

## **Aspiring Stories from Rural Communities**

**Rural Development in CIRDAP Member Countries** 



Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP)

### **Aspiring Stories from Rural Communities**

**Rural Development in CIRDAP Member Countries** 

September 2019 © CIRDAP

#### Compiled by

Dr. Usharani Boruah Librarian, CIRDAP

#### Cover design & copyediting

Md. Rezwanul Haque Asst. Librarian, CIRDAP

#### **Published by**



Centre on Integrated Rural Development for Asia and the Pacific

Chameli House, 17 Topkhana Road G.P.O Box 2883, Dhaka-1000 Bangladesh.

Fax: 02-9562035, 9571880 Web: www.cirdap.org

### **Foreword**

The main objective of this compilation work titled "Rural Development in CIRDAP Member Countries: Aspiring Stories from Rural Communities" is to encourage, motivate, energize and enlighten the heart of good people who will read them. A lot of people in the world do many great things for their society and for the world. Sometimes they are recognized and sometimes not; but nevertheless they love keeping their good work up for the benefit of the world. Stories have been collected on their work particularly from the member countries of CIRDAP. Their stories inspire us and show us the path to bring changes into our lives and the communities we live in.

I thank Librarian Dr. Usharani Boruah for collecting and compiling these stories for dissemination to CIRDAP Member Countries and beyond.

Happy reading.

Dhaka, September, 2019

**Tevita G.B. Taginavulau** Director General CIRDAP

## **Contents**

For	eword
	Afghanistan
1.	Success Story: A Smile Expresses Thousand Words
2.	Afghanistan: Where Water Means Food
3.	Bano The First Female Shopkeeper In The Village
4.	Electricity In A Box Project Success Story Of A Woman
5.	Ensuring Animal Health In Afghanistan - And Beyond
6.	Success Story: Facilitating Doorstep Market Opportunities
7.	Success Story: Greenhouses An Alternative To Poppy Cultivation
8.	Livestock-Keepers See Incomes Rise And Nutrition Improve In Afghan
9.	Mission Impossible: Nazia And Her Dreams
10.	Success Story: Paving The Way For Market Linkages In Balkh Province
11.	Success Story: Supporting Farmers To Grow Saffron
12.	S. S.: Women Of Kalafgan Works And Generates Legitimate Income
	Bangladesh
13.	Life Is Beautiful Against All Odds
	Rina Akter Who Is Making Her Dreams Come True.
	Building Future With Boutique
17.	Cancer-Preventing Broccoli Cultivation Brings Success
18.	Crafting Way Out Of Poverty
19.	Elderly Couple Gain Solvency With Duck Farming
20.	From Worker To Apparel Entrepreneur
21.	Homemaker To Trendsetter
22.	Innovative Way To Tackle Sapling Crisis
23.	Integrated Farming Brings Cheers To Farmers
24.	'Magic' Of Smartphone Changes Life Of Teesta Char Women
25.	Oasis In The Sand
26.	Of A Farmer With Passion For Education
27.	On The Trail Of Lutfar Rahman: 'The 1 Tk Master'
28.	Organic Vegetable Farming Brings Smiles To Farmers Of Gopalga
29.	Plucking Tea Leaves Brings Self-Reliance Among Female
30.	Rajshahi Villagers Make Fortune By Shoes Manufacturing
31.	Rezaul Shines In Sri Lankan Cardamom Cultivation
32.	Shirina, A Role Model For Female Farmers
	Self-Reliant Through Quail Rearing
34.	Turkey Farming Changes His Life
35.	Uttama, An Inspiration For Female Entrepreneurs
	Woman Gets Self-Reliant Through Vermicompost
37.	Women's Fight On The Climate Front
38.	Wonder Fabric From Pineapple

Fiji
39.Catalina's Story: Climate Change In Fiji, Through The Eyes Of A Child
40.Climate Change Is Wiping Out The Secret To Fiji's International Rugby
41.Semiti's Story – Fiji
42.Developing Women's Passions And Marketable Skills
43.Island Communities Overcoming Remoteness Through Mobile Service
44.Managing A Dalo Farm In A Rural Village Of Fiji – The Story
45.People With Disabilities Encouraged To Become More Active
46. Social Services Reaching The Furthest Behind First In Fiji
47. Will You Marry Me On The Reach Bus? 9
48. Canteens, Carnivals And Candy: A Winning Combination
India
49. Renu Mahanta And Her Traditional Assamese Dishes
50. Climate -Smart Agricultural Initiatives Set To Scale In India
51. How This Farmer Is Earning Good Money Through Betel Vine Farming
52. Sowing The Seeds Of Progress – One Woman's Story
53. Meet This 68 Yr Old Yoga TeacherDreams Of An Organic India
54. A Life Measured In Metres And Yards
55. 'He Says I'm Even More Cursed Than My Mother'
56. Patraput's Saviour Of Indigenous Seeds
57. Charubala: Joy And Jhumur, Sorrow And Song
58. The Designers Of Dhoolpet's Deities
59. 80, 250- Crore Programme To Connect Village Roads
60. `Internet Saathi' Programme To Be Expanded To Punjab, Odisha
61. Towards A Barrier-Free Life
62. This Mill Helps Its Women Staff Spin Success Stories
63. Waiting For Rain — With Three Ponds And A Determined Will
64. Pune Farmers Reap Benefits Of Expert Advice
65. Sweet Success
66.Doing More With Less
67.Beating Pollution, One Plastic Bag At A Time
68.Making A Difference, One Bag At A Time
69.Solar Energy: Boost To Farmer Income In India
70.Success Story Of Guava Fruit In Thailand
70.Success Story of Guava Francis in Francisco
Indonesia
71.Aging Remarkably
72.Agro- Tourism Village Launched In Indonesia's Jambi Under Sdg
73.In Indonesia, Cleaning Up The Citarum, 'The World's Dirtiest
74.Indonesian Solar Lessons From Vietnam
75.Islam Inspired Renewable Energy
76.Jobs At What Cost: The Impact Of Electronic Waste Management
77.Passing It On

	185
	188 190
IR <b>Iran</b>	
81.A Success Story About Investing In Iran	194
82. Opportunities In Iran's Consumer Goods Market	198
83. Seoul Keen To Share Smart City Solutions With Tech-Savvy Iran	201
Lao PDR	
84.Creative Lao Woman Is Proud Winner Of Outstanding	204
_	207
86.Forest Supermarkets	210
87.From A Pig Farm To An Energy Bank With A Breath Of Fresh Air	218
88.Going Closer, Probing Deeper: My Transformative Journey	221
89.Mystic Mountain Coffee And Homestay Brews Up Perfect Recipe For Ss	224
	226
	228
92.Steady Flows: How A Community In Southern Laos Takes Disaster	232
93. Taming The Waters In Xayaboury Province	234
94. The New Way Of Working In Practice In Lao Pdr	236
Malaysia	
95. Chemical Free Padi Farming	240
96. Corrugated Plastic Box Manufacturer Sees Potential In New Product	242
97. Fadlan Preps For Future In Farming	246
98. Filipino Villagers Swap Trash For Rice In Fight Against Plastics	247
	248
	254
101. How Malaysia's Golden Goose Of Ecotourism, Sabah, Keeps	257
102.Journey Of Musang King	261
103.Laying The Foundation For Sustainable Landscape	263
104.No Overnight Success For Instant Noodles Producer	265
105.No Pain No Gain For Animal Rescuer.	266
106.Organic Way To Develop Life Skills	268
107.Poverty Alleviation Through Rural Tourism Development	270
108.Sabah Rural Development Ministry Plans Rural Tourism Initiatives	273
109. Woman In Malang Makes Christmas-Themed Sock Dolls, Empowers	275
110.Young And Bold.	278

## Myanmar

111.Accelerating Rural Electrification In Myanmar
112.Bringing Hopes To Farmers: Fao Provides Agricultural Assistances
113.Getting Back To Basics At Thagyi Thamee Restaurant
114.Lighting Myanmar's Remote Villages
115.Myanmar's Farmers Go Hi-Tech
116.Quilling Comes To Myanmar
117.Royal Jaggery Offers A Sweet 'Made In Myanmar' Product
118.Story By Nang Phyu Phyu Lwin
119.Ykko: From Small Shop To Major Brand
Nepal
121.Reinforcing Resilience
122.Nepal Goes Green With A Genial Grin
123.It's A Rocky Road To Power For Rural Women
124.Postcards From Nepal: Meet The Man Who Showcased The Country
125.Lahathis—A Gift From Muslims To Hindu Women
126.Local Goat-Farming Investments Surge
127.Nuwakot Farmers Happy Growing Strawberries
128.Govt Begins Pilot Of Agro Tourism Village
129.Rising Demand Gives Boost To Fish Farming
130.Apple Farmers Delighted As Road Reaches Village
131.Hand-Made Happiness
132.Breaking Age-Old Barriers
133.Weaves Of Change
134.Bridge Is A Blessing
Pakistan
135.Behind Every Successful Start-Up, There Are Failures
136.Building Support For Women In Pakistan
137.Creating Opportunities For Social Inclusion In Pakistan
138.How A Self-Sustaining Nonprofit Is Increasing Access To Education
139.Importing Success?
140.How A Young Entrepreneur Is Saving Lives In Pakistan
141.Meet The 26-Year-Old Pakistani Who Founded A Multi-Million
142. 'Over 90 Species Facing Extinction'
143.Start-Up Spirit
144. Treat The Person, Not The Disease
145. Where The Government's Handling Of The Economy Is Going Wrong
5 5 6

## **Philippine**s

146.Life's Dream, Realized Family Farmer-Turned-Government
147.Restoring Livelihoods Of Typhoon Hit Farmers In The Philippines
148.Tools For The Trade To Reach New Markets In Manila
149.Poor Filipino Fishermen Are Making Millions Protecting Whale Sharks
150.Stimulating Development Through A Poverty Alleviation Fund
Sri Lanka
152.Herbs That Saved Hundreds Of Lives
153.A Fresh Start To Life
154.Energy Poverty
155.Peddle Power
156.Production To Partnership' – Why Grassroots Success Means Better
157.Resilient Women – Stronger Communities
158.Silent Stitches
159.Sky Is The Limit
160.Small -Holder Dairy Farmer Turns Dairy Entrepreneur
161.Value For Waste
162.Wild Mushrooms
Thailand
163.A Thai Village's Ecological Success Story Offers Important Lessons
164.Agriculture Drones To Transform Farmers Lives In Thailand
165.Dare To Return.
166.Farmers Cultivating Illicit Drug Crops Are Usually Among The Most
167.From Poor Peasants To Entrepreneurial Farmers: The Transformation
168.From Struggle To Success, Lisu Hill Tribe Enters
169.Growing Industry
170. How Is Thailand Bringing Technology To The Table
171.Organic Gardening Teaches Chiang Rai Hill Tribe Kids
172. The Long Learning Curve: Bringing School Up To Date
Vietnam
173. 'Barefoot' Engineer Helps Farmers Ease Hardship
174. A New Development Paradigm
175.An Economic Success Story: How Vietnam Became Southeast Asia's Top
175.An Economic Success Story. How Vietnam Became Southeast Asia's Top
177. Vietnam: Disaster Preparedness Education Will Be Part
178. Protecting Villages From Flash Floods And Improving Livelihoods
179. Village Fields Turn Organic
180.Wake Up And Smell The Cinnamon
181. Young Smallholder Farmers Overcoming Climate Challenges
182. Youth Shape Agriculture Sector Of Tomorrow
102. I cam simple i Girentere sector of romotion

## **AFGHANISTAN**

## **Success Story: A Smile Expresses Thousand Words**



Ms. Zarwari Jana is one of the many poor rural women in Afghanistan hoping to feed her family. She is not educated and therefore not able to work in the Government or other private organization. Her husband passed away two years ago and she has two children who polish shoes in the Bazar. She is suffering from chronic stomach ulcer which is another issue she faces on daily basis.

CARD-F team found her eligible to receive the pullets during their survey and hence she was selected for the SSL package. She received the 30 pullets and now she is earning about 800 AFN weekly by selling the eggs. The surplus money which she earns now has enabled her to buy medicine for herself and send one of her child to school.

"I study with a lot of passion so that I become a doctor and treat my mother," says 10-year-old Zubair the Second son of Ms. Zarwari, who wears school uniform and a cap. "I love studying because it is how I will be able to have better life. Previously I could only watch the students going to school however now I am glad to be one of them" says the young Zubair with his eyes full of dreams for a better and brighter future.

SSL program is designed to help poor rural households and reduce poverty in the country. Recently, CARD-F has distributed 200 poultry packages among the poor households in Khost province.

## **Afghanistan: Where Water Means Food**

Rebuilding centuries-old water systems for better food production and live

Agriculture makes up over a third of Afghanistan's economy and employs about three quarters of its population.Up to 85 percent of the country's food comes from irrigated farming.Farmers have been relying for centuries on Hari Rud ("Rud" means "river" in Persian) to irrigate their land. The river flows for over 1.000 kilometres, cutting through the red rock mountains of central and western Afghanistan, and continuing in Turkmenistan.But rivers' basins and watersheds have suffered greatly from



uncontrolled water exploitation, overgrazing, deforestation and a gradual degradation of the environment. Decades of civil unrest have also made it impossible to properly maintain and repair the country's water systems.

#### Reviving the Shaflan - one of Hari Rud's main and oldest canals

To address this, FAO, the Government and its partners have been working to restore and upgrade 17 water irrigation canals, covering 10,000 hectares of land in western Afghanistan's Pashtun Zarqhun district.

An aqueduct conducting a water stream across a hollow valley. A water divider with bank protection. @FAO/Wahidullah Iodin

One of the canals is Shaflan – one of Hari Rud's main and oldest canals. More than 60,000 people from 26 villages depend on it to grow food. As part of the rehabilitation of Shaflan Canal, the project ensured the construction of one intake structure, 23 water dividers, seven water outlets, two aqueducts, three protection wall and 13 drop structures.

This enabled farmers to expand their fields from 3,600 to 4,200 hectares, growing more wheat, barley, and spices like saffron. Women were also able to set up kitchen gardens to grow vegetables. Both developments lead to greater food security and social cohesion.

#### Twice as much water and less costs

Afghan farmers from Herat province working in their wheat field irrigated thanks to the project. ©FAO/Shah Marai

Afghanistan relies on a traditional system for managing water irrigation systems called the "Mirab", made up of farmers and village elders.

More than 500 farmers were trained in maintaining and operating the 17 canals, and taking measures to avoid future damages. Habibulah was one of them.

"Before we had to hire labourers, buy wooden stacks and plastic bags to repair the eroded parts of the canal and divert the river flow into the main



canal. It was costly. Each year, we were paying more than Afghan Afghani 500,000 or the equivalent of \$7,000 (farmers earn on average \$1,440 per year). We couldn't manage water losses, and there were always disputes about this between villages as we were constantly short of water," says Habibulah.

"Now the permanent intake structure allows a controlled and regulated water flow in the main

canal to fully irrigate the land all year round," he adds. Put it simply, farmers now have twice as much water and less costs. More water means more food to eat and sell for an additional income, and ultimately, better lives.

This project was made possible thanks to support from the Islamic Development Bank.

Overall, FAO's water projects rehabilitated about 800,000 hectares of irrigation schemes

benefitting more than 800,000 farming families.

Source: http://www.fao.org/fao-stories/article/en/c/1111046

## Bano the first Female Shopkeeper in the Village.



Ms. Bano is a member of "Sahar" Saving Group (SG) in Balkh district of Balkh province. In 2013, she obtained the membership of the Saving Group (SG) and won the confidence of other members by saving an amount of 30 AFN weekly. Bano narrates her story this way: In 2013, Ms. Fatima Sarfaraz an employee of Women Economic Empowerment Rural Development Program (WEERDP) came to our village and briefed all women in the women council head's house.

Hence, I was educated about the program and I was interested to join the Saving Group to save money for my children's future.I was busy in household chores with no other occupation, prior to joining the program. I was suffering very much economically and socially. My husband's low income from the shop made me worried about our life's fate, I thought to myself, what will happen to us? I was also apprehensive about, how to send my children to school? I asked myself, whether my husband could afford to purchase books, pen and fulfill their other needs?

So, how to find an income source to support my family and assist my husband to ensure prosperous life. Consequently, I joined the Saving Group due to Ms. Fatima's persuasion, and until 9 months ago, I was able to get Islamic loan from the Village Saving and Loan Association (VSLA) after Association's and Saving Group's members suggestion.

I established a shop in a corner of my house and my husband helped me to purchase basic and essential goods for a newly opened shop. Eventually, I was warmly welcomed by villagers. My sales were high enough to repay my debts on time, due to the encouragement and gratification of the residents. Therefore, I took another loan to increase the capital of the shop, currently, I have everything that is need of a housewife and women and children are not required to go faraway to city markets.

It is worthwhile to mention that after clearing my debt account, I got a loan of 24000 AFN from "Safa" Saving and Loan Association to buy a refrigerator for the shop, in order to sell cold water, drinks and doogh in hot summers. I am tremendously grateful to the programs

employees for their advice and guidance that qualified me to serve my family and friends. As a women, I had never thought that I would work as the first female shopkeeper and earn Halal income in the Balkh district. We were underprivileged family, my husband was the only breadwinner of the house, however we have 1000 to 2000 AFN daily sale now which is a good income besides that I have made the life of village easy too.

Since I joined the program, I and other women and girls who are part of the program are satisfied and pleased. Previously, we had only performed household chores and we were unable to do anything else. Nonetheless, the program's great contribution to rural women was to educate them and give them the idea that they could also work and earn income to have a good life. In addition, it taught us that instead of idleness, living in poverty we should get an occupation and work along our male family members regardless of the resources. Moreover, we should demonstrate that women can also earn Halal income for her family and themselves. Now, I along other women help our husbands' side by side in the work and we have a good life.

Correspondingly, I can say that I have great plans and goals for the future, from recruiting employees to expanding my business. I encourage other women and girls in the village to work, so that they will come out of the darkness too, and see a life from another window.

Source: Ministry of Rural Rehabilitation and Development (MRRD), Afghanistan. Feb, 2019.

## Electricity in a Box Project Success Story of a Woman in Nawniaz Village



Nawniyaz village is located in Charasyab district, 15 Km from Kabul city. The economic condition of the local residents is extremely destitute and as a result they don't have access to the basic necessities.

It is our firm believe that electricity is the major factor in promoting the awareness through media in the local community. But unfortunately in this modern era of the 21stcentury the residents of the said village had no access to the electricity and they were bound to live their lives without new technology and use LPG gas and kerosene oil for lighting purpose in their homes. In the near past with the help of Asian Development Bank (ADB), Ministry of Rural Rehabilitation and Development (MRRD) distributed solar home system in Nawniyaz village. Ms. Latifa Wahabzada Gender Associate of ASERD/MRRD visited the village and interviewed a beneficiary woman named Akhtar bi bi.

Akhtar bibi: - I am the mother of eight (8) children and my husband died few years back. Before the distribution of solar home system by MRRD with the help of ADB our lives were full of obstacles. For lighting purpose we were using LPG gas and kerosene oil in old traditional equipment's, which were not only expensive but also very harmful for eyes and respiratory system of human being as well. Similarly, the kids were not welling to attend the toilet at night due to fear, studying at night or schoolwork was another problem for them. We did not get any information or awareness about local and international news and current affairs. What we got from livestock like dairy products the preservation was also a big challenge for us and often rotted in the summer.

Now by having electricity packages (solar home systems) our life is totally changed and created ease, I work in the kitchen very easy, me and my children are happy and we would like to thank MRRD & ADB for making our dark lives brighter through solar home system.

Source: https://mrrd.gov.af

## Ensuring animal health in Afghanistan - and beyond

12 million animals vaccinated and regional cooperation on disease control increased

"My sheep and goats are my only source of income for my family. We consume their milk and meat and sell what's left in the market to buy essential household and school items," says Agha Ma, a female pastoralist in Balkh, Afghanistan.

"We used to lose a lot of animals to disease every year, but thanks to FAO, we are better herders, and are giving our children and grandchildren better educations than we ever had."

Ahga Ma is speaking of the TAD or Transboundary Animal Disease Project, supported financially by the government of Japan, which is working to protect Afghanistan's livestock against two deadly endemic diseases: Peste de Petites Ruminants (PPR) and Foot-and-Mouth Disease (FMD).

Nearly 30 percent of households in Afghanistan own goats and sheep. Families use their animals as a source of food as well as a source of income. Any threats to these animals can devastate farming families and threaten the food security of pastoral-dependent communities.



To date, FAO has vaccinated 12 million sheep and goats against PPR, and 300 000 cattle saved from FMD in all 34 provinces of the country. As a result, there have been no outbreaks FMD or PPR in the communities where the vaccinations were given. While these vaccinations need repeating, the project made a real difference to the lives of tens of thousands of Afghan farmers who were able to keep larger herds, and consequently generate more income.

A creative approach Combatting disease is not an easy task in a country with often inaccessible mountainous terrain, porous international borders and a largely illiterate rural population.

#### **Rural Development in CIRDAP Member Countries**

FAO staff and over 1 000 community-based animal health workers carried-out routine checkups, vaccinations and raised awareness about the prevention of contagious animal diseases through early treatment – and through the setting-up of outreach booths at local animal markets across the country, and the publication of pictorial brochures aimed at farmers unable to read.

The farmers were also given information on when and where they could source medicines - and during the process their animals were vaccinated against PPR and FMD. Animal health workers also issued vaccination cards for each animal - detailing inoculation history.

Samira, 23, a paravet who has been working with FAO for 18 months and who was trained by government epidemiology staff, travels daily from village to village to vaccinate animals and teach communities about animal diseases. "At first it was difficult because communities didn't understand or trust vaccinations. Now that they've seen the impressive positive results, they happily and readily bring their animals for vaccination," she says.

FAO also restored and equipped the central livestock diagnostic laboratory in Afghanistan's capital Kabul, with state-of-the-art equipment, a teaching laboratory, storage capacity for 10 million doses of vaccines, and a team of professionals that can swiftly diagnose disease. These professionals train new veterinary students and government epidemiology staff on animal disease surveillance throughout Afghanistan.

Regional problems addressedWhile the TAD project has been of enormous help to Afghan farmers, that is not enough. The cross-border movement of sick animals from another country is of great concern. FMD and PPR are endemic in both Afghanistan and neighboring countries such as Iran, Pakistan and Uzbekistan. The TAD project built-up veterinary and disease surveillance capacity across the region. Together, neighboring nations explored new ways to build upon each other's successes. Pakistan, for example, has more diagnostic capacity than others in the region and offered to share its' expertise through training.

FAO aims to expand its animal health care services for drought-affected livestock keepers and further improve the productivity of nomadic herders through intensified training on disease surveillance, prevention and increased control of a larger variety of animal diseases.

Healthy animals help people live healthy lives and livelihoods - bringing us closer to a #ZeroHunger world.

Source: http://www.fao.org/fao-stories/article/en/c/1203360/. 30-08-2019

# **Success Story: Facilitating Doorstep Market Opportunities**



Historically, Afghanistan has been a country heavily reliant on the Agriculture Production. According to a report by USAID 75% of the population is still directly or indirectly benefiting from the agriculture sector. Although Afghanistan has one of the most fertile lands for agriculture production, it had become an importer of the agriculture products during the last four decades due to distress and civil war in the country. Parwan province, a northern province of Afghanistan known as the largest contributor of vegetable in the local markets, had become paralyzed due to lack of expertise and modern agriculture technology and practices. People are producing vegetable in their kitchen gardens for self-consumption and low yield and lack of access to new practices eroded their sight for commercial scale production.

Comprehensive Agriculture and Rural Development Facility (CARDF), funded by the British and Danish government, has taken an initiative to introduce alternative livelihoods through greenhouse production to the encourage farmers to produce on commercial scale and recover Parwan's reputation as the largest contributor of vegetable in the local markets of Afghanistan. CARD-F introduced greenhouse production in Parwan Province to remedy the situation and provide substitute imports of vegetable. As part of its greenhouse intervention, CARD-F is providing farmers with tools, improved seeds, fertilizer and greenhouse installation, trainings on land preparation, sowing, planting, irrigation, weeding, integrated

#### **Rural Development in CIRDAP Member Countries**

pest and disease management, fertilizer application and best practices in harvest and postharvest management, and greenhouse management.

Parwan has retrieved its lost identity as the largest contributor of fresh vegetable to local markets.

Commercial Scale Production increases the yield and reduces the cost of production.CARD-F facilitated market opportunities at the doorsteps of the farmers.Farmers can now produce with no fear for lack of market opportunities.

CARD-F is encouraging commercial production through these greenhouses. So far CARD-F has established 30 greenhouses, on cost-sharing basis with the local farmers, with a cumulative potential of producing 210 metric tons of fresh vegetables each year. In recognition of the large scale of production Nasir Faizi Brothers Vegetable Trading Company contracted to purchase all of the produced vegetables on market price from the doorsteps of farmers. Now the farmers can produce without fearing a surplus in production. These greenhouses produced an extraordinary yield leaving greenhouse production in all other provinces behind. CARDF aims to further support vegetable value chain in Parwan province and establish 80 new greenhouses in Phase II.

## Success Story: Greenhouses an Alternative to Poppy Cultivation in Badakhshan



In the remote districts of Afghanistan, investing in agricultural improvements by constructing more greenhouses has provided a viable alternative to poppy cultivation.

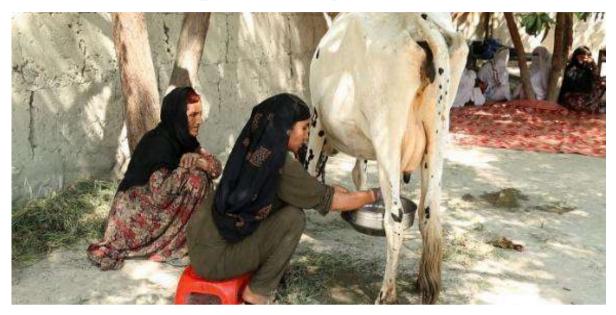
Mohammad Akbar, who lives in Baharak district of Badakhshan, has invested 20% and received the remaining 80% from Comprehensive Agriculture and Rural Development Facility (CARD-F), funded by the British and Danish governments. With this money, he built two greenhouses which have helped him cultivate three times as many vegetables as before. In the first six months of 2016, he has earned enough money to support his family and children. Mohammad Akbar, father of eight, believes that the new greenhouses in remote districts and villages of the country provide an excellent opportunity for the farmers to earn enough money in order to support their families.

He said: "I am glad that I have two greenhouses and received CARD-F training in order to be a professional farmer. I am planning to build five more greenhouses as they will help me save some money – then I will be able to support my son financially – for his wedding of course. CARD-F's support has stopped the farmers to cultivate poppy in our area."

With British and Danish governments support, CARD-F aims to develop commercial value chains and building infrastructure to raise productivity and increase employment, incomes and exports. Another goal of CARD-F is to reduce illicit opium farming by creating alternative opportunities in higher value crops.

Source: http://www.cardf.gov.af Bottom of Form

## Livestock-keepers see incomes rise and nutrition improve in Afghanistan



A woman milks her cow in Nangarhar, Afghanistan. ©IFAD/Melissa Preen

Poor rural people in the Afghan provinces of Kabul, Parwan and Logar are feeding their families better and increasing their earnings by taking part in the IFAD-funded Community Livestock and Agriculture Project.

The project supports smallholders and landless people in raising large and small livestock for income and food. It started work in 2012, and so far about 14,000 people have been trained in dairy production and poultry husbandry. Vulnerable groups, including households headed solely by women, landless people, and resettled and nomadic Kuchis, are key target groups. Participants are offered training, inputs and access to technology, boosting their production and strengthening their resilience to setbacks, including livestock diseases. Women are setting up self-help groups, which enable them to put aside small sums of money. They are also learning processing skills for dairy products and for pickles, jams and other preserves.

Mrs Makai lives in the village of Laghmani with her husband, who is blind. They have a small piece of land and two cows and she now leads a self-help group. "With the help of the project, my income from the milk cows is getting higher, meeting our daily needs and giving us the chance to save an amount at the end of the month to spend on my children's education and medicines," she said.

"Now with the training, as well as certain inputs such as solar driers, packaging and processing equipment, and training, I can process the products in a professional way and thus they are sold for a reasonable price in the market."

Source:https://www.ifad.org 13 August 2018

### Mission Impossible: Nazia and Her Dreams



Because of her disability and the fact that she couldn't earn money, Nazia had to put her dreams of education on hold. © UNDP Afghanistan / S. Omer Sadaat / 2019

"Who would marry a short girl like her? Look at her legs. Why did you come, it's better you stayed at home." his is what Nazia, who was born with a disability, hears from people whenever she goes to a party or a gathering. Nazia is originally from Kunar province, but due to insecurity in her home province, her family moved to Jalalabad City. She is clever, and a hard worker, and was determined to achieve her dream of getting a higher education. But because of her disability and the fact that she couldn't earn money, she had to put her dreams of education on hold.

In Afghanistan, access to higher education continues to be a challenge, especially for women in remote areas, which tend to be socially conservative. And for those with disabilities, earning a living can seem impossible.But Nazia was not willing to give up just yet. Determined to be economically independent, she learned embroidery from her older sister. For three months now, she has been working in a local garment factory, supported by the SALAM project, a UNDP/Government project supported by the Government of Finland. "My brother heard about the SALAM project and carried me to the Department of Labor Social Affairs (DOLSA) for the programme for disabled citizens. I took an exam there and got selected. "The SALAM project supports trainees for six months. The first three months is onthe-job training, where the Afghanistan Centre for Excellence (ACE), a job-creation contractor of the SALAM project, is responsible for paying the wages.

<sup>&</sup>quot;I'm very happy. I found my trainer, colleagues and the work environment very friendly." says Nazia. "I feel very happy to be a part of this family. Now I have developed my embroidery skills a lot." ©

<sup>&</sup>quot;I can stand as a symbol for other women living with disability."



UNDP Afghanistan / SALAM / 2019

She received US\$120 for the first two months and US\$180 for the third month. Once trainees successfully complete three months, the second phase of job placement begins. When employed, ACE pays 30 percent of the salary and the employer picks up the remainder.

Aside from the incentive she receives on a monthly basis, Nazia has developed her own income stream in her spare time, accepting clothes orders from relatives, friends and neighbors. This brings her about \$80 a month. "I thank everyone involved in this project for having a special quota for disabled people. It is an achievement of a lifetime – finally I can continue to pursue my higher education" she says. Education is one of the most powerful and proven vehicles for sustainable development. A small financial contribution to Nazia's life has opened a world of vocational training to her. "I have proven not only to my relatives but all others that disability does not have to be a barrier for a person to be successful in life. Now I can stand as a symbol for other women living with disability." The people of Afghanistan call Jalalabad the 'evergreen' city, due to its temperate climate. It's known for its citrus fruit, cane-processing, honey, olive processing, sugar-refining and paper-making industries. The SALAM project is rapidly expanding throughout the city. Three hundred people are receiving training in entrepreneurship, 600 men and women benefit from vocational training, and 200 have participated in job-creation programmes.

With funding from the Government of Finland, the Support Afghanistan Livelihoods and Mobility (SALAM) project is implemented as a joint intervention between UNDP, ILO and UNHCR and in full partnership with the Ministry of Labour and Social Affairs (MoLSA) to reflect the common goals of a variety of actors while recognizing and maintaining their separate mandates and areas of expertise and to seek durable solutions for Afghans in line with the Government's vision and strategies for employment generation and labour migration.

Source: http://www.af.undp.org . May 25, 2019. Afghanistan

## Success Story: Paving the Way for Market Linkages in Balkh Province



Lack of infrastructure in rural districts of Balkh province has put the entire population at a disadvantage. Meanwhile the people living in rural Afghanistan are highly involved with agriculture and that is the only source of income for about 75% of the population. Lack of infrastructure has significantly increased the cost of transportation of the agricultural products to the market. This trend is gaining substantial momentum with the low tariff rates on imported agricultural products.

Now the travel time has decreased from 45 minutes to only 10 minutes. People can easily access better markets to sell their products with lower transportation costs. And it makes it easy for the milk collection centers to connect with the milk processing factory.

In order to remedy the situation, Comprehensive Agriculture and Rural Development Facility (CARD-F), under a contract with National Road Access Program (NRAP) lead by MRRD have taken an initiative and asphalted 6.14 kilometers of road to connect four villages of balk district to the center of Balkh province. This road inaugurated by MRRD on the 6th March 2016, provides better livelihoods to more than 11 thousands of inhabitants of Balkh district and paves the way for earning a better income through establishing market linkages.CARD-F is supporting the dairy value chain in Balkh district of Balkh province by providing training for farmers on effective cattle management, fodder management, milking and milk collection. In addition, CARD-F has constructed five permanent milk collection centers (MCCs) to gather the milk and deliver it to the dairy processing factory. The Asphalted road connected farmers with MCCs ensuring sustainable livelihoods for the people of this district.

Furthermore, asphalting this road had created a total of 57 construction jobs during the years 2015 and 2016. The rural income generated during construction period has been US\$ 1,995 earned by local construction labors.

### **Success Story: Supporting Farmers to Grow Saffron**



Afghanistan is an agricultural country with many people across the provinces making a living through farming activities. Daad Mohammad, who is a farmer in Enjil district of Herat province, has always hoped to grow and produce saffron in order to generate enough revenue to support his family.

However, due to lack of water in Herat province, it has always been difficult to gain sufficient income. With the support of Comprehensive Agriculture and Rural Development Facility (CARD-F) programme, in a half acre of land, Daad Mohammad was able to produce 100 grams of saffron. Despite this being his first attempt at growing saffron, he generated enough income to support his family. Daad Mohammad also received 300 kilograms of saffron crocus bulbs from CARD-F for continuing farming this lucrative crop in the future.

The UK is proud to be helping farmers across Afghanistan, especially to grow saffron – a crop that can generate a lot of income for farmers. The UK and Denmark have funded the agricultural assistance programme, CARD-F since 2009 and both countries have committed to supporting the programme until at least 2018.

So far, CARD-F has helped establish over 1,000 enterprises in provinces across Afghanistan; a quarter of which are headed by women. It has also built infrastructure to increase productivity and improve links to markets; all of which help build a bright future for farmers across the country.

## Success Story: Women of Kalafgan Works and Generates Legitimate Income from Greenhouses.

Fatima Gul lives with her four children in a village located in the Kalafgan district of Takhar province. Her husband spent many years in prison outside the country and is now in bed with illness and is unable to work; considering the persisting circumstances, Fatima Gul, the only breadwinner for her family, was looking for works that are suitable for rural women.

The Comprehensive Agriculture and Rural Development Facility (CARD-F) has established 65 greenhouses in Takhar province, creating a total of 84 job opportunities for rural residents and providing them with a legitimate income. Fatima Gul has been working in these greenhouses for four months. While she is also taking responsibility for her family and by working hard in greenhouses she was able to earn 24,000 Afghanis in four months. According to Fatima Gul, in addition to receiving monthly income, she also produces pickles through crops of these greenhouses. During her time in these greenhouses, she has been able to produce more than 300 liters of pickles in traditional ways and earned 14,000 Afghanis from selling only 200 liters of them which has led to the growth and economic empowerment of her family.

Rahim Beg Yaqoubi, the owner of the greenhouses in which Fatima Gul works, says: beside the economic benefits of these greenhouses, I want to create local job opportunities by introducing new farming methods to the people of my hometown.

According to him, the Kalafgan district of Takhar province does not have enough water for farming, which is why most of the workforce in the area moved to Iran, Pakistan, and Turkey for work. Sometimes they are compelled to work with smugglers and then turn to using drugs.

Fatima Gul says: Now, the only hope for my family to make money and livelihood is to work in greenhouses, which is made possible through CARD-F's support and the investment of Mr. Rahim Beg.

In addition to Ms. Fatima Gul, eight other women also receive a monthly income of 5,000 Afghanis by working in the greenhouses established by Mr. Rahim Beg. According to him, these women have been working in his greenhouses for four and a half months and so far they received a total of 180,000 Afghanis in wages.

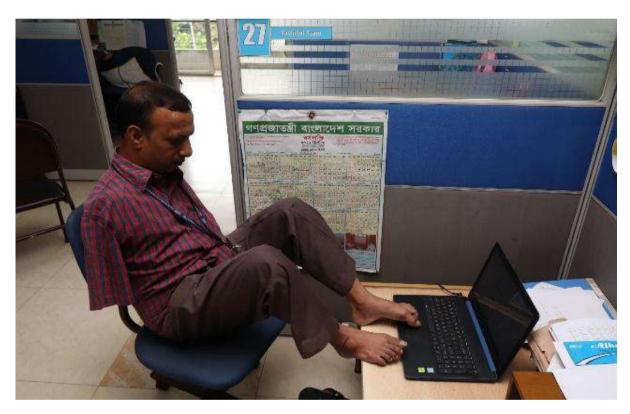
The CARD-F program in Takhar province has established 65 greenhouses, with an annual production capacity of 559 metric tons of vegetables which is worth a gross margin of 12.6 million Afghanis. The greenhouses created a total of 84 job opportunities for the residents of Takhar, including women and men, and by 2017 it has increased rural income in the province by more than 2.4 million Afghanis.

## **BANGLADESH**

## Life is beautiful against all odds.

Rasidul Azam Rasel – a man who overcame his disabilities with his patients. He is a very energetic person who always thinks that life is precious even after all the odds he has faced in his life and he believes that if a man tries, he or she can touch the Sky. Rasel was born in a village name Pasghariakandi on 1977 in Munshigonj district in Bangladesh. He was born without hands. His Father Mr. Akramuzaman and Mother Habiba Khannam had three children before his birth.

As the youngest child of the four, everybody loved him. His father worked in famous Adamji Jute Mill. They took care of him so that he could get admitted in a school. His parents taught him how to write with his leg and admitted him in a school. He was very interested in his studies and scored first division in school exams.



Rasel working in his office at CDD

His parents were very happy with his success. The school teachers also helped him with his studies. He was not only a good student but also was good at sports and cultural activities. In cultural and sports competitions he would secure positions. Apart from school he helped the neighbours when they needed help. The school mates and neighbours always loved Rasel. They would encourage him to study further. In 1991 he passed his S.S.C. Exams from Adamji High Scool. Later, he obtained his Bachelor's Degree from Tejgaon college, Dhaka.

He always tried to gain more and more knowledge from books and from his surroundings. He read books to sharp his knowledge and skills. He was very much interested to learn computer but many organizations refused him to admit. Rasel never lost hope and he tried different places to learn computer. At last one institute took him in and him how to work with a computer.

#### Aspiring Stories from Rural Communities

After completing his education life and computer course he became eager to work. He looked for a job. It was difficult to get a job for a disabled person. He was refused to get a job. Realizing the difficulties of finding a suitable job, his elder brother requested him to work in the community clinic. He took the job and worked there very sincerely. He gained experienced from his job. After this job he joined in BRAC.



Rasel conducted training session at CDD.

He always thought of helping disabled people. He understood how much pain and difficulties a disable person may face in the society they live. In 2005 he joined Centre for



Rasel at CIRDAP Library

disability in Development (CDD) as Associate Coordinator and Disability Inclusion Trainer in SHOMOTA Project. There he received a good work atmosphere and authority gave him all the supports so that he could work with comfort. He is married now and has a son. He was born as a disabled person but with his own efforts he overcame obstacles and became successful. He always thinks that life is beautiful if one works hard and be honest by heart. Rusel's life story motivates us and encourages other disabled people to work towards becoming successful in their life.

He showed us that if we want to live a beautiful life we have to work. Only work can lead us to success and despite of all odds Life is beautiful.

Source: The Story written by Dr. Usharani Boruah. Librarian, CIRDAP.

## Rina Akter who is making her Dreams come true.

Rina was born in an agriculturist family. Her Father was an Agriculturist. From the beginning of her child hood days she dreamt of a fruit garden where she can grow different kind of fruits, flowers and vegetables. She liked trees and flowers. She had many flowers and plants in her home which she always took care of. While taking care of her plants she felt happiness and very much enjoyed her time with the plants.



Rina Akter and her Malta Garden.

Life had changed her. Her husband was an agriculturist too and the couple were blessed with two children. Her husband helped and inspired her to establish a fruit farm on their land. They have 1 Acre28 Decimal of land in "Angrot Telipara Gram" under Dhamoirhat union in Naogaon district. Her househas been named "Mayakanon". Every day atvery early morning she gets up, does all household works like cooking, cleaning, taking care of her children, goes to school and college with her kids. She has graduated from a college but never tried for a job and after marriage she got busy with her family. She forgot that once upon a time she had a dream of a fruit farm. Life was going on.

As her two children were growing up, she now had little bit of time in her hand for her own. When husband and children were off to office and school she started thinking about her dream that was forgotten long ago. She had a big land now and the beautiful house "Mayakanon".

First she stared a nursery in 2015 as she loved flowers. From there she eventually started her fruit garden in 2017 on 1 Acre28 Decimal of Land. First she started to plant Malta fruits with the help of her husband . As an agriculturist her huband always supported her. She bought 136 sapling of Malta Fruits. After two years Malta trees bore lots of fruits. She got 3-5 kg fruits from each tree. The market price of Malta was 120to 140Tk.

From 136 Malta trees she hopes to get profit of at least 1 lac 36 thousand Tk.





Biogas system in her Farm. Now she has 27 Goats in her Farm.

Apart from Malta she planted 416 Dragon fruits which would bring her additional income. She has 10 cows and more than 27 goats and 40 pigeons. Prevoiusly unemployed people are now working in her farm. Dragon Fruits are more on the expensive side local market of Bangladesh and she manages to gain huge profit by selling these fruits.

In her farm she uses organic compost along with Solar panel and vermicomposting. Many

people in her neighbourhood are inspired by Rina Akter and shows interest to do the same.

According to Rina Akter women need to be selfsufficient. If a woman works and earns money she is likely to get more respect from her own family and from the society.

She added that everyone should work for her or his dream and one day it may come true. Determination and patience has made her a successful women. She strongly believes that every women has to work and change their livelihood. The added income generated contributes to the entire family livelihood

We salute Rina Akter for her determination as someone who never gave up her childhood dream.



Rina Akter and her Dragon Fruits fram.

Source: The Story written by Dr. Usharani Boruah. Librarian, CIRDAP.

### **Building future with boutique**

Housewife becomes solvent by opening apparel shop in Jamalpur's Tomaltola



Once a housewife struggling to make ends meet, Khursheda Begum Khushi has now become a shining example of self-employment in her locality in Jamalpur.

The 45-year-old runs her boutique "Khushi Basralay" at Tomal tola, making a profit of around Tk 25,000 per month.

Her road to success, however, was a bumpy one.

Growing up in poverty, Khushi dropped out of school and was married off when she was only 16. After the birth of her daughter two years later, her husband Abdul Alim, a trader, was struggling to bear the expenses of the family.

Around 25 years ago, Khushi started working as an apprentice handicraft worker to ease her family's financial distress.

"One day, I went to my neighbour's home where I saw a woman doing embroidering on a 'nakshi kantha' [traditional embroidered quilt]. That's how I got the idea," Khushi told this correspondent recently.

Khushi was just 20 when she landed the job at "Srijan Hastashilpo," a local business entity. She had to work 12 hours a day for a monthly salary of just Tk 500.

"The payment I got for the laborious task was meagre but I was happy to get the opportunity to learn. I learned how to do embroideries on blankets, bed sheets, pillow-covers, sarees and other women's wear," she said.

#### **Aspiring Stories from Rural Communities**

Appreciating Khushi's devotion, her employer increased her salary to Tk 1,500 after two months.

"With time, I started envisioning that one day I will launch an embroidery business at my home," Khushi said.

With her husband's help, she got in touch with some Dhaka-based boutiques and brought panjabis. She did embroideries on them and thus gave herself a new income alongside her job.

After three years, she guit the job and joined another handicraft business

"Shotodal" as a designer in Jamalpur for Tk 3,000 a month.

She continued working there for five years and honed her skills, which led her to start her own business, recalled the entrepreneur.

In 2013, Khushi left her second job and began running a small business "Khushi Hastashilpo" at her home with Tk 20,000. After hiring a number of women to do different needle work at different scales, she appointed some women as "supervisors" to lead them.

Her business produced nakshi kantha, bed sheets, cushion covers, wall mats, and women's attire. Her workers' payment varies based on their skills.

Khushi told this paper that after being in the business for a decade, she had savings amounting to Tk 1,500,000. She invested all of it in her boutique "Khushi Basralay" in 2013.

Her husband was also involved in the business, Khushi added.

"I am proud of my wife as she has pulled out the family from hardship and established me as an honourable businessman," said a proud Abdul Alim.

Maksuda Hasnat, executive member of Jamalpur Handicraft Entrepreneurs Association, said, "Khushi has set a rare example in the community by not only establishing herself as an entrepreneur but also by creating jobs for hundreds of women in need."

Source: The Daily Star, 15 January 2019, Bangladesh

## Cancer-preventing broccoli cultivation brings success to Satkhira farmers



A broccoli farm in Satkhira, opulent with this vegetable, which turned the fates of some farmers, bringing them prosperity, on January 28, 2019 Dhaka Tribune

#### As broccoli is an unfamiliar vegetable to locals, they call it 'green cauliflower'

Satkhira farmers have found prosperity and success in the cultivation of the cancer-preventing vegetable broccoli. With the aid of the non-governmental organization Unnayan Prochesta (UP) based in Tala upazila, Satkhira, some farmers were commercially successful by cultivating this unconventional vegetable in the area.

Broccoli is an unfamiliar vegetable to the people of Satkhira district. As the vegetable is green in color and looks like a cauliflower, locals call it "green cauliflower."

#### Story of Masud's success

According to sources from the Tala upazila agriculture office, a young farmer named Masud Hossain from Nagarghata union in Tala upazila got a good yield by cultivating broccoli for the first time on eight decimals of land.

When he first brought the broccoli to sell at the local market, people called him foolish and were unwilling to buy the vegetable, even if it was free.

#### **Aspiring Stories from Rural Communities**

However, after learning about broccoli, the popularity of the vegetable rose to such extent that it sells out instantly when brought to the market.



Young farmer Masud Hossain, in his broccoli farm, found success commercially by cultivating this vegetable, on January 28, 2019 | Dhaka Tribune

Masud Hossain said: "With the assistance and advice of UP, we had to spend only Tk1,200 on broccoli cultivation this year while getting a profit of Tk15,000 in return."

He started working in agriculture a few years back following his father's footsteps, after getting a degree from Satkhira's Advocate Abdur Rahman College but

failing to acquire any jobs.

Although Masud and other broccoli farmers of the area were worried about the sales of broccoli, they have been shown a light of hope as broccoli turned out to be quite popular. They hope to increase the cultivation of broccoli in the future.

Agriculture Officer of UP Md Nayan Hossain said: "Masud was commercially successful by cultivating broccoli with the help of our advice."

"Broccoli is a winter vegetable, as is the cauliflower. Although it is very popular in the United States and Italy, the people of our country are not very familiar with it," he said.

"The vegetable is rich with nutrients such as proteins, vitamin C and other minerals. In addition, it is also a vegetable that gained popularity for having qualities to prevent cancer," he added.

He said: "We have trained five farmers from Panchpara and Mithabari villages in Nagarghata union, along with Dhandia union this year, to cultivate broccoli as an experiment on less than an acre of land."



File photo of broccoli, that locals call 'green cauliflower' | Dhaka Tribune

"As a result," he said, "many farmers of the regions were willing to cultivate the vegetable after witnessing the profits and successes of those five farmers."

He said it was possible to produce 62 mounds of broccoli after only 50 to 60 days of planting 5,000 broccoli seeds, and earning Tk75,000 after spending just Tk10,000.

The expenditures, including the cost of fertilizers, seeds and such, were less than Tk1,000, making broccoli cultivation more profitable than any other vegetables or crops.

Tala Upazila Agriculture Officer Md Abdullah Al Mamun said: "Broccoli is a vegetable that has an abundance of nutrients while being low in calories. It contains plenty of potassium that helps maintain the nervous system and keeps the body healthy and disease-free.

"Farmer Masud, along with several others, has gained immense commercial success by cultivating broccoli. Everyone is keen to visit his broccoli garden, as the story of his success has spread in the area."

Source: Dhaka Tribune, 30 January 2019, Bangladesh

## **Crafting way out of poverty**

Women of 20 villages in Bogura produce handicrafts for export



Baskets made from cane are kept on the roof of a house in Hapunia village of Bogra's Sherpur. Women of many villages in the upazila are turning their fortunes around making the handicrafts that are exported to different countries. Photo: Mostafa Shabuj

Several thousand women from about 20 villages in Bogura's Sherpur upazila are becoming self-reliant by making handicrafts, playing a key role in earning foreign currency as these handmade products are exported to different countries.

The artisans make a variety of products like hamper baskets, floor mats and rugs of different sizes while they are able to work from the comfort of their homes. They collect raw materials like palm leaf, kans grass, palm and jute fibers from six companies operating in the area and are paid upon completion of the orders.

The companies have provided nearly 6,000 women of these villages under five unions, including Bhabanipur, Garidah, Kusumbi and Simabari, a scope to become active economically. On a visit to Hapunia village, this reporter saw women at some households busy making baskets. They do this work after completing their household chores, villagers added.

Each artisan earns between Tk 3,500 and Tk 10,000 a month, depending on the number of orders carried out, they told The Daily Star. Abdur Rashid, a rickshaw puller of the village,

recently built a sturdy brick home, thanks to the collective earning of the family members including his wife.

"My wife, daughter—in-law and daughter all make handicrafts at home. Together, they earn at least Tk 20,000 a month," he said.

Nargis Akter, 37, another resident of Hapunia village, said she gets Tk 8,000 to Tk 10,000 a month. She has been working at the factory of BD Creation, one of the six companies, for the last ten years.

"More than 95 percent of the women of this village are involved in making handicrafts."

Zosna Begum, 35, said she learnt this craft when she was just a little girl. Women here never go to Dhaka to look for work in garment factories as there are plenty of work opportunities in these villages, she added.

Rarid Hasan, area manager of BD Creation, said, "We have over 500 home artisans and 200 factory workers, who are mostly women. The home artisans collect the raw materials from us and sell the finished products back to us."



He said there are six companies -- Sun Trade, Classical Handmade Products BD, Dhaka Handicraft, ASK Handicraft, Crafts Village and Creative BD -- that collectively produce handicrafts worth Tk 2 crore every month from Bogura.

### Aspiring Stories from Rural Communities

Mostafa Ahmed Pias, managing director of BD Creation, said they produce 200 different items from Bogura and export those to countries like Australia, Germany, France, Italy, Brazil, Portugal, Sweden, Denmark, China, India, USA, and the Middle East.

"To bag orders, we participate in one fair in Germany and two in Hong Kong, where all the big buyers attend."

In Hapunia village alone, there are six factories -- two of BD creation, three of Classical Handmade and one of Sun Trade. Rabiul Hasan, production manager at Classical Handmade, said, "We employ nearly 200 artisans in each factory in the village."

The first handicraft factory in this area was setup in 1980, he said. It has grown over the years due to the availability of raw materials and workers.

"The raw materials mostly come from nearby villages and the char areas of Jamuna River."

Source: The Daily Star, 09 May 2019, Bangladesh

## Elderly couple gain solvency with duck farming



Md Yakub Ali is seen feeding the ducks of his farm Dhaka Tribune

The couple started the farm when they had no one to look after them

An elderly couple in their sixties successfully escaped poverty raising ducks in Dinajpur when their adult children no longer supported them.Md Yakub Ali and his wife Zinnatun Begum started a duck farm on the banks of the Atrai river in Gucchagram village of Khansama upazila.On a visit to the Jaiganj-Jharbari dock area of the Atrai river this correspondent found the small farm has around 450 ducks and the couple's tin shed house. Zinnatun and Yakub cover their family expenses by selling eggs at around Tk14,000 per month and are looking forward to expanding their farm. Yakub bought 500 day old ducklings with all their savings and were able to turn a profit from the farm in two months of intense work.

"I have a son and two daughters. My daughters are married. My son lives separately with his wife and children. We have no one to look after us," said Yakub Ali.Zinnatun spends day and night looks after the ducks on their farm, and says: "We don't have the strength to do heavy work at this age. The ducks swim in the river in the daytime and we feed them, herding them to the farm in the evening." Although 50 of the ducklings died from various diseases, the couple is satisfied with the treatment and suggestions provided by livestock officials in the upazila. Veterinary Surgeon Dr Bipul Kumar of the Department of Livestock Services (DLS), upazila unit office, said: "Duck farming is a profitable business. Khaki Campbell is the most popular breed of ducks that are farmed in Bangladesh."

"Ducks suffer mostly from the plague, fowl cholera, and viral hepatitis. The government provides free vaccines for these diseases." Many locals are now inspired to take up duck farming after the couple's success in the field.

Source: Dhaka Tribune, 26 May 2019, Bangladesh

## From worker to apparel entrepreneur



Once an RMG worker, Chhobi Das Gupta now runs factory in Ctg employing 100 people
Garment worker-turned entrepreneur Chhobi Das Gupta instructs an operator at her garment factory in
Chattogram's Notun Chaktai area. Launched around three years ago, the factory now employs more than 100 workers. The
photo was taken on Sunday. Photo: Rajib Raihan

After the death of her father, Chhobi Das Gupta started working as a garment worker at the age of 12. She dropped out of school and became the bread winner of a family of seven struck hard by poverty. For the next 18 years, she worked at different garment factories contributing to the country's largest for ex-earning sector. She managed admission at Bangladesh Open University as well but had to step back again due to financial stress. Despite hardship, Chhobi had a dream that one day she would start a garment factory of her own and, to make that a reality, she started saving from her monthly salary. After saving for 18 years, Chhobi finally started her own factory "Sense Fashion" at a rented flat in Chattogram's Khalifa Patti in February, 2016. She appointed six workers and bought 10 sewing machines with a capital of Tk 7 lakh -- Tk 5 lakh that she saved and the rest she borrowed. Two years later, her business grew bigger prompting her to move the factory to Rabeya Tower in New Chaktai neighbourhood. She had more than 100 workers and 60 sewing machines at the new place. "There was a time when I had to wait for my salary at the end of every month to feed my family members. Today, I disburse Tk 6 lakh in monthly salaries to my workers," said the 32-year-old hailing from Pashchim Sholkata in Anwara upazila.

While talking to this correspondent at her factory on January 5, Chhobi said she had been demotivated by many people when she started the venture but nothing could derail her. After moving the factory to New Chaktai, Chhobi faced objections from local businessmen and neighbours over running power generators. She tried to convince them and was finally able to run generators after four months' of tirelessly effort. Chhobi mentioned her husband Amalendu Das Gupta and his friend Dipankar Dastidar when talking about motivation. "Without their support, I would not reach this stage," she said. "They were always by my side during the ups and downs and encouraged me whenever I broke down." Chhobi, without going into details, said she had heard of the government's loan schemes for women entrepreneurs but claimed that she had been turned down by several banks when she asked for money to expand her factory. She made a plea to the government to provide her SME loans so that she could expand her factory and continue creating jobs.

Source: The Daily Star, 16 January 2019, Bangladesh

## **Homemaker to Trendsetter**

Tangail woman growing organic food for over a decade; fondly called a 'model farmer'



Organic farmer Rina Begum poses with two white radishes at her farm in Tangail's Delduar upazila. Photo: Mirza Shakil

Once a homemaker, Rina Begum is now revered as an agricultural trendsetter in her village Mamudpur in Tangail. The 48-year-old has been into organic farming for over a decade. Rina is fondly known as "the model farmer" in her locality. Through hard work and dedication, she has been leading "poison-free" agriculture in the area. She uses compost fertilisers and natural methods like sex pheromone and perching method to prevent pest attacks on crops and vegetables. Her composts are made of cow dung, leftovers of banana plants, shrubs, creepers, and herbs.

Two years ago, she and 19 other women in the upazila received trainings from the local agricultural department on the usage of vermicompost (a nutrient-rich organic fertiliser and soil conditioner relatively easy for plants to absorb) in order to get better harvests."Actually, it is not possible to fully cut-off usage of chemical fertilisers. But compost fertilisers, especially vermicompost increases the fertility of the soil keeping its qualities intact. It also reduces the cost, brings in more harvest and profit," Rina told this paper. Following in her steps, other farmers of the area were also getting better results, said Shoyeb Mahmud, upazila agriculture officer in Delduar.



Rina produces six maunds of vermicompost every two months and sells them to farmers of the village as well as of adjacent villages at Tk 25/kg, he added. Moreover, the energetic lady had developed a seed bank with about a hundred varieties of vegetables, spices, and near-extinct varieties of paddy, the officer noted.

"Most farmers do not preserve seeds of the crops they grow. I sell my seeds to them and sometimes I give it to them on condition that they will preserve their seeds and give those to me in exchange," Rina told this correspondent. "Rina apa [elder sister] taught us the techniques of sowing seeds and usage of fertilisers for better yields. We take advice from her over various problems that we face during farming," said Amena Khatun, another female farmer of Mamudpur.



A medal awarded by the Food and Agriculture Organisation of the UN for being the ideal farmer. The pictures were taken recently. **Photo**: Mirza Shakil

In 2004, Rina received training under project "Naya Krishi Andolon" ran by a local NGO Unnayon Bikolper Neeti Nirdharanee Gobeshana Kendra. The training taught her organic farming and natural methods to control pests, Rina recalled.Born in Hinganagar village of the upazila in 1971, Rina was married to local farmer Main Uddin in 1985 when she was a student of class-VII in school.

Rina and her husband received 130 decimal of land and a home on 20 decimal land by inheritance. "My husband and I applied the techniques to cultivate crops and vegetables on our land," Rina said while recalling her initial days in farming. She not only gained solvency and reputation but also improved the lives of her family members. Her two children, a daughter and a son, completed higher education and have jobs.

Rina's daughter Bipasha Akhter is proud of her parents."When my father goes to nearby market to sell vegetables, they are sold within the blink of an eye because people know that the products are produced by my mother and are free of chemicals and pesticides," said Bipasha.

Nominated by the Department of Agricultural Extension, Rina went to Bangkok in 2015 on the occasion of 35th World Food Day.FAO Regional Office for Asia and the Pacific organised the programme where Rina was honoured with a crest, certificate, and cash for her contribution to organic farming and leading female farmers in her locality.

Source: The Daily Star, 10 February 2019, Bangladesh

## Innovative way to tackle sapling crisis

Paddy farmers in low lying areas of Pirojpur make seedbeds on raised fields to meet their requirement



Paddy growers at Dumuria village under Dewlbari-Dobra union in Pirojpur's Nazirpur upazila usually grow saplings on a high bed, locally known as kandi, as most of the villages under the union remain waterlogged and covered with different water plants round the year. Photo: Star

Geographically most areas under Dewlbari-Dobra, Kalardoaniya and Malikhali unions in Nazirpur upazila remain waterlogged and covered with different water plants including water hyacinth all the year round. As a result, it is quite impossible for the farmers in those areas to cultivate Aman, which is the main season for paddy in the southern parts of the country.

However, as the water level started decreasing with the arrival of winter, it created an opportunity for the local farmers to grow Boro paddy in the marshlands.But, growing paddy sapling is a bigger challenge for local growers. Usually farmers across the country grow paddy saplings on plain land and without any serious difficulty, but it is too difficult here as there is hardly any suitable land available, local farmers said.

"Usually we grow paddy saplings on a high bed, locally known as kandi," farmer Sudhir Ranjan Bepary of Beel Dumuria village said, adding that it is difficult to find such land in the areas as most of the farmers grow Robi crops there.

**Rural Development in CIRDAP Member Countries** 

"Sometimes, we have to grow the saplings on plain land in distant villages and then carry

those to our cropland," Ali Hossain of the village said.

"It's not that easy to grow paddy in marshlands as the areas remain covered with thick water

plants," farmer Anukul Mondal of Pakuria village said, adding that paddy growers have to

face serious difficulties, especially arranging the saplings.

"Most of the farmers in our locality mainly depend on Robi crops and if embankments are

built here production of paddy and Robi crops will surely increase," said Samiran Halder, a

member of Dewlbari-Dobra Union Parishad (UP).

"Growers in Dewlbari-Dobra union can only grow paddy during the Boro season when the

water level starts decreasing," Union Sub-Assistant Agriculture Officer Premananda Halder

said.

Dewlbari-Dobra UP Chairman Mohammad Waliullah said although Bangladesh Agriculture

Development Corporation (BADC) constructed an embankment in his union, more

embankments are needed for agricultural development."Alongside growing paddy sapling,

life is very challenging in the marshlands as the entire communication system depends on

waterways there," Nazirpur Upazila Agriculture Officer Digbijoy Hazra said.

His department has a target to bring around 13,000 hectares of land in the upazila under Boro

cultivation this year, which was 10,000 hectares the previous year, he added.

The Daily Star, 12 December 2018, Bangladesh

36

## **Integrated Farming Brings Cheers to Farmers**

Integrated farming has brought cheers to farmers in Patuakhali district. The farmers in the district have started cultivating vegetables in fish gardens and ponds following the advice of the agriculture department.







Saidur Rahman Rubel Molla, chairman of Charkajal UP, said: "Integrated farming will help farmers bring more profit."

"I started integrated farming after being trained by officials of the local agricultural department. The training has improved my knowledge about seeds," he added.

Currently, Rubel Molla has built his farm on 33 acres. His farm has 2,000 bean trees, 2,200 bottle gourd trees, 3,000 pumpkins, 3,000 chichinga trees, 1,200 balsam apple trees, 1,500 green cucumber trees, 1,800 cucumber trees and 2,000 asparagus bean trees.

Besides, green pepper is cultivated on 40 per cent of the land, brinjal is produced on 30 per cent of the land, and 20 per cent of land is allocated for coriander cultivation.

Fifty short-variety coconut seedlings and Amropoli mango seedlings have been planted on the banks of a pond. Farm manager Ibrahim said: "I have 20 labourers in the farm. I sell milk, fish and vegetables in the local markets and make a profit of Tk. 25000 to 30,000 after paying workers' wages, cost of fertilisers, seeds, pesticides and other expenses."

Saidur Rahman Rubel Mollah said he had cultivated different species of fish in eight ponds and three enclosures in 2008. Earlier, the ponds and the enclosures were left abandoned.

He began cultivating vegetables following the advice of the agriculture department in 2015.

Saidur Rahman, deputy assistant agriculture officer of Char Kajal union, said: "Earlier, it was only a fish farm. We asked him to cultivate vegetables with help from the agriculture department. The success of Rubel Molla has inspired local youths, who have also started integrated farming." Upazila agriculture officer Abdul Mannan said: "We have trained the farmers and provided necessary assistance. They are now supplying vegetables to the local markets."

Source: The Independent, 3 January, 2018, Bangladesh

# 'Magic' of smartphone changes life of Teesta char women



Women holding smartphones pose for photograph on the bank of the Teesta River at Dakkhin Kharibari Char in Dimla upazila of Nilphamari. Photo: Eam Asaduzzaman

Merina Begum was having a video phone call with an agriculture officer when this reporter approached her maize field at Dakkhin Kharibari Char, a sandy area of the Teesta River basin in Nilphamari's Dimla upazila.

"Hello Sir, please see my maize field in the video and suggest me what to do," the 36-year-old Merina was asking Upazila Agriculture Officer Sekendar Ali, at the other end.

Ali, after having a long look at the maize, advised her to put boron fertilizer as a remedy.

Merina appeared happy and told this reporter that the android phone she got as a gift three years ago has been an important tool for her to solve many farming-related issues.



### **Aspiring Stories from Rural Communities**

Fazila Begum of the area listens to weather forecast through a smartphone, which prompted her to reap onion earlier than the usual harvesting time to save the crop from damage by imminent rain. The photos were taken on March 3. Photo: Eam Asaduzzaman

Merina is one of the 100 women farmers in Dakkhin Kharibari Char, who got the phones in 2016 under a research project called Protic (Participatory research and ownership with technology, information and change). The project was funded by Monash University of Australia with the support of Oxfam Bangladesh.

Local NGO Polli Shree, which has been implementing the project, also provides each of them 500 megabyte data very month.

And this small yet smart device has been empowering poor women in the area, a home of 3000 families, in a big way.

"Every day I get at least 10-12 video calls from women farmers of the char and their phones come as blessing for all as I can solve the problem instantly sitting in my office," Ali told this reporter afterward. Farida Begum, 32, another proud owner of the phone, was preparing to harvest lal shak (red amaranth). She made a call to a vegetable wholesaler to know the market price and got a very good response.

Another beneficiary Saleha Begum, 30, said, "After giving mobile sets, project officials taught us how to use it. Besides, useful apps on agriculture like Krishoker Janala and Digital Thikana, dialing to government offices and call centre of project Protic, weather forecast and even entertainment were installed when we got the phones."

This reporter talked with ten users and all of them said they are getting benefits after using those apps. They also said it allowed their husbands to go to the big cities and work there to earn some additional money for the family. The women of this disaster-prone char area also said that they could get message in advance on natural calamities and convey it to villagers to take shelter to safer places.

Many of them impoverished families have now built half pucca tin-roofed houses, purchased farm land, have source of pure water, sanitary latrine and can send the children to school, said Rabiul Islam Shahin, the Dimla UP chairman.

Moreover, they are also helping their neighbours to get the benefit of digitalization, Shahin added.

MA Makim Chowdhury, project officer of Protic, said, "Last year, a research team from Dhaka University, comprising a group of students led by Associate Professor Shakhawat Hossain of disaster management department visited the area. They were overwhelmed to see the impact of the cellphones while conducting a survey here."

Contacted, Shakhawat Hossian said, "Touch of digitalisation with the help of smartphones has brought about basic changes in the lives of the poor, marginal and deprived women in the remote area. It happened not only in agriculture but also in disaster management and entertainment. More importantly, it empowered the women."

Nazmunnahar, the UNO of Dimla, said she was amazed to see how quickly the women in the char area were learning about and applying those devices in their daily life.

"I have asked several of them to solve a few riddles and they did it using the google search engine with amazing efficiency," said Nazmunnahar.

## Oasis in the Sand

Tangail farmer turns riverside wasteland green



A part of the orchard beside Bangabandhu Bridge in Tangail. Right, An "alu bukhara" tree in the orchard. Photo: Star

Four short years ago, on the Jamuna river's eastern bank beside the Bangabandhu Bridge in Tangail's Bhuapur upazila, there was a large patch of ground overrun with river sand. Most people would have dismissed it as a wasteland. But when Ibrahim Ali Mondol passed by while sitting aboard a Dhaka-bound train from his native Natore, through the window he saw something else: the potential for a grand orchard.

"It was a huge amount of land, around 27 acres, not being put to use," Ibrahim recalls. "I decided to lease it." He did just that, at first sub-leasing the land from Jamuna Resort Limited and two years later switching to a lease from the Bangabandhu Bridge Authority.

Ibrahim rented a home in nearby Pathailkandi and settled in along with his wife and son. His dream of creating an orchard in the sand hadn't come from nowhere. Ibrahim worked in Saudi Arabia for several years. He'd seen it done before. "It isn't easy to grow plants in sand," he says, "but with modern, scientific methodology and hard labour it's possible. Saudi farmers grow all sorts of fruit and vegetables in the desert."

For as long as Ibrahim remembers, he has been passionate about plants, especially fruit trees. The orchardist was born in a small trader's family in Sonapatil village of Natore's Naldanga upazila, passing his Secondary School Certificate exam in 1987. Ibrahim then completed a two-year diploma in air-conditioning technology before leaving for the Middle East. Upon his return eight years later he thought to start a broadband internet business in Dhaka, which along with some friends he did. Though business was good, Ibrahim longed for nothing more than to find himself in nature's midst, surrounded by trees.



Ibrahim Ali Mondol

So he set to work, preparing the soil. He invested all his savings earned at home and abroad in the process. His wife sold her gold jewellery. "The trick is to first dig the hole and add cow dung," Ibrahim says. "I plant each sapling on top of dung, with a little sand added again. It's important to water them generously as soon as they're planted." "Even then," he continues, "only about 85 percent of the saplings will survive the sandy soil, but it's easy enough to replace any that have died. "Once established, Ibrahim keeps the trees healthy with mostly organic and some chemical fertiliser, and regular water. Four years on and the results are astounding. Ibrahim's mixed orchard features around 3,000 mango trees of at least seven varieties. He has 6,000 guava, 500 jujube and 2,000 lemon trees.

Ibrahim grows pineapples, hog plums, dragon fruit, sweet tamarind, Indian almonds locally known as "kath badam", and "alu bukhara" plums. The farm's vegetable repertoire includes pumpkin, brinjal and green chilli. Over 100 medicinal species are grown, such as aloe vera, tulsi, red sandalwood, "shatamul" wild asparagus and "kalomegh". "In the last two years I sold fruit worth Tk 6 lakh," says Ibrahim. "This year I hope to sell Tk 10 lakh of produce. By 2020, the farm should be bringing in about Tk 50 lakh every year."

"It's truly remarkable what Ibrahim has done with that sandy, riverside land," says Bhuapur's sub-assistant plant protection officer, Habibur Rahman. "I was really surprised. The benefits of his work go beyond the huge amount of fruit produced. His farm enhances the area's crop diversity." For Ibrahim, developing his orchard has been in large part a labour of love, driven by an unstoppable passion for trees. "In our country we don't have as many trees as we need," he says, with particular concern for global warming. "I urge everyone to plant at least two fruit trees in their household yard, and more in any other place that's suitable."

Source: The Daily Star, September 30, 2018, Bangladesh

## Of a farmer with passion for education



Farmer Abdur Rashid taking care of and teaching children with physical and mental disabilities at the school he founded in 2011 at a remote village in Lalmonirhat's Kaliganj Upazila. The picture was taken recently. **Photo**: S Dilip Roy

Abdur Rashid is a marginal farmer revered and respected for a completely different role he has been playing for the last nine years in the remote village of Lalmonirhat's Dakkhin Dalgram Parshurampara.

The 60-year-old set up a school for children with special needs in 2011.

To do that, he gave up 20 decimal of his 35 decimal homestead land, the only property he owns.

He built a tinted house with three rooms from his own coffer and with the support of locals, arranged specialised teachers motivated enough to volunteer like him for a "feel very happy" cause.

Rashid named it Kaliganj Pratibandhi Bidyalay, which is now bustling with 110 children; 25 mentally, 35 speeches and hearing, 20 visually and 25 physically challenged.

"I spend four to five hours in the school every day. When I sit with the children and teach them something new, they become extremely happy. It makes me happy too," Rashid said, adding that the time he passes with the kids gives him an unparalleled peace.

Festivity was all around when this reporter reached the farmer's school after a 40-kilometre ride from the district headquarters. The children were in the assembly and singing the national anthem before enjoying their education in those not too specious yet festive ambiences.

There are 20 teachers, including nine females, and 15 teacher's assistants, all provide voluntary service and teaches by rotation. Since it's a specialised school, all the teachers took training for three months. Professionally, they are businessmen and kindergarten school teachers. Some are university students.



The school also has two vans for the students. Solvent parents pay for transporting their children while it is free for the needy ones.

Asked what motivated him to take up the challenge to work with the children with special needs, Rashid said it was primarily need-based. "Many parents considered their challenged children as burden. Some of them turned to me for advice and at one point, I said to myself if I could to do something for those kids," said Rashid, a proud father of four daughters. "But it was very challenging when I started," said Rashid, who claimed to have studied up to class X.

"Parents were not interested in exposing their challenged children in public domain. I had to create awareness among the parents and convinced them that their children would only get better through the school," Rashid said while reflecting on those tough days when he took door-to-door campaign at 20-25 villages in five unions of Kaliganj upazila. Nowadays, parents are willingly to send their children with special needs for learning, he said. "Many such children are at the primary stage of their illness and proper treatment and support might help them get cured. I can't help in this regard. I'm trying to do what I can do best," he said.

"I purchase books, khatas, pens and other educational accessories for the children with the money I earn selling hens, ducks, goats and even cows. I also get help in the forms of wood, bamboos, tin from the local people to build the school," said Rashid. Abdul Hakim, a teacher at the school, said, "We teach some children by Braille system and sign language. Those with physical disabilities are given general teaching."Rawshana Begum, a guardian from the village, said her physically and mentally challenged daughter was very happy now to know how to read and write. Besides, the girl enjoys most when at school with other children. Another local, Shahjahan Sazu, said Abdur Rashid and his Kaliganj Pratibandhi School showed that children with special needs are not burden and instead can become resources if given proper support. Rashid applied to the social welfare ministry for registration of his school. Deputy Director in Lalmonirhat Social Welfare Department Mosharraf Hossain said all the school's all necessary papers were at his office and the ministry concerned and that the school would get the approval soon. "It's great job by a farmer," he said, as he showered Rashid with praise.

Source: The Daily Star, 09 March 2019, Bangladesh

### On the trail of Lutfar Rahman: 'The 1 Tk Master'



Lutfar Rahman has been involved in spreading education to poor children living in the villages since 1984. UNB

Photo

Imbued with the light of education, Lutfar Rahman has been involved in spreading education to poor children living in the villages along the banks of the Brahmaputra River in the district, exceptionally in exchange of only one taka from each student since 1984. Lutfar Rahman, himself a resident of Uria village in Fulchhari upazila, could have been labeled a 'floater', rendered homeless after his ancestral land and valuables were washed away by the mighty river in 1974.

Afterwards, he even could have been called a "Laundrywala", as he opened a laundry shop in his village after the fatal erosion. Now, his name takes only one adjective and that is 'One Taka Master', ever since he took up tuition as a profession, of course with a focus on teaching poor students in the area.

Lutfar Master has been conveniently spreading the light of education among students in Baburia, Madanpara, Dhulipara, Kangipara, Pulbandi and several nearby villages.

Then, he took shelter on the bank of Brahmaputra river in Gadhari village, which is only 7 kilometres away from his former native village and started imparting knowledge to poor children there since 1984. The name may seem to be a name for demeaning someone to those unknown, but local people call him by this name, holding him in high esteem and, it perfectly goes with his familiarity for inculcating primary school students for only Taka 1 per day.

Now the 69-year old, who passed his Secondary School Certificate (SSC) examination in 1974, could not go for further education, and could not manage a job for his family as he had to instantly survive with his family members. He, then, started reaching door to door in search of such students as are too poor to manage their money for tuition, averse to go to leave them away from schools

### **Aspiring Stories from Rural Communities**

"I saw many poor children getting averse to education and, in many cases, leaving their education due to facing high price of tuition, that prompted me to involve in this profession to do something for those, and that, at the same time ekes out my family subsistence.

"I take only one taka from each of my student after daily tuition, and thus I have five batches consisting of at least 25 students that, in total, brings me around TK 3,000 to 3,500 every month," said master Lutfar. "My 4-member family is dependent on the paltry amount but makes it somehow."

"I started tuition in 1984, when I used to receive only 25 paisa, that also would suffice for my family with a struggle like this today," he continues.

Akhtar Majhi of Madanpara in the upazila said, "We are poor people and cannot afford to bear expenses of our children. The private master or coaching centre takes Tk 200 or Tk 300 as compensation. We cannot afford it. So, we must go to Tk 1 master. He is as we expected a truly great, great teacher, better than any other tuition options."

About the teaching of the Tk 1 Master, one of his students Ruhul Alam who is currently working as an NGO worker said, "During our childhood, Sir (Lutfar Rahman) had been a constant mobile school for children, we all used to gather round him for even taking our lessons."

"Militancy does present a huge loss of our people and country, I hope my students will not indulge in militancy, they would be as rational as a human should be," said the master.

"There is no substitute for education to create a poverty-free society," he said. "I motivate my students to spread the light of education as best as they can."

Source: The Independent, 22 January 2019, Bangladesh

# Organic vegetable farming brings smiles to farmers of Gopalganj, Pirojpur



Farmers in Gopalganj and Pirojpur are cultivating safe vegetables using only organic methods Dhaka Tribune

With organic farming, farmers have been able to avoid chemical fertilizers and pesticides

Farmers in Gopalganj and Pirojpur districts are enjoying the cultivation of safe vegetables in the front and backyards of their homes throughout the year using only organic methods. Safe vegetables are healthy for the human body, and more flavorful as well. That is why such vegetables have gained so much demand in the marketplace and are being sold at higher prices than vegetables cultivated using chemicals fertilizers and pesticides.

With organic farming, farmers have not only been able to avoid chemicals and pesticides, but have also been protecting the environmental balance. Moreover, it is saving them the extra cost of fertilizers and pesticides. Yearlong vegetable farming has changed the living standards of the farmers of these regions, and is becoming more popular among them.

The Agricultural Research Institute said with the funding of the Bangladesh Krishi Gobeshona Foundation (KGF), they have started the cultivation of safe vegetables in the lower wetland areas of Gopalganj and Pirojpur under a project to improve the living standards of farmers using innovative and research-based methods.

The institute also said a total of 96 farmers – from Kandarpgati of Gopalganj sadar upazila, Mitradanga of Tungipara upazila, Tarakandor of Kotalipara upazila and Bil Dumuria village in Nazirpur upazila of Pirojpur – have established 96 plots of safe vegetable farms in their house yards and nearby areas by creating a floating bed of water hyacinth.

### Aspiring Stories from Rural Communities

Shakti Kirtania, a farmer from Mitradanga village of Tungipara upazila, said: "The low-lying lands of our village get plunged underwater at the beginning of monsoon season. Most farmers of the area become idle at that time."

"But with this project, we have created a floating bed of water hyacinth in the water, and then cultivated vegetables on the bed surface. We have made a lot of profit from selling the safe vegetables to the market," he said.

"We are also getting counsel, training and free seeds from the Gopalganj Agricultural Research Institute to cultivate green broccoli, turnip, white broccoli, cabbage, spinach, eggplant, gourd, bean, cucumber, pepper, red spinach, tomato, etc."

"We do not use chemical fertilizers and pesticides on the vegetables. That slashed a lot of cultivation costa, and my yard is now abundant with fresh and nontoxic vegetables," he said.

Molay Majumder and Gurupad Biswas, farmers from Kandarpgati village in Gopalganj sadar, said: "We have earned Tk1 lakh from cultivating organic vegetables on around one acre of farmland in the winter and Tk50,000 in the summertime."

"We are also hoping for big profits next monsoon season. Many farmers in our area have been benefited by growing the safe vegetables," they said.

Shahar Ali Sheikh, a vegetable trader from Gimadanga village in Tungipara upazila, said: "The nontoxic safe vegetable is very delicious to eat and has great demand in the market. Normally we buy the vegetables directly from the farm and take it to local market, and they quickly sell themselves."

MM Kamruzzaman, chief scientific officer of Gopalganj Agricultural Research Institute, said: "Yearlong vegetable farming is changing the living standards of the two district's farmers. A massive socioeconomic change is taking place in their livelihoods, and every day new farmers are coming forward with great interest in farming safe vegetables."

"With this method, they are maintaining the environmental balance and also preparing to deal with the risks of climate change."

Source: Dhaka Tribune, 12 February 2019, Bangladesh

## Plucking tea leaves brings self-reliance among female farm labourers



Labourers plucking leaves at a tea garden in Panchagarh — BSS photo

Plucking of tea-leaves has brought self-reliance to some 10,000 female farm-labourers in the fast-expanding tea sector on the 'Karotoa Valley' ecological zone in the northern region, reports BSS.

Along with bringing wellbeing to their families by earning through plucking green tea leaves, the women have improved their standard of living and their well-dressed children are now going to schools.

Talking to the news agency, female tea-garden labourers, including housewives, widows, divorcees and unemployed young girls said they are effectively contributing now to their families for living with dignity and honour.

"We are drinking safe water, using sanitary latrines, adopting family planning, stopping child marriage, taking healthcare and living better with our earnings," tea-garden worker Lovely Begum of village Danagoachh in Tentulia upazila of Panchagarh said.

Labourers Aklima Khatun of Moynaguri, Phuli Begum of Kandaligoachh, Mariyam of Guchchagram, Rozina of Narayangoachh and Halima of Dodhigoach villages in Tentulia upazila said they are plucking tea-leaves for the last 10 to 12 years.

Labourers Shyamoli, Joytsna Begum and Mukta Rani of these villages said they are earning daily wages between Tk 250 to Tk 300 on an average by plucking tea-leaves in the tea gardens.

### **Aspiring Stories from Rural Communities**

"Earlier, I passed my days desolately. Now, I earn up to Tk 300 as wages per day to lead better life with my children," said widow Sokhina of Danagoachh village under Tentulia upazila.

Similarly, female labourers Laboni Yasmin, Morsheda, Azmeri Begum and Kohinoor of Panchagarh Sadar said they are plucking tea-laves to lead a better life.

The female tea-garden labourers expressed their happiness at sending their children to schools as plucking of tea-leaves has created job opportunity for them to earn wages for improving their economic condition.

However, they said there almost no concrete rules regarding labour law, working period, appointment letter and minimum wage and healthcare facilities, maintaining register books, safety and security measures for them so far.

"We are hopeful the authorities concerned will resolve these problems for our better future as the tea sector is growing fast on the valley," Azmeri Begum added.

Vice-president of Panchagarh Chamber of Commerce and Industry Mehedi Hasan Khan Babla said the boosting tea sector on the 'Karotoa Valley' is enhancing economy along with creating huge employments for unemployed women.

"By plucking green tea leaves, around 10,000 poor women are already leading improved life with a dream of building better future for their children following their well-being and empowerment," Babla said.

Senior Scientific Officer of Bangladesh Tea Board at Panchagarh regional office Dr Mohammad Shameem Al Mamun said Prime Minister Sheikh Hasina first launched `small-scale gardening-basis' tea cultivation in plain land of Panchagarh in 2000.

Since then, tea cultivation continues increasing and its commercial basis farming began in 2005 as the farmers found `small-scale gardening-basis' tea cultivation on plain lands highly profitable in the area.

"An all-time record 8.46 million kg 'made-tea' worth about Tk 2.06 billion was produced in the 'Karotoa Valley' in 2018 which is higher by 57 per cent than the output of 5.44 million kgs of 'made tea' in 2017," Dr. Shameem added.

Last year, tea was cultivated on 7,645 acres of lands in the valley comprising of five northern districts as tea cultivation is expanding every year following implementation of various pragmatic steps by the present government.

"The number of tea-garden labourers, especially tea-leaves plucking female labourers is increasing every year with faster expansion of the highly proactive tea sector on the Karotoa Valley," he added.

Source: The Financial Express, 21 March 2019, Bangladesh

## Rajshahi Villagers Make Fortune by Shoes Manufacturing



RAJSHAHI: Many people, both males and females, have become financially solvent by manufacturing shoes at Kaluhati village under Charghat upazila in the district, reports BSS.

The successful villagers are contributing to boosting socio-economic condition of the nearby areas. Sohel Rana is now a successful entrepreneur through the business. But his initial stage was not smooth. He had to face many struggles to achieve the present dignified status. "In the village, most people worked as share croppers or day labourers,"

said Sohel Rana recalling his memory of 1990s. The villagers had no land then. They lived in houses of clay and straw. "I had started this business with Tk 20,000 in 2002 and my capital investment is around Tk 22 lakh at present," said Sohel Rana, owner of Konika Shoes Factory, while talking to the news agency at his shop in the village on Friday. He has started supplying finished goods to Aarang and some other posh shops in Dhaka at present.

Then some 15 people of the village used to sell shoes on bicycle in the Rajshahi city and its adjacent places. But, the mode of business has changed over the years and now they manufacture and sell shoes from their respective shoe factories in the village. At present, most of the families are solvent and self-reliant. Many families now live in brick homes with electricity. Many small shoe factories flourished in the village with financial and technical assistance of Small and Medium Enterprises Foundation (SMEF).

### Aspiring Stories from Rural Communities

Sohel Rana, who is also general secretary of Kaluhati Shoe Industry Owners Cooperative Samity Limited, said the village has around 65 shoe factories employing around 7,000 people and fifty per cent of them are females at present. These small factories produce 2.34 lakh pairs of sandals, both for males, females and children and sell those in various districts every month. "My income has risen. Now I am earning between Tk 6,000 and 8,000 per month," said Morzina Begum, worker of Konika Shoes factory. She says many housewives and unemployed youths in the village have changed their lot by making shoes and packets.

The shoe manufacturers make a good business during Eid and other religious and social festivals. SMEF arranges a short course at the College of Leather Institute in Dhaka for the small factory owners learning how to design and make quality shoes.

"I am supplying necessary packets to the shoe factories," said Anwar Hossain, owner of Anwar Packet Store. He has started his business with an investment of Tk 5,000 and in 2013. More than 60 women are working in his business and amount of running capital stood to Taka 20 lakh at present, he added. He says shoe making has become a source of income for unemployed youths and many have become economically solvent through the business.

Source: The Independent, 13 May 2018, Bangladesh

## Rezaul shines in Sri Lankan cardamom cultivation



Rezaul Islam nurses his cardamom plants at Natun Chiliarchar village in Kurigram's Rowmari upazila. **Photo**:
Abdul Wahed

The life of Rezaul Islam, a youth from Kurigram, was nothing out of the ordinary.

While poverty held him back from continuing his studies beyond his SSC in 1997, he held odd jobs here and there in Dhaka to make the days pass.

In 2006, a flustered Rezaul came back to his home in Natun Chiliarchar village under Rowmari upazila, where he began a nursery business to grow fruit plants on a small piece of leased land.

He visited Dhaka in 2008 to take part in the Bishwa Ijtema, an annual gathering of Muslims in Tongi.



Cluster of Sri Lankan cardamom plants. Photo: Abdul Wahed

"I used to watch a group Sri Lankans prepare their meals on small burners and the strong, pungent flavour and aroma of their spices, which they brought from their country, used to intrigue me," recalls the 37-year-old.

He became friends with Abdur Rahman, 55, who said the distinct curry flavour came from the Sri Lankan cardamom.

"He told me that the cardamom is one of the world's most expensive spices, next to saffron and vanilla, promising to bring back more the next year."True to his word, they kept contact over the phone and Abdur brought two spawning plants and some cardamom seeds in Bangladesh the next year.

Like an excited child, Rezaul planted those on unused lands behind his home. The plants soon grew tall but were near withering under amateur care. With much trial and error and guidance from agriculture officials, he was able to expand the number of cardamom plants to one decimal of leased land.

The plants first bore cardamoms in 2011, said Rezaul. "I shared the herb with my neighbours and used it in our cooking as well. Everyone gave me feedback that the flavour was more aromatic than cardamoms otherwise available here." A cardamom plant can form a cluster of 20 plants in a year, he said. Each green cardamom, sweet and small variety, plant may yield around 20 grams of the dry herb a year, while the black cardamom, larger and smoky flavour, plants may produce around 30 grams.

In 2015, he contacted his relative Saiful Islam, a wholesaler of spices at the Kattimari Bazar of Rowmari upazila, some two kilometres from his house, and sold his first batch of Sri Lankan cardamoms. "I sold one kilogram of the spice for Tk 3,000 a kilogram to Saiful. He would sell the spice to retailers for more at various markets in Tongi, Gazipur."

With business picking up slowly but surely, he expanded cultivation to five decimals of land near this home and around 30 decimals of land at Himbazar area of Gazipur, said the

### **Rural Development in CIRDAP Member Countries**

farmer. "I sold eight kilograms of green and black cardamoms in 2016, 15 kilograms in 2017 and 20 kilograms last year."

"This year, I expect to sell the seeds worth over Tk 13 lakh. He sold cardamom seeds and plants worth Tk 5 lakh last year," he added. The plant, best suited to warm tropical climates, grows well in the shade and loamy soil, said Rezaul, who lives with his mother, wife and two children.

"Rowmari Upazila Agriculture Officer Abdulla Al Mamun visited my garden in 2017 and found the plants infected with fungus. He guided me on spraying anti-fungal medicine on the plants in case of disease. I use a mix of organic and inorganic fertilisers as well." In addition to selling the herb, he also sold some plants to fellow farmers in Comilla, Meherpur and Cox's Bazar districts. "I sold each plant for Tk 1,000."

D Mostafizar Rahman, deputy director of the Department of Agriculture Extension in Kurigram, said, "I was pleasantly surprised by visiting Rezaul's garden recently. I advised him to spread his know-how to local farmers as well. I think the cultivation would improve when the spices research department would work with these cardamoms." Giving in to his adventurous spirit, he took a lease on two acres of land in Himbazar area of Gazipur in August, to expand operations.

"I prepared 30 decimals till March this year and sowed cardamom seed this month. I aim to grow around 1,000 plants at first," he said.

Source: The Daily Star, 28 April 2019, Bangladesh

## Shirina, a role model for female farmers



Shirina, left, at her vegetable field at Maynakuti village in Rangpur Sadar. Photo: Star

Housewife Shirina Begum, who set an example of producing bumper crops, especially vegetables, on a small land, has now become a role model for many female growers at her native Maynakuti village in Rangpur Sadar upazila. Seeing her success, around 120 women of the village are now engaged in crop farming and are getting regular suggestions from Shirina on farming of various crops. Although thirty-five-year-old Shirina, who married Rashedul Islam about 18 years ago, used to help her husband in crop farming after their marriage, she could not engage fully due to other household works. After her husband Rashedul had a brain stroke and lost his physical and mental balance in 2014, she fully engaged herself with crop farming to maintain her four-member family.

Besides her ailing husband, she has to bear the responsibility of her college going daughter Towfika Akhter Prity and son Towhidul Islam, a Class VI student. In a bid to support her family, she first started crop farming on only 50 decimals of land belonging to her husband and then took lease of another 100 decimals from two neighbours Sirajul Islam and Rezaul Karim for Tk 45,000 per year and started to produce vegetables and vegetable seeds there.In 2015, she enlisted with Geodata Based Information Services (GEOBIS), a project of Lal Teer Seed Ltd, for advisory services. After the enlistment, she started receiving advice through her mobile phone on proper cultivation such as right sowing techniques, how to treat the soil, transplanting, preventing pest attack and harvesting the produce.She subscribed to the SMS

**Rural Development in CIRDAP Member Countries** 

service of GEOBIS so that she could receive weather forecast report. It also connected her

with the Call Centre Service to listen the expert's advice.

"Prior to enlisting as a beneficiary of GEOBIS I had a little profit, but now I am getting a

good profit every season," Shirina said.

"I cultivated paddy on 75 decimals of land, brinjal on 15 decimals, bitter gourd on 50

decimals and bottle gourd on 10 decimals. I am getting Tk 15,000 profit every month," she

said, adding that she is now able to support her sick husband and two children.

Under her leadership, many women growers of her village are now receiving advice on

cultivation of different crops and getting weather alert.

Shamima Begum, 38, of the village, said she started crop farming after seeing Shirina's

success.

"Shirina first showed us the way of earning through crop farming, especially vegetables, and

we are self reliant now," another woman Morsheda Begum, 42, said.

"I am getting a good profit from selling vegetable seeds to Lal Teer Seed Ltd. I hope our

children will bring a bright future for the family," Shirina said.

Source: The Daily Star, 04 January 2019, Bangladesh

56

## Self-reliant through quail rearing

Once frustrated, the DU post-graduate is now a successful man



Mahbubul Alam Naeem takes care of his quail farm in Patuakhali's Kalapara upazila. Photo: Star

There's a wise saying: Difficult roads often lead to beautiful destinations.

Meet Mahbubul Alam Naeem, a post-graduate from Dhaka University, who has set an example for jobless youths. He had to go through the typical ups and downs of life after completion of his formal education but nothing can bring him down. Once frustrated, Naeem now can earn about Tk 48,000 a month by rearing quails. The 35-year-old is now the inspiration for many jobless young people of his locality. The tranquil journey of his struggle began with two quails, said Naeem, a resident of Shikder road area in Kalapara upazila headquarters. "After completing my Masters in Information Science and Library Management in January 2016, I joined an international non-governmental organisation. As it was a project-based job, I worked there for about 16 months," he said.

After the project was over, he became very frustrated over getting new job and, at one stage, he returned home, said Naeem. "One day, I bought two quails from local bazar and started rearing them out of curiosity. Later on, the idea of quail farming business struck my mind. I set up a farm at my home compound and started the business with 600 young quails spending Tk 50,000 in the mid of 2017, and since then I have not looked back," he said. "At present, there are 1,200 quails in my farm and I earn over Tk 40,000 every month from there. Apart

**Rural Development in CIRDAP Member Countries** 

from the expenses, my net income is now Tk 20,000 to Tk 25,000 per month," said a smiling Naeem. He gets at least 800 eggs a day from 1,200 quails. He sells each egg at Tk 2 and earns Tk 1,600 daily. Apart from this, he sells each full grown quail at Tk 70 to Tk 80.

A quail lays at least 320 eggs in a year and that is very profitable, Naeem said, adding that besides quails, there are ducks, hens and pigeons in his farm. He also cultivates fish. "There's a kind of pleasure in business as I'm now self-reliant. Besides, it is very good for me as I am earning better than a job," he said. There's a huge demand for quail's eggs and its meat in the local market as it is nutritious, said Naeem. Local youth Forkanul Islam said Naeem's success really inspired a number of jobless youths. Many young men of the locality have already decided to rear quail after seeing his success. Upazila Livestock Officer Md Habibur Rahman said, "Naeem often comes to us and we provide him technical support." Quail rearing is popular in the area considering its local market demand, he said.

Source: The Daily Star, 24 October 2018, Bangladesh

## Turkey farming changes his life



Brishaketu Chakma at his turkey farm at Gargirachhari village in Khagrachhari Sadar upazila. Photo: Star

Even 10 months ago, Brishaketu Chakma, had to go through hardship, but he can run his nine-member family smoothly now. It is turkey farming which has brought dramatic change to the life of the 54-year-old, who once worked as farm labourer to feed his family members at Gargirachhari village of Sadar upazila.



An incubator at the farm. Photo: Star

**Rural Development in CIRDAP Member Countries** 

In February this year, Brishaketu set up a farm at his house with 60 turkey chicks spending

Tk 80,000, and he did not look back since then. His son-in-law, a vegetable trader of the

upazila headquarters, bought the chicks for him. The farm now has 180 turkeys, including 27

full grown, and an incubator as well. He has earned Tk 60,000 from the farm till now, said

smiling Brishaketu, adding that his income is increasing day by day.

"I'm very grateful to a retired veterinary field assistant of livestock department who helped

me a lot to look after the birds as I had no previous experience to deal with the turkeys," he

said.

"Each egg of the birds is sold at Tk 100 and the selling price of one-month-old turkey is Tk

500 to Tk 600, while a two-month-old is sold at Tk 1000 to Tk 1200. The meat sells for up to

Tk 450 per kilogram," said Brishaketu.

"It is a profitable venture as turkeys eat vegetables, including spinach and cabbage, while you

have to spend extra money to feed poultry chickens," he said.

Upazila Livestock Officer Rafigul Islam Khan said if Brishaketu comes to them, they will

train him how to treat the turkeys and give proper training in rearing the birds as well.

Source: The Daily Star, 01 January 2019, Bangladesh

60

## Uttama, an inspiration for female entrepreneurs



Uttama Roy Ratna at her poultry farm in Majhapara area of Lalmonirhat municipality. Photo: S Dilip Roy

The farm had only one cow and a hundred chickens. Now, ten years later, it has 75 hybrid dairy cows, 20 goats, 6 thousand chickens and 200 pigeons. The farm now spans over 11 acres of land in three separate plots where special grass for livestock, fruits, flower and spices are also grown.

The estimated value of livestock, poultry and orchards in the farm now stands at around Tk 2 crore.

This is the success story of Uttama Roy Ratna. Her ventures in Majhapara area of Lalmonirhat municipality has become an inspiration for woman entrepreneurs in and around the town.

After deducting all expenses and making payments to day labourers and salaried employees, 25 total, the 47-year-old entrepreneur takes home around Tk 2 lakh from the farm.



Female workers tend special grass grown for cattle, raised in her farm. Photo: S Dilip Roy

Among the employees, 15 are women from the marginalised section of the community. These women can now provide for their family with the Tk 6 to 8 thousand salary they make each month at Uttama's farm.

"I can now spend the money to buy things for my family and for my children's education," said Binodini Rani, a farm employee.

"When in need, Uttama Didi is always there for us," Nipa Rani, another employee, said.

Asked about how she started it all, Uttama said after getting elected as a councillor of Lalmonirhat municipality in 1996, she had to visit surrounding areas extensively. It was the visits in some farming communities that helped her grow interest in farming.

In 2008, with encouragement and support from her husband, a banker, Uttama launched her enterprise with one cow and one hundred chickens on five acres of land belonging to her husband.

All the income that she earned from the farm was put back in the farm as investment. And on the second year, she approached several banks for loans.

"I didn't get any loan from any bank after several attempts, but that didn't stop me," said Uttama.

### Aspiring Stories from Rural Communities



Cattle farm. Photo: S Dilip Roy

Five years later, when the farm grew bigger, she received Tk 15 lakh loan from Brac, an NGO. She successfully repaid the loan three years later. After that there was no turning back and the farm continued growing. Uttama even started growing special grass for livestock on six acres of land that she leased from locals.

"My husband is of course my inspiration and support as I got to set up the farm on his land," said Uttama, mother of three children. Her husband, Arun Roy, said, he is proud of his wife's success, especially for her efforts in helping the women in need.

Source: The Daily Star, 08 March 2019, Bangladesh

## Woman gets self-reliant through vermicompost

Akhinoor Begum, an ultra-poor woman of Charkhali village in Galachipa upazila, has become self-reliant by selling earthworm manure fertiliser.

Five years ago, Akhinoor's family, including her two daughters and two sons, fell on hard times. Her inherited piece of land was lost to river erosion. The river took her land and home, leaving her a complete destitute. She built a shanty house on a piece of khas land on the side of the road. The only earning member of the family was her husband. But five years ago, he became paralysed.

Akhinoor went from door to door to get financial help for her husband's treatment. But she did not get help from any corner. She took up a housemaid's work to maintain her family. Her children's studies were affected due to the abject poverty.

In 2015, Akhinoor learnt that an NGO was running a development project to reduce poverty with the help of PKSF funds and that it gave financial assistance to the ultra-poor through various term loans under the project. She got in touch with the NGO and was trained to make earthworm manure fertiliser. The NGO helped her by giving her 5000 worms of a special species.

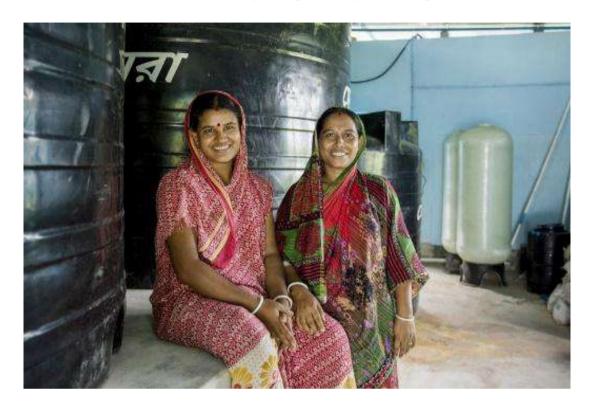
To prepare the earthworm fertiliser, Akhinoor collected cow dung. Akhinoor started producing earthworm fertiliser. In just three to four months, she started vegetable production by using her homemade earthworm fertiliser in a patch of vegetable field. She produces vegetables like bottle guard, balsam apple, cucumber, pumpkin, snake guard, green pea, lady's finger, green papaya, green cucumber, bean, basil, brinjal and green chilly. After using this fertiliser in the vegetable field, she sold fertiliser worth Tk. 7,000 and kept some for use in her field. Inspired by her, many people in the area consult her on making earthworm fertiliser and its use has increased in the area.

Akhinoor now sells vegetables worth about Tk. 36,000 grown on her field every year. Earthworm manure fertiliser has ushered in a new dawn in her life.

Source: The Independent, 27 April 2019, Bangladesh

## Women's fight on the climate front

A story of entrepreneurs from Dacope



Climate change has a greater impact on those sections of the population, in all countries, that are most dependent on natural resources for their livelihoods and/or who have the least capacity to respond to natural hazards, such as droughts, landslides, floods and cyclones. Women commonly face higher risks and greater burdens from the impacts of climate change in situations of poverty, and their participation in decision-making processes and labour markets compound inequalities and often prevent them from fully contributing to climate-related planning, policy-making and implementation.

The United Nations Framework Convention on Climate Change (UNFCCC) and its annual Conferences of the Parties (COPs), which constitute the main decision-making body of the Convention, are an important instrument of international cooperation in the field of tackling the impacts of climate change. Held annually, the 24th meet of COPs began this year on December 2, where promoting gender equality and the empowerment of women will be a key component. It is here, where women's role in tackling climate change will be shared, promoting their local knowledge of and leadership in e.g. sustainable resource management and/or leading sustainable practices at the household and community level.

Till date, there are countless examples of women's inclusion at the local level which has led to improved outcomes of climate -- related projects and policies in developing countries. It is now, that policies or projects should start including women's meaningful participation in decision making authority and leadership fully -- decreasing existing inequalities and

increasing effectiveness.35-year-old Shila Bawali is a woman who has been working determinedly over the past few years to contribute to her community -- responding to her community people's needs and increasing cooperation across her village. Residing in one of the most climate change -- affected coastal areas of the country, she has taken a step in making safe drinking water an accessible right for everyone around her.

Visiting her village Khona Khatail in the Pankhali union of Dacope upazila, Khulna, the effects of climate change are highly visible through low-lying areas, stretches of dry and barren land, salinity intrusion in ground and surface water, and an increased expanse of poor households. It is recently that villagers have started rebuilding their houses, and cultivating their lands using advanced saline water-resistant processes. However, scarcity of salinity -- free drinking water continues to be a steady crisis here.

Shila lives with her two children and owns a small grocery shop in the village outskirts -- her main source of income. Managing her children, carrying out daily household work, and running the shop -- all of this was a constant and tiring routine for Shila. But what troubled her the most was the regular sickness that her children and adults of the community would suffer from -- skin allergies, stomach problems and water-borne diseases; this is due to daily consumption of unsafe water from their only water source -- ponds and canals.

This needed to be mended. And after months of discussions and knocking on doors, Shila was successful in building a 45-member women's association called "Khona Khatail Mahila Samity" -- where she along with 16 others currently act as contributing members.

Through this association, these confident women help their own community in reducing daily life difficulties. But what needed to be done first was fulfil the core purpose this association was set up for - a sustainable and reliable supply of safe water.

Water Aid and HSBC have been working in nine unions of the Dacope upazila for four years now, providing water, sanitation and hygiene services to people living in the communities there. Shila with her other contributing members approached local project staff on ground after finding out Water Aid and HSBC's work, sharing their water problem and seeking a solution. After multiple meetings and a clarity in the community's needs, Shila was successful in actively motivating her village residents and generating an O&M fund for the installation of a Reverse Osmosis Plant that Water Aid and HSBC agreed to set up in her village, aiding to solve the safe drinking water crisis they faced. In addition to fund collection and advocating the plant, Shila also took a major step in donating a part of her land in the name of her association for the construction of the plant.

Later, after months of construction and coordination with project staff, the plant was finally inaugurated at Shila's village Khona Khotail on December 3. Shila and her association members, local project staff, WaterAid and HSBC representatives, and people from her community and village were present on the day.

#### Aspiring Stories from Rural Communities

Through this plant, salinity will be removed from ground water, making it safe and pure to drink for over 1300 residents of Khona Khotail. Not only limited to Shila's community, the water will also be available for local people and people from other communities at a very low-price compared to other commercial vendors, making it affordable for everyone. Shila also plans to sell this water at nearby restaurants in the village market so that everyone is benefitted and she can have an additional income source.

How does Shila feel on this success? She shares how she foresees her daily life to be much relaxed with less time spent in household work -- mostly on chores related to water. She is excited to serve more customers in her shop and succeed in life, also eager to witness her community thrive with new hopes and lesser sickness.

As the UNFCCC COPs celebrate women's perspectives, experiences and knowledge on a global platform, lets applaud women like Shila who take on new challenges and risks in their hectic lives, and solve crisises that are not created by them but can surely be solved by them.

Source: The Financial Express, 15 December 2018, Bangladesh

## **Wonder Fabric from Pineapple**



"Barong Tagalog" — a partially see-through, embroidered shirt sewn from pineapple fibre and silk is an integral part of Filipino culture and has been there in that nation since the 15th century, when the Spanish colonizers brought pineapples to the archipelago.

But it was in November 2015, at the 21st meeting of the Asia Pacific Economic Cooperation (APEC) held Manila that the famed cloth, made it to the headlines across the globe when former US President Barak Obama went up on the centre stage, donning in a "Barong Tagalog."

This fine cloth, also known as PINA has usually been worn by the royalty and important people. Museums across the world hold exquisite piña dresses in their collections—the legacy of a 19th-century fashion trend.

Over the centuries, the garb has continued to evolve, developing elaborate embroidery, thanks to the continued influence of Europe, and now even reflects the touch of one of fashion's most famed recent couturiers.

Part of the appeal comes from the fabric's natural elegance. The Filipino fabric has long been a touchstone of the national dress; it's the traditional, if expensive, option for long Barong Tagalog garments.

A version of that Barong Tagalog or pineapple silk is now being produced in Bangladesh with pineapple produced in Srimongol.

Thanks to the entrepreneurship of Dawood Farhan and his daughter Umaima Jahan Dawood for bringing this haute couture to Bangladesh.

## Entrepreneurship led to partnership

Dawood Farhan is the managing director of Fiber Resource Center (FRC) Bangladesh. He has travelled all over the country and to many places abroad on various assignments all

#### Aspiring Stories from Rural Communities

through his life and has been a pioneer in many spheres in the fields of agriculture, poultry and livestock areas.

Talking with The Independent, he said that he first saw the beautiful pineapple silk in the Philippines. "It was a wonderful fabric—transparent, silky and very classy. It was not only beautiful to look at but also was very comfortable to wear."

"I got very curious when I learned that it was made from pineapple waste. I was drawn to study a bit more about the history of making this yarn and started learning the process," he said.

After learning the history and craft of making yarn from pineapple, he thought of producing the fabric in Bangladesh. "Pineapple, as you know, is grown in abundance in the Modhupur, Chittagong Hill Tracts and Sylhet areas of Bangladesh. I thought if fabric can be made in the Philippines, why not here!" he said.

After that his innovative nature and wide knowledge led him to find ways to make yarn from pineapple. His personal research led him to meet the then and present day chief of Mennonite Central Committee (MCC), David Hall, at a conference.

Mennonite Central Committee (MCC) at that point had their own extensive research on this subject and was looking for a like-minded individual, who would lead this project commercially but also help create employment in tribal communities and among deprived and sexually exploited women.

Farhan always wanted to create employment opportunities for all, especially those deprived and socially exploited.

The two ideas met and merged and Fiber Resource Centre Bangladesh (FRC Bangladesh) came into being.

The process of making cloth

For making pina fibre, the outer, long leaves of the pineapple are preferred. In the manual process, they are first decorticated by beating, rasping and stripping, and then left to ret in water to which chemicals may be added to accelerate the activity of the microorganisms that digest the unwanted tissues and separate the fibres.

The retting time has been reduced from 5 days to 26 hours. The retted material is washed clean, dried in the sun and combed.

Estimating 10 leaves to the lb (22 per kg), 22,000 leaves would make one ton and would yield 50–60 lbs (22–27 kg) of fibre.

Dawood Farhan said that making Pina cloth was a delicate process as it was hand loomed by only a few weavers. It is very precious and scarce, making it expensive.

"The major end use of Pina fibre is the Barong Tagalong, wedding dresses and other traditional Filipino formal dresses," he said, adding that it is also used for table linens, mats, bags and other clothing items.

Because it is lightweight but stiff, this sheer fabric can be used in any creative design. "There are few clothing items more beautiful than those made from pineapple."

The traditional decoration for this fabric is a style of hand embroidery called 'calado'. An embroidered piña garment is called piña calado. These hand-woven fabrics are coloured with vegetable dyes originating from leaves, and barks of different trees.

When asked whether pineapple yarn is as good as cotton, Dawood Farhan said that "it is a different material, so quite difficult, almost impossible to compare it."

"Pina on its own is a very high grade-material and produces fabulous materials and yarn. And has a fantastic look and feel to it, in addition to it being environmental and skin friendly."

### The varieties of cloth

Pina fibre is often blended with cotton, abaca, and silk to create wonderful light, breezy fabrics. When woven with silk, it's called pina seda or pina-silk. Pina jusi is blended with jusi (abaca or silk) for strength and sheerness and is less expensive than 100 per cent pina.

Umaima Jahan Dawood, the daughter of Dawood Farhan said that they currently produce FRC Pina Silk, FRC Pina Cotton, FRC Pina Cotton/Silk.

"Yes, this is made of pineapple," replied Umaima when I asked whether the beautiful fine, transparent golden scarf which she wore at the time we met was made from pineapple.

"Yes we have made some clothes that we have worn to many events, too—both day-wear and evening wear! We have already opened a boutique house selling these cloths. The soft launch of the boutique house has already been done."

"We will do a grand launch of our boutique house soon," she said.

Umaima said that it is an environment-friendly wear, a product that is used up completely without leaving any negative footprint.

"With time, consumers have become very conscious which is great news for all of us. At the same time, consumers are also very fashion conscious. With a fabric like this, all natural and so versatile in its uses, the prospects are many—many styles, many uses, many benefits."

Umaima said that it was a new concept in Bangladesh, so people would generally take some time to understand it better.

"But once they do, and also know of the manifold benefits to society, we know they will be as excited and interested about the FRC Pina fabric and products, if not more."

About the marketing strategy for the cloth, Umaima said that they wanted the people of Bangladesh to know that "this product is coming from their own country, being made by their own people and needs to be worn and promoted by its people too."



## Catalina's story: climate change in Fiji, through the eyes of a child

It's 5:30am in Vunisavisavi, a small village on the coast of Vanua Levu, Fiji's second biggest island. The sun is starting to rise, birds are beginning to chirp, and **Catalina**, 11 years old, is awake. Bright eyed and bushy tailed, she's up with a spring and heads to the bathroom to brush her teeth.

"Every morning, I wake up early, have my bath, put my uniform on and have breakfast. After breakfast, I walk up to the school bus stop and I wait for the [school] truck to come at 7:00am."

The sight of the sea greets Catalina as she walks out her front door every day. Unlike other coastal villages across Fiji, Catalina's village has been hit hard by the impacts of climate change.



Catalina (11) stands in front of a huge uprooted Banyan tree on the shore of VuniSaviSavi, a coastal village on Vanua Levu, Fiji's second largest island. Due to coastal erosion and rising sea levels (Vunisavisavi exists below sea level), trees along the shoreline (such as coconut palms and Banyan trees) struggle to survive or stay upright.

## **Rural Development in CIRDAP Member Countries**

## Unpredictability of the ocean

Sea water levels have risen rapidly in the last ten years, something only her parents and older siblings would've particularly recognised. The youngest of three, Catalina is often home alone with her mother. Her sister attends boarding school in a nearby town, and her brother is away with her father, a farmer, who has travelled to neighbouring island Viti Levu to work in sugarcane farms. The soil in their village has become too acidic for farming, due to rising sea levels.

"My father is a farmer, my mother stays at home doing mothers work, and I always go to school every morning. What I love most about my family is we talk about what's happening — our timetable, family budget, family problems — and what will happen the next day. I laugh the hardest when my father makes funny stories and does things that make me laugh. They [Catalina's parents] always want us to be happy."



Catalina (11) in class at Nakobo Primary School, close to Vunisavisavi, a coastal village on Fiji's second largest island, Vanua Levu. When she grows up, Catalina would like to be a netball referee. She also wants to construct a sea wall for her village to protect the future generation from rising sea levels, and to stop her community from worrying.

Catalina's parents are in their fifties, and despite having to spend significant time apart, they do their best to create a tight knit family unit. One of the brightest students in her class, Catalina's mother smiles with quiet pride as she flicks through a folder of Catalina's tests, showing average scores of 70% and above. An ambitious student, Catalina says that aside from school, her favourite time of the day is when she's able to go fishing with her mother when returning home from school.

"After school, I sometimes go fishing with my mother for dinner. I like swimming with the fish because they make me laugh and happy. I noticed the fish and turtles have declined. We just catch enough fish for us, and we leave some to grow. I love to see fish swimming around me. But during high tide we see some dangerous things. When the weather changes, then we see that the sea is scary."

## Scares of the sudden change in weather

In the indigenous Fijian *itaukei* language, there is no word for climate change. Most people, including Catalina, refer to climate change as "*visau ni draki*", directly translated to "a change in weather". Unfortunately, Catalina knows all too well how devastating and how frequent a sudden change in weather can be.

The impacts of climate change – the sudden storm surges, and devastating natural disasters like Tropical Cyclone Winston – are becoming more common, and more worrying, especially for someone like Catalina, one of the youngest members of her community.

"If you see the sea and there is bad weather, like when it rains the seawater pours out into the village, a lot of scary things happen. Questions come up in my mind, like what kind of accidents can happen? When the weather is really bad, the seawater can reach my house [50 meters inland]. If the weather changes all of a sudden it can reach up to here [knee height] and past this house. I'm scared and worried because I don't know what to do if this house is destroyed. I don't know where we will go." Dreaming of a solution

Despite the devastating effects of climate change, Catalina has bright hopes for the future of her community. A forward thinker, she dreams of building a sea wall, something she believes will protect them from increasingly high tides, and sudden storm surges.

## **Rural Development in CIRDAP Member Countries**



"I always think that when I'm older, I want to construct a sea wall for the village, to protect the future generation of Vunisavisavi, and also to make the people happy.

The sea wall will change the look of the village and make it look better. But right now I'm thinking, when younger ones are older they will follow my footsteps by building a seawall. Then [when it's completed] we will have a big thanks giving celebration. The seawall will stop the waves from entering the village. It will give peace and assurance to people and they will no longer worry about the waves."

Catalina, 11, jumps from the bow of the village boat which anchors on the edge of 'the tomb' a deep hole in the coral reef. The tomb is an impotant part of the stories told about demigods from Vunisavisavi, it's also the children's favourite swimming hole. A place they can swim in deep water and look at fish through their snorkel and goggles.

Source: Arieta Tora Rika <a href="http://talanoa.com.au">http://talanoa.com.au</a>

# Climate change is wiping out the secret to Fiji's international rugby success

Namatakula is a small village in Fiji found on a long stretch of the country's most beautiful coastline: the Coral Coast. Every year, hundreds of thousands of tourists flock from around the world to this 80 kilometre stretch of white sand and turquoise water.

But the village of only 2,522 inhabitants is known for more than its sun and sand. This tiny place has also produced some of the best rugby players in the world. Nemani Nadolo and two brothers, Chris and Tevita Kuridrani, grew up in the village and now play in the top leagues in France and Australia. Another local, retired winger Lote Tuqiri, is a household name in both Australia and Fiji, having represented both nations in international competition.

Fiji is one of the few countries in the world where rugby is an official national sport. About 4.3 per cent of the population are registered rugby players, the highest ratio of any nation. Fiji punches well above its weight in international competition, most recently winning the gold at the 2016 Rio Olympics.



An explanation for this success may be found in rugby's deep connection with Fijian society. The sport's emphasis on physical strength, courage and selflessness aligns with Fijian bati ideology, or warrior ethos. And the national team's quick and unconventional style is said to be rooted in a cultural logic of vaka vanua – "the way of the land".

## **Rural Development in CIRDAP Member Countries**

"The way of the land" is what has given players growing up on the beaches of Namatakula a natural advantage. From an early age, kids run barefoot on the soft sand with whatever object they can find that mimics a rugby ball. The beach serves as the foundation for conditioning and strength training, and its beautiful setting nurtures a love for the game that inland fields could never duplicate.

It is no surprise that many people think these beaches have given Fiji its international rugby reputation.

But today, climate change is gradually causing the beaches of Namatakula and the Coral Coast to disappear. Crashing waves and rising sea levels have begun to slowly eat away the traditional training grounds of the Fijian rugby player. More and more kids in Namatakula and elsewhere are forced to play inland, often in bare feet on rough, dusty and unwelcoming terrain.



Samuela Kuridrani, founder of the Kai Ni Cola organization in Namatakula, brother of Chris and Tevita, has found this development heartbreaking. "I returned from Australia to see that where we had played when we were younger was no longer there because the waves had taken over," he said. "It's made me want to make a move to save our community."

Kuridrani has made it his personal mission to ensure future generations have the opportunity to play and train on the same beaches that made his brothers and others famous. Kai Ni Cola has begun a massive, self-funded mangrove restoration project to ensure their way of life will be preserved. The community has so far planted over 300 mangroves along the shoreline of Namatakula and aims to plant far more in the coming years.

For many small island states and coastal communities, there is little choice to adjust to a shifting environment. As Kuridrani puts it, "All we can do here in the Pacific is to adapt."

Planting mangroves is just one way to adapt to some of the impacts of climate change in coastal communities. To ensure that developing countries are ready to face the transformative effects of climate change, UN Environment and UNDP are helping governments integrate a range of adaptation strategies into national development plans through the National Adaptation Plan Global Support Programme.

Source: https://www.unenvironment.org. Fiji. 25 SEP 2018

## Semiti's story – Fiji



Love Your Neighbour

Semiti grew up in an informal or 'squatter' settlement in Fiji. He is now Director of the People's Community Network, supported by Caritas Australia, which empowers thousands of landless Fijians living in informal settlements.

Semiti says, "Through the voice of the poor we can become one, and it's very powerful."

Semiti grew up in an informal, or 'squatter', settlement in Fiji. More than a quarter of Fiji's people live in these settlements, with little hope of finding permanent housing and land. Their situation is particularly vulnerable – many live in unstable shelters, and there is a constant threat of extreme climate events. Children have few opportunities for education, and unemployment levels are high. There is little access to public services such as roads, water supply, electricity and garbage collection.

I was once someone who had nothing."Semiti. Now Semiti is working together with other residents of informal settlements to make positive changes. He is the Director of the People's Community Network (PCN), which Caritas Australia supports. PCN helps empower landless people in Fiji, enabling them to address the issues that affect their lives. The network helps people in each settlement to advocate together to improve their living conditions. They work in committees on issues relating to health and hygiene; care of the elderly and of women who

**Aspiring Stories from Rural Communities** 

need empowerment; education needs; and unemployment. Semiti and other informal settlement residents tell how PCN helps them work together as neighbours, in solidarity. Through their participation in housing, savings and education programs, they have formed common bonds, and have grown in resilience and in dignity.

One thing that my past taught me is to give back to the community what I have learned. I always tell them: I was once in your shoes." – Semiti

Source: <a href="https://www.caritas.org.au">https://www.caritas.org.au</a> Fiji.

## **Developing Women's Passions and Marketable Skills**

**Project Name**: Increasing Women's Economic Opportunities through Support to Women's

**Vocational Training Centre** 

**Project Partner:** Fiji Muslim Women's League (through the Fiji Muslim League)

**Total Funding:** \$163,655

Funding timeframe: 2015-2016

The Fiji Muslim Women's League is a non-government organisation that has been operating the Makoi Women's Vocational Training Centre in Suva since September 2015. *Pacific Women* funding supported the roll-out of training courses at the Centre to build women's culinary, horticulture, tailoring and computer skills.



Ms Esther Toma at work at the Suva Motor Inn. Photo Source: Esther Toma.

Ms Esther Toma participated in the Makoi Women's Vocational Training Centre's culinary course and has gone on to gain employment as a cook at the Suva Motor Inn. Ms Toma describes how the course enabled her both to follow her passion and to feel empowered at the same time:

'What stood out most for me was the simple dishes that can be prepared with ease and with a professional touch that has the potential to generate revenue if I were to start a business of my own. I saw this course as a platform that will allow me to develop skills which interest me and is also marketable, providing the means [for] any woman to be financially independent.'

The Makoi Women's Vocational Training Centre seeks to train 25 women each semester in each of the four areas. It aims to equip women with the necessary life and business skills to start self-sustaining cottage industries, or find work in their chosen fields.

'Women, especially stay home mothers, are a huge untapped resource that have the potential to directly contribute to the economy', notes Ms Toma. 'Unless they are educated with a skillset that is their identifiable strength, this benefit will not be realised, not only at home but also in the workplace / workforce and in the economy as a whole.'

Ms Toma says her participation in the course has brought bright and positive outcomes into her personal life and that of her family.

'Yes, it does make me feel economically independent. I feel that I am contributing to the economy and bringing satisfaction to the customers I serve ... I have more sense of belonging in my profession and in my area of work. At home my opinions are heard and taken into account. I get to contribute to the financial decisions in my life and also my family. I feel more in control of my life in comparison to life before I took the course.'

Source: <a href="https://pacificwomen.org">https://pacificwomen.org</a> June 15, 2018. Fiji

## Island communities overcoming remoteness through mobile service delivery.

October 2017 Rotuma Island, Fiji – Fesa'itu Isimeli felt empowered to help herself after she applied for a government service which was made accessible for her at her house in Losa Village in Rotuma Island.

Fesa'itu, a 60-year-old retired school teacher, has been bedridden due to an accident she encountered. She sent her children to university using funds from her pension, which meant she did not have enough funds to sustain herself in suitable physical conditions. The Disability Allowance she applied for will now enable her to increase the degree of her independence in her community.

Rotuma Island lies 650 Kilometers north of Fiji, which is closer to Funafuti, Tuvalu than Suva, Fiji and irregularity in the transport services to the mainland of Fiji make accessing services across such a distance a challenge. It takes three days to get to Suva by boat when the boat service is available.

"We live far from the government station in Rotuma, and off course Suva is too far for me. The mobile service delivery to our village is exactly what we wanted. The services delivered directly to us by this REACH are providing both financial and moral support to people like us living in remote place," she said.

She was among 635 people (338 women and 297 men) who took advantage of the mobile programme for awareness raising and delivery of government services brought to each of all seven districts on Rotuma Island under the REACH Project.

We live far from the government station in Rotuma, and off course Suva is too far for me. The mobile service delivery to our village is exactly what we wanted. The services delivered directly to us by this REACH are providing both financial and moral support to people like us living in remote place. Fesa'itu Isimeli, Losa Village

Recipients of social welfare schemes received vouchers at their homes during the mobile service delivery. Frank Fesa'itu, who was among them, received the vouchers delivered to his house in Paptea Village. He has walking difficulty and lives by himself with support from his fellow villagers. "I feel so fortunate to be included and not forgotten in the distribution of the voucher," said Frank.

The mobile service delivery on Rotuma Island was conducted by the team of officers from the Ministry of Women, Children and Poverty Alleviation, Legal Aid Commission, Human Rights and Anti-Discrimination Commission, other local government offices, and the United Nations Development Programme (UNDP) Pacific Office in Fiji.

IMPACT STORIES Rights, Empowerment and Cohesion (REACH) for Rural and Urban Fijians Project.

Source: https://www.undp.org/content/dam/fiji. October 2017.

## Managing a Dalo Farm in a rural village of Fiji – The Story of Filimoni Kilawekana, Dalo farmer in Korovou

#### SITUATION OF THE FAMILY FARM

Filimoni and his wife and four children, live in Nailaga village in the Province of Tailevu located in the central division of the main island of Viti Levu in Fiji. Their main source of income derives from their dalo farm located next to two rivers (Wainitevua and Waimalua) in Korovou, Tailevu. They have been farming for more than 10 years, eager to have a sustainable income source. Their main goal is to improve their living standards and educate their four children. Farming life has many challenges over the years that led to low yields due to cyclones, theft, and lack of farm roads. The family was determined to continue farming and in April 2019, a farm access road has been built with the support of the Fiji Government through the Ministry of Agriculture. It has motivated the family to expand their farm utilizing the 20 acres leased farm land to increase production from 20,000 to 60,000 dalo, and to intensify their farming methods to plant assorted vegetables, fruit trees and cassava to increase family income as from 2019.

Filimoni also get other sources of income from consultancy advisory services to the farmers by conducting training on dalo beetle eradication, and dalo planting practice to increase size of dalo corm based on requirements of the buyers and export markets. The most important expenditures incurred by the family are for maintaining the farm to produce high yields, and family daily food consumptions and obligations. Filimoni and his wife and children have set their targets and goals to have a future sustainable livelihood that includes sending the four children to universities and a pilot training school in Nadi. The ultimate goal for the family is that through farming their family can have a sustainable income source and investments with a vision in becoming a 'millionaire' in five to ten years time.

## AGRICULTURE PRACTICES

Filimoni and his family had started to intensify their farming from 2009 when they had 30,000 dalo plants. This was reduced significantly over the years due to lack of a farm access road, to transport farming inputs and harvested dalo to the collection point for the buyers, on the road side.



Picture 2: Dalo suckers, and bags of dalo harvested are carried across the river by youth groups engagd by Filimoni during planting and harvesting periods.

With the farm access road constructed in March-April 2019, a lot of challenges faced by Filimoni in transporting the farm inputs such as dalo suckers and fertilizers, and harvested products are being addressed. Filimoni and his family are able to intensify their dalo production by planting an additional of 20,000 Tausala and 40,000 Hybrid varieties, and cash crops like vegetables and pineapples. There is no animal on the farm, as the family focuses entirely on crop and vegetable farming, a whole farm approach to plant for consumption for sustainable food security and income. Filimoni is a former extension officer of the Ministry of Agriculture, and he has extensive work experience and knowledge, specialized on certain agricultural activities like dalo beetle eradication. With the road in place, and the family plans to make some changes by re-strategising to improve their farming activities and raise production for 2019-2020. The farm produces its own dalo planting materials, with 60,000 dalo suckers already produced from the existing farm. Each of the 20,000 dalo plants produces three to four suckers. Increasing dalo production, also means that an increase in the amount of fertilizers and chemicals that need to be applied. Fertilizers and chemicals will be purchased from the nearest suppliers in Korovou Town at the Northland Farming Suppliers Ltd. Fertilizers and machines (digger, excavator) are subsidized by the Government on a one third (farmer) and two third (Government) payment arrangement.

At the next planting season in May 2019, more Tausala Dalo varieties will be planted due to a high price of 3 dollars (FJD) a kg, as well as Hybrid Dalo as there is no restriction on size of dalo for the export market. Exporters cut the Hybrid dalo into pieces and pack them into 1kg plastic bags, frozen and exported to New Zealand, Australia and USA markets. Management of soil fertility is properly handled, as there is a lot of organic deposits on top of the soil at their farm. Financing the farm is not an issue. Income from previous harvests and one in April 2019 will finance the farm and all agricultural activities. The family has a savings accounts with the Bred Bank in Fiji.

#### PRODUCTION AND PRODUCTIVITY

Filimoni and his family has intensified the dalo production from 15 to 20 tonnes per hectare. For 1 hectare, 10,000 dalo plants are planted. Space of planting is important to get the right size of dalo corm, with spacing of 1 meter by 1 meter for each plant. High yields are maintained within 5 to 10 years, with application of organic fertilizer such as poultry and green manure.

The family's food security is supported through daily consumption of breadfruit and fruit trees which grow in abundance near the family home and at the farm site and are available throughout the year. The family consumes a lot of dalo as main staple food, rich in starch and good source of carbohydrates, but can increase the cholesterol level in the human body. The family is aware of this and ensures that a balanced diet is consumed daily.

## STORAGE, CONSERVATION AND PROCESSING

The family does not store their dalo at the farm site. Once it is uprooted, sorted and packed in a 50kg bag, it must be delivered or picked by the buyers from the road side on the same day. Also, dalo is sold by the family at the farm gate and at municipal markets at the nearest Towns of Korovou or Nausori. To store the product, the family needs proper storage and freezer facilities at the farm. The family has planned to go into value adding in the medium to long term, once the farm has sustainable production volume and government subsidy is offered in the installation and construction of a packhouse, storage and freezer.

### MARKETING AND SALES

The family contacts Bens Trading Co. Ltd, who is the main buyer and exporter of dalo. The family sells the dalo after eight months of planting, and there are peak periods in which dalo is in high demand like the christmas season. Bens Trading buys dalo for 1.50FJD a kg for the Hybrid variety and 3.00 FJD a kg for the Tausala variety. The price of dalo fluctuates, depending on market demand, and availability of dalo. From next planting season in May, the family has planned to programme their planting that is 10,000 dalo suckers to be planted every month. This would benefit the family as their farm will continue to supply when there is not enough dalo in the market.

The family will now use the digger and excavator from the next planting season on, with the availability of a farm road. This will reduce labour cost with the current 15 cents per plant, total cost is 1,500 FJD for planting 10,000 dalo. The family searches for new markets by going into value adding such as dalo chips, flour, porridge and beer.

### FARMER ORGANISATION MEMBERSHIP

Filimoni became a member of the Fiji Dalo Farmers Association in 2016. He was also appointed President of the Association, by the representatives of all the dalo farmers in the 14 Provinces of Fiji. His family has experienced the benefits as it increased their network with

the Ministry of Agriculture, Fiji Crop and Livestock Council, Biosecurity Authority of Fiji, Fiji Development Bank, Donor agencies, Traders and Exporters of Dalo, Fiji Agrofood Processors Association and other farmers organisations in Fiji. Filimoni gained a lot from his membership of the Dalo Farmers Association, as he accessed training and improved his knowledge on climate smart farming practices. Other farmers also benefit, especially if they are registered in the Farmers Database of the Fiji Crop Livestock Council, and Ministry of Agriculture. According to Filimoni, it is imperative to look after the members by assisting them to access finance, agri-inputs and training on how to apply the chemicals at their farm. Filimoni believes that through the Mobile application system which now sits with the Fiji Crop and Livestock Council, farmers connectivity with other farmers and players along their value chain will significantly be improved. The Dalo Farmers Association has much potentials and opportunities to access other potential industries and to assist their members in areas of needs or improvements.

### **RELATIONS WITH OTHER ACTORS**

As head of the Dalo farmers association, it was easy for Filimoni to build a network with the Ministry of Agriculture, the Fiji Crop Livestock Council, traders, processors, the Fiji Development Bank, agro input suppliers/ dealers, and advocate on behalf of their members. The support and co-operation between the Fiji Dalo Farmers Association and the key players, supporters and enablers in the value chain is beneficial to all. The areas that need improvement are in extension services and research, in relation to the dissemination of research outcomes to the farmers and regular visits of the extension services officer of the Ministry of Agriculture to provide technical advisory support services. Extension advisory services are very thinly spread in Fiji, for example, there is one extension officer for every 800 to 1,000 farmers. Filimoni and members of his Dalo Farmers Association see very little of the extension officer, thus very little information reaches the farmers.

## **EXTERNAL FACTORS**

Climate change has impacted on results of yield of dalo production. Long periods of dry weather dried up the land and adversely affect the dalo corm size. Price of dalo fluctuates a lot, that at times discourage farmers from planting more dalo, leading to higher dalo price.

Government policy on subsidies for seedlings and machines currently cannot cater for farmers demand. Filimoni recommends for the subsidy policy to be reviewed, taking into consideration the actual needs of farmers on the ground. A bottom up, participatory and inclusive approach to involve youth and women in farming is highly recommended by Filimoni and his family. Farming is a career, and anyone can take it up to improve individual and family livelihoods.

By Jiu Daunivalu (CEO, Fiji Crop Livestock Council), May 2019 https://www.fclc.org.fj/

## People with disabilities encouraged to become more active through mobile service delivery

Ba, Fiji – "I am going to my farm again," Merewai Lewaniekuvu said with a large smile. She had stopped going to her farm since she developed her knee pain over the last three years. The pain discouraged her to walk to and from her farm along the unpaved path from her village located on the hill and forced her to stay at home.

Her eyes were lit up when she received the walking cane and tested it in front of her house. She was visited by the group of specialists from the Spinal Injury Association (SIA), a non-governmental organization working in Fiji, who provides mobility equipment and technical assistance to people in need of such kind of support.

With the support of the Rights, Empowerment and Cohesion (REACH) for Rural and Urban Fijians Project, the expert group visited the remote communities in mountainous interior of Fiji as part of the REACH mobile team who conducts awareness raising of the social, economic and legal rights enshrined in the Constitution of the Republic of Fiji and delivers associated services on doorsteps throughout Fiji. The initiative is coordinated by the Ministry of Women, Children and Poverty Alleviation, Legal Aid Commission, Human Rights and Anti-Discrimination Commission and the United Nations Development Programme (UNDP) Pacific Office in Fiji.

The access to the government services for the people in the communities is often challenged by the geographical location which is quite distant from the town center where the services and support are being provided and even if people can travel, often there is very rough terrain delaying the transportation.

This is more so for people facing limited mobility. However, due to the REACH mobile service delivery some of them have recently obtained the technical advice and walking aids for the first time, and some obtained readjustment or repair for the maintenance of their equipment provided earlier. Merewai was among 222 people (103 women and 119 men) who received the REACH mobile service delivery during the four-day visit to the interior communities in Savatu District in Ba Province, Western Division. Among them 11 people (five women and six men) were directly assisted by the SIA.

Jane Savou from SIA said, "We assist people to regain their mobility they lost. We encourage people to walk by themselves with some walking aids, so they stay healthy and active." "We were able to provide our services to the people who need mobility assistance but had never been provided before," she added.

The importance of the services for people living with various challenges was evident during the visit, and it is particularly vital for those experts to reach out to the remote communities and find out the needs so that no one will be left behind. It was enabled through collaboration with the REACH mobile service initiative.

In addition to the technical support, two applications for disability allowance were submitted during the visit. The social welfare officer from the Ministry of Women, Children and Poverty Alleviation who was a part of the mobile service delivery, advised that the newly enacted disability allowance scheme enables individuals living with disabilities to receive economic assistance regardless of their family's economic situation.

Fiji ratified the Convention on the Rights of Persons with Disabilities (CRPD) on 7 June 2017. The Disability Unit has been established within the Ministry of Women, Children and Poverty Alleviation and have been delivering disability allowance and associated support to people in need. The Disability Unit has also been working in collaboration with the SIA and other related groups and is an active part of the REACH mobile service delivery.

International Day of Persons with Disabilities which is 3 December was commemorated in Fiji by various groups. The REACH mobile service delivery was conducted by the Rights, Empowerment and Cohesion (REACH) for Rural and Urban Fijians Project. The REACH Project is implemented by UNDP Pacific Office in Fiji in partnership with the Ministry of Women, Children and Poverty Alleviation, and the Legal Aid Commission and supported by the Government of Japan and UNDP.

The REACH Project aims to contribute to Fiji's achieving 17 Sustainable Development Goals with particular focus on the Goal 16 which is a commitment to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels; and the Goal 5 which is to achieve gender equality and empowerment of all women and girls.

Source: <a href="https://www.undp.org/content/dam/fiji">https://www.undp.org/content/dam/fiji</a>. December 2017

## Social Services reaching the furthest behind first in Fiji



Kelera at her home in Nanuku Settlement (Photo: UNDP)

Kelera looked up from cutting her grass and climbed up the decaying wooden steps to open the door of her house to welcome the unexpected visitors from the social welfare office. She lives alone in her one-bedroom house after her daughter and son married and left, and her husband passed away, "a long time ago."

Kelera Dimairewa, 79, has lived in Nanuku Settlement for over 47 years. Her memory of the beginning of her life in the settlement remains clear: "I came in 1971. There were only three houses, and we were one of them." Currently, the settlement is home to more than 300 households.

Nanuku Settlement is one of over 171 informal settlements in Fiji as identified by the UN Habitat in 2016<sup>[1]</sup>. Informal settlements in Fiji are often characterized with these legal, social and environmental conditions: there is no legal status of the occupancy; housing standards and environmental conditions are inadequate; and the level of access to services and infrastructure is low.

While close proximity to the city and towns provides many advantages to the residents, the informal nature and stretched capacity of the settlements, compounds adverse living conditions. Residents have insecure control over and access to their land at best and settlements are often built in unsuitable and unsafe locations beside swamps or on river banks

prone to flooding. Persons living in these high population density areas have limited access to infrastructure, state utility services and a clean water supply.



Social welfare officer advising Kelera of the pension scheme provided by Fiji Government (Photo: UNDP)

Kelera clapped her hands in glee when she learned from the social welfare staff that she was eligible to and could soon receive Social Pension which provides her with FJ \$100 (around US \$48) every month.

When asked what the pension would be spent on, she shared the strategy for her future saying, "The money I will receive as Social Pension will add to my savings to buy a new apartment."

She has been preparing to move to a new unit with three bedrooms with her daughter and son's families, including a total of nine grandchildren. She has to save up to FJ \$50,000 (around US \$24,000) to obtain the unit title as part of a housing scheme managed by a community-based organization.



Sadala sharing his story in Nanulu Settlement (Photo: UNDP)

Sadala Nareki, 30, moved to Nanuku Settlement when he was a teenager.

"It is challenging for young people to live in this community because of the antisocial activities they engage in such as selling drugs, drinking outside on the road, and so on."

Adolescents and youths with limited capacity development opportunities face narrow choices for their future. It results in a vicious cycle of poverty without measures to address their specific needs.

Social service providers in Fiji, both governmental and non-governmental, have been vigorously reaching out to those who are left behind. The efforts being made by those specialized agencies and organizations are put together as an integrated programme, supported by the Government of Japan and the United Nations Development Programme (UNDP).

The initiative, Rights, Empowerment and Cohesion for Rural and Urban Fijians Project, or Project REACH, uses an innovative integrated approach, including raising awareness and delivery of social services at people's doorsteps.

The Project enables social service providers to proactively search for beneficiaries and help the most vulnerable from falling into poverty and isolation.

Sadala learned some legal aid and social welfare services from the REACH awareness raising programme brought in the community hall in his settlement.

"Young mothers face many challenges when they are separated (from their partners) and have to manage their lives with small children. I learned that the services provided by the government, which we were informed of today, can help them," he said.



Ataleta keeps her house with her younger sister and grandparents in Jittu Estate (Photo: UNDP)

Ataleta Ravenaroba, 17, living in Jittu Estate, another informal settlement in Suva, received a reproductive health check-up through the REACH mobile service delivery.

"I had a check-up for the first time. It is good that it can prevent us from getting diseases. Many teenage girls become pregnant. I would like to encourage them to have the free check-ups I had."

"The discussion and services the officers brought to us today were good. It encourages people to stop violence and do a lot of good things for the community."



Jittu Estate (Photo: UNDP)

Bakhodir Burkhanov, Country Director and Head of Regional Policy and Programme, UNDP Pacific Office in Fiji said, "Through the provision of inclusive social services to remote communities in Fiji, the REACH initiative ambitiously aims to reach those left furthest behind."

"Catering to various dimensions of vulnerability, this service delivery model will be critical for the success of the 2030 Agenda for Sustainable Development."

Experiencing and benefitting from the Project REACH mobile service delivery programme, younger generations like Sadala and Ataleta are spreading the word to vulnerable members of their settlements so that no one will be left behind in the path towards Fiji's sustainable development.

Source: <a href="https://rb.gy/28ed57">https://rb.gy/28ed57</a>

## Will you marry me on the REACH bus?

Savaira and Amani took each other's hands and exchanged marriage vows. Having been declared married, the couple then signed the register, along with their two witnesses and the Registrar.



Savaira and Amani had been together as partners for over seven years. They live in Amani's village in Namosi, in the interior of Fiji's main island.

Every morning they walk for over an hour up into the mountains, where they grow root crops and vegetables. Once a week they go to town to sell their produce. It takes three hours by bus each way from their village to the town.

"I had no time at all to seek government assistance. Here, we face so many hardships in terms of earning money. It's not that easy. And because of the hardships we faced, our marriage was delayed," said Savaira.

Their civil wedding ceremony was conducted in a unique way. It was organized inside a bus, which was 'a mobile office', custom designed and equipped to provide social services such as the registration of births, deaths and marriages.

Amani said, "All the officers from the different government departments were in the village hall. Everything that we needed was right there. So, we just got ready. She dressed in her *jaba* (long dress for women) and I put on my shirt and we went down to the village hall."

Together with their fellow villagers, Savaira and Amani received the team of government officers at their village hall. They participated in awareness raising on the social, economic and legal rights enshrined in Fiji's Constitution. The villagers were provided with immediate access to public services associated with these rights. Amani and Savaira were among 18,432 Fijian who have accessed social services through the Rights, Empowerment and Cohesion (REACH) for Rural and Urban Fijians Project. The REACH Project is coordinated by the United Nations Development Programme (UNDP) and supported by the Government of Japan and UNDP.

"The evening we got married, she felt so emotional because she finally knew deep down that she was now married to me," said Amani.

"We got back home and prayed, thanking the Lord that it had finally happened," added Savaira.

Formally registering a marriage in Fiji gives the couple legally recognized status, which is a key requirement when applying for probate – the legal and financial processes involved in dealing with the property, money and possessions of a partner who has passed away – or designating the partner as a nominee or beneficiary under Fiji's National Provident Fund.

Savaira said, "I now feel that I fully belong and have a stronger commitment to the *vanua* (land) and the church."

The civil registration of the marriage lifted her confidence as a member of the community and secured her legal entitlement. The REACH initiative assists all Fijians to overcome various challenges in accessing social services as guaranteed in their constitution. It promotes increased and improved government service delivery by targeting the furthest behind first.

Source: http://www.pacific.undp.org, 23 October 2018. Fiji.

## Canteens, Carnivals and Candy: A Winning Combination



PLAYING both parental roles at once is a tremendously difficult task that not many parents can manage successfully. However, for Loata Takape Senibale of Lau, Fiji, it has been a humbling experience to serve as both mother and father to her 10-year old son while her husband, a sailor, is at sea. In addition to her parenting roles, Senibale is a successful entrepreneur and member of SPBD Fiji since 2011. Reflecting on her successes, Senibale notes, "I run canteen, pastry and kava businesses. It's a difficult thing trying to run the businesses, playing both roles as a father and mother to your child because my husband many times is away at sea. But I'm thankful to this God Almighty for giving me the strength and inspiring me in such challenging times."

Since taking her first loan from SPBD of FJD \$1,000 (USD 560/NZD 670) in 2011, Senibale has seen her business grow through thick and thin. She recently graduated to SPBD Fiji's small and medium enterprise (SME) loan program, accessing larger financing of FJD \$12,000 (USD 5,700 / NZD 8,000) to meet her business needs.

Apart from her canteen, pastry and kava business, Senibale travels to various carnivals to set up her candy shop. "I travel to carnivals in Savusavu, Levuka, the Western side and Suva, Nausori to sell my candy. I have a very close friend who is my business partner when it comes to carnivals." The 48-year old usually earns a profit of FJD \$2,000 - \$3,000 per carnival. She says the carnival income is then budgeted to help her payments or to invest in her existing businesses. Senibale understands the value of savings and saves regularly with SPBD. She also understands the importance of uplifting others in her community – she has her own personal savings at home, which she uses to assist ladies who face problems. Senibale is also assisting her sister's tie-dye business by selling her sister's products at her canteen. Her hard work, determination and success did not go unnoticed.

Senibale was one of the five finalists for the South Pacific Business Development (SPBD) Fiji Businesswoman of the Year award. "I am reaping the rewards by being recognized as one of the five finalists for the businesswoman award." Senibale was surprised and humbled by the recognition. Acknowledging SPBD and its staff for their continuous financial support that has empowered lowincome and disadvantaged women, she notes, "I really appreciate what SPBD has taught us, from financing us to providing training, they have been a source of empowerment to women like me who not only live in the urban areas but also the



### Renu Mahanta and her traditional Assamese dishes.

In the year 2012, she started her dream project with limited knowledge and capital. In the beginning, she started producing Assamese traditional snacks (Jalpan) from her own residence in Nagaon District, Village Hemrbari, Samaguri in Assam with a helper and continued for one year. By the end of 2012, the business started to grow and she registered under the FSS Act.





Renu Mahanta cooking various cakes& tea

In the year 2013-14, when she felt that it is necessary to put more capital to grow faster, she applied for a loan from Assam Financial Corporation and they granted the same. With the loan, she expanded the industry by purchasing an electronic juicer, mixer grinder and a few other machines. She started making 25 different kinds of pickles made from raw materials like bamboo, king chilli, bitter gourd, etc. and locally found herbs which were becoming

uncommon. She did so because she didn't want these foods to be forgotten. She want the Assamese traditional food items to be famous worldwide. She want it to have a market outside the state of Assam. Gradually, her products were liked by people and their demand increased. It made her determined to stick with the industry and further popularize it.



Renu Mahanta preparing pickles with her employee.

Renu, started participating in various training programmes so that the quality and popularity of her products increases. She got training on the Fruit and Vegetable Preservation Training organized by the Deptt. of Agriculture, Entrepreneurship Development Programme organised by NEITCO, IICPT and many more.



Renu Mahanta in her Vegetable Garden.

She started out with 5 employees in 2013-14 and it has increased three times now. Her employees don't have higher education which made it difficult for them to land a job. She personally gave them free training and helped them improve their skill and now they can earn

their livelihood and run their household. Now, she has also been giving free training to other youths and help them start their own self-reliant activities.

She also take part in many national and international trade fairs which have helped her industry to gain popularity and helped her spread the Assamese traditional food outside the state.Renu Mahanta has the honour of receiving many awards like the North East Award, 2016.

MSME 5000 Award, 2018, etc. She has also founded a Farmer Producer Company to help farmers develop and find markets with fair prices for their products. Almost all of the raw materials used in her industry are obtained from these farmers.

On August, 2019, she opened a tea bar along with a bakery. The tea bar is the first of it's kind opened here. Specifically by a woman. It has a wide variety of tea types and it has helped in promoting the various aromatic and rich Assam teas.



Renu Mahanta and her Food Stall.

She couldn't have done and achieved so much alone. There have been countless people behind the scenes who have cheered her on and helped her to stand where she is today. She is very much thankful for all the support she gets from her family, her associates and well-wishers. She would especially like to thank Assam Financial Corporation, Ministry of Food Processing, Industry Deptt., Agriculture-Horticulture, and State Bank of India for helping her to grow her industry and to find the way of her dreams.

Source: The Story written by Dr. Usharani Boruah. Librarian, CIRDAP.

# Climate -smart agricultural initiatives set to scale in India



Farmer beneficiaries of the Dhundi Solar Pump Irrigators' Cooperative, Gujarat, India. The cooperative was established with originally six members, which is the first such model in the world. Photo: IWMI By Tushaar Shah. Feb 12, 2018

Government of India announces new multi-billion dollar scheme to implement solarisation of farm irrigation on a national scale.

It was a moment of validation for the scientific community when the recent Union Budget (2018) of India brought to light a new scheme called Kisan Urja Suraksha Evam Utthaan Mahaabhiyan (KUSUM), for promoting solar farming. With an allocation of USD 21.8 billion, the government plans to start building 10,000 MW solar plants on barren lands, providing 1.75 million off-grid agricultural solar pumps. Through the scheme, farmers' income levels are projected to see a sharp rise as they will be given an option to sell surplus power generated to the local power distribution companies (DISCOM).

The announcement has brought in a sense of jubilance for researchers at the International Water Management Institute (<u>IWMI</u>) and the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) who, with support from Tata Trust and the CGIAR Research Program on Water, Land and Ecosystems (<u>WLE</u>), set up the first ever solar pump irrigator's cooperative in Dhundi Village of Gujarat. This climate-smart initiative has been a novel intervention in the sense of the approach of farmer led and owned 'cooperatives'. Since

its inception in 2015, it has been hailed by stakeholders, especially the state policymakers as a model of reference to be scaled for attaining multiple benefits of income growth, regularization of power, sustainable ground water use and de-dieselising of agriculture leading to a curb in carbon dioxide emissions.

In fact, with escalating interest in its visible impacts, the Gujarat government had felicitated the solar cooperative members with a certificate of appreciation awarded to the same, by the Chief Minister of Gujarat on the occasion of Krishi Mahotsav or Agriculture Festival in 2016. In the following year, the site was visited by representatives from the Ministry of New and Renewable Energy of the government of India.

Taking account of the mounting interest of policymakers in the model, we engaged in a dialogue with the Finance Minister during pre-budget consultations with experts in the agriculture sector, to elaborate on the benefits of this model on scaling. The Dhundi model was also presented to the Prime Minister in a consultation with eminent economists organized by Niti Ayog (principle policy think tank of government of India) on 10 January 2018. Such efforts have come full circle with the Finance Minister of India announcing during the budget session:

"Many farmers are installing solar water pumps to irrigate their fields... government of India will take necessary measures and encourage state governments to put in place a mechanism that their surplus solar power is purchased by the distribution companies or licensees at reasonably remunerative rates."

#### De-coding solar power as a remunerative crop

Climate-smart agriculture (CSA) as a concept envisions the creation and implementation of innovative models for attaining multiple benefits and resilience not just for the farming community but a wide range of stakeholders. The innovation in the given case can be gauged from the epithet for the model itself, SPaRC - Solar Power as Remunerative crop, since the power from the sun is fetching not just economic dividends for the farmers but also helping create a sustainable business model on the whole.

With an aim of promoting climate-smartness in farm irrigation systems, SPICE - Solar Pump Irrigators' Cooperative was brought to being with 6 smallholder farmers organized into a platform and offered 7.5-10.8 kWp (Kilo-watt-peak) capacity solar irrigation pumps which were connected to each other in a micro-grid. The cooperative members provided around 5% of the capital cost of the solar panels, pumps and micro grid with the rest being subsidized by the project.

Further, a 25-year power purchase agreement was drawn with the local electricity utility i.e. the Madhya Gujarat Vij Company Limited (MGVCL). The latter offered the cooperative a feed-in-tariff of USD 0.07/kWh (kilo-watt-hour) for evacuating their surplus solar power to the electricity grid. This tariff is supplemented from IWMI-Tata funds by IWMI-CCAFS

with an additional USD 0.02/kWh 'Green Energy Bonus' and USD 0.02/kWh 'Groundwater Conservation Bonus', taking the total tariff up to USD 0.11/kWh.

#### Achieving a metamorphosis

Treating solar power as a remunerative crop and crafting a resultant, sustainable business model began to rapidly transform the scenario around Dhundi with the most direct bearing on the very lives of the 6 farmers in the cooperative. By early 2016, nearly 48,000 kWh of surplus power was sold to the MGVCL, earning the farmers an additional income of around USD 5, 300. As benefits became clear, three more farmers joined the cooperative contributing USD 390/kWp upfront, five times more than what the first six members had contributed. Even more farmers wanted to join but the contract with MGVCL capped total capacity of Dhundi SPICE at 100 kWp. Since the inception of the first sale in May 2016, the total units of surplus power sold till date stands at approximately 98,000 kWh and is slated to cross the 100,000 margin very soon. In fact, in January 2018 alone, one of the members sold 4,300 units of power from his farm alone, thus, generating an additional income of around USD 470 for himself.

On the other side of the benefit spectrum lies the DISCOMS and the government itself that are being liberated from the debilitating farm power subsidies. In a scenario of farmers having access to grid power connectivity the DISCOM would be obliged to provide not just a hefty subsidy but also bear the additional costs involving infrastructure installation.

Most importantly, such initiatives put to motion the attainment of the nation's intended nationally determined contributions (INDCs) towards reducing greenhouse gas emissions. At Dhundi, carbon dioxide emissions from the site has been reduced by 56.5 tons with the replacement of diesel with a clean source of power. The bonus of the model lies in making groundwater irrigation climate-smart as the potential for selling off surplus power is promoting measured withdrawal and application of water. Further, land use has seen change wherein the farmers have installed solar panels on their fields at an elevation, thus, allowing them to cultivate shade loving crops below the panels, thereby the model reducing the land footprint of solar expansion on the whole.

Source: https://rb.gy/09345d

# How this Farmer is Earning Good Money through Betel Vine Farming



Bidhan Layek of Tentulia village in Bankura district of West Bengal took up betel vine cultivation to ensure regular and lucrative return. He felt betel vine as a suitable crop for small farmer like him to get better return for a good period of time of 10—12 years. With this believe he was cultivating betel vine in his 10 kathas of land.

Everything was going well until last year when his betel vine field was affected with fungal diseases. He observed that the betel vine leaves were becoming rough with black spots and stunted growth. He tried out all his traditional ways to curb the spread of the disease but unfortunately nothing worked out. He was distressed with the situation and contacted few of his fellow farmers and they suggested him to get in touch with Reliance Foundation toll-free helpline number 1800-419-8800.

Without further delay, he called the toll-free number and shared all the symptoms related to the disease with Reliance Foundation expert and after hearing his problems, the expert shared that his betel vine are affected with *anthracnose* disease and recommend him to apply the *azoxystrobin* medicines twice with dose of 0.75 ml per one litre of water.

He sprayed the medicines as per the suggestions of the expert and was able to overcome the issue within couple of weeks. Witnessing the positive impact of the suggested medicine, he was surprised as well as happy as his efforts and hard work of past few months was not in vain.

From a dejected circumstances, he went on to produce good quality of betel vine with timely support and guidance of RF expert. The total production stood around 65,000/- betel vine from his 10 kathas of land. He sold the produce in the local market of Bankura at Rs1000 per 1000 pieces and earned around Rs 65,000/- in total. He was vastly pleased with the support extended by RF in treating the disease on time and saving him from acute loss.



Today he recommends farmers especially the young ones using smartphones of his village and nearby villages, to get connected with RFIS platform for addressing their queries related to agriculture or livestock.

Bidhan Layek said, "RFIS is providing farmer of his village with many relevant information on good cultivation practices, weather- related advisory, soil testing, government schemes and programmes, etc. through audio & text messages along with multi- location audio conferences. I am quite satisfied with the profit generating from proceeding of betel vine and look to keep getting technical support from RFIS in coming days".

Source: https://krishijagran.com 17 September, 2019

# Sowing the seeds of progress – one woman's story



Rekha Pandram, Secretary of the Nari Chetana Mahila Sangh, a federation of women's self-help groups in Madhya Pradesh.

30 March 2017 – Rekha Pandram, 34, is a Gond woman who has transformed the lives of more than 7,500 women and their families across 40 villages in the Dindori district of Madhya Pradesh, India.

Born into a poor family in the village of Amdari, Pandram was forced to leave school after only eight years and work as an agricultural labourer to support her family. Like many village women, she had very little say in the decisions made by her family despite contributing to the household income.

Although she was married at 19 and expected to adopt the role of housewife, Pandram remained motivated to learn, grow and lead.

In 2008 she became a member of one of the self-help groups set up through the IFAD-supported Tejaswini Rural Women Empowerment Programme, in the village of Phulwahi.

The programme is designed to empower rural woman so that they can take advantage of economic and social opportunities. Self-help groups such as the one Pandram joined also give women a chance to be involved in decision-making processes – often for the first time – and allow them to gain control over their lives.

Pandram's determination to make a difference was recognized early on. With encouragement and technical training she advanced as a member of the village level committee and was

selected to represent her self-help group and village at the federation level, eventually becoming the secretary of the Nari Chetana Mahila Sangh, a federation of women's self-help groups formed under the IFAD-supported Tejaswini programme. At the same time Pandram found time to study and passed her high-school exam and now she is planning to take her higher secondary certificate exam.

In line with the objectives of the IFAD-supported programme, Pandram's federation began work with 1,500 women in 40 villages teaching them to cultivate and market minor millets – *Kodo* and *Kutki*. In 2013, the women all agreed to sow minor millets on 0.5 acres of their land.

Minor millets are traditional crops that are being promoted by the programme. In India, as in other countries, wheat had been used to replace local crops, but the millets are hardier than wheat, coping better with water scarcity and rocky land.

The Federation later extended its work to include de-husking the millets, and this has become one of the most successful enterprises in the Dindori district to date. The women taking part in this initiative are now earning good incomes. But most importantly, they and their families are eating well because the millets are highly nutritious.

However, Pandram's work did not stop there. Many of the villagers living in the tribal-dominated Dindori district live in impoverished conditions with marginal land holdings and underutilized resources.

Her aim was not only to ensure economic well-being, but also to further improve the nutrition of participating households. By following her lead in sowing seven different green vegetables in plots of land behind their houses, more than 3,000 women were able to harvest fresh green-leafed vegetables from their plots to use for meals on a daily basis. As a result of her "seven-days-seven-vegetables" initiative, the nutritional status of the women and their families started to improve.

To share her experience and knowledge, Pandram attended the Commission on the Status of Women in New York in March 2017 and spoke at the IFAD side event "Empowering rural women to develop resilient, sustainable livelihoods and communities".

She recounted the federation's success with the minor millets. "Previously we were only getting 12 rupees per kilo of minor millets, 15 for other types of millet," she said.

"But now with the support of the Madhya Pradesh government and IFAD, we have established a processing unit in the village, and started processing minor millets and packaging them. We are now getting up to 80-90 rupees per kilo. We have given our name to this product and it has our brand."

https://www.ifad.org 30 March 2017. India

# Meet this 68 year Old Yoga Teacher Who Spreads Happiness among Unprivileged Kids & Dreams of an Organic India



Pic Credit- The Better India

An unbreakable dream, an enthusiasm towards a better future, an infinite zest to make this world a little better has turned this ordinary person to an extraordinary one. Today our story will portray and tribute a 68-year-old yoga teacher cum-organic farmer who has adopted many unprivileged kids to give them education and a healthier & brighter future.

Mallkiarjungoud Patil is a Yoga teacher or mentor and more importantly anchor for those children who belong to economically backward families of Guddad Hulikatti village in Dharwad district of Karnataka. He has not only adopted those children but also dreamt of transforming them into educated, healthier, responsible and bright individuals. His green dreams wake him up all night.

The yoga class goes on for an hour after which they go back to their guru's home to eat a fresh and healthy breakfast consisting of millet-made dosa or idli. Later, they chart their way to their school.

"Being uneducated, we cannot help our son in studies. We are happy Patil sir is helping our son in his studies," said the farmer parents of Suprit, one of the children adopted by Patil.

When the children return from their school, Patil helps them with their homework and gives them practical lessons on farming.

Patil's routine has been more or less the same for the last 30 odd years, except for a few things like switching to organic food, teaching yoga and his determination to help impoverished children get an education and a healthy lifestyle.

Let's know where it all begins.

Patil was diagnosed with severe back pain in 1986 and was asked to include yoga in his everyday schedule. He joined a yoga class in Hubli, where he had been working in the city's Postal Department for ten years. Yoga reduced Patil's pain considerably within a year and ignited a new passion in him.

"I was so bowled over by the benefits of yoga that I decided to learn it and teach others," he tells us.

After completing a diploma in yoga from Karnataka University, Patil started his own parttime classes in 1989 while still working. In his yoga career spanning three decades, Patil claims to have taught yoga to around 20,000 people.

The thought of not having natural food troubled him all throughout and eventually pushed him to pursue organic farming. So until 2010, he continued with his job to fend for his family and once his three children became financially independent, Patil took early retirement to make natural food accessible.

He moved back to his village with his wife in 2010 and took back his family's four-acre land that he had given on lease to other farmers. The land was almost infertile due to chemicals and fertilizers that were being used on it and it took Patil nearly two years to make the farm toxin-free.

Meanwhile, he underwent training for 3-4 months in organic farming from Karnataka University and soon, he started cultivating millet and gradually introduced other plantations like wheat, rice, groundnut, banana, mango, drumstick, maize, ragi and papaya.

Patil believes in growing plants that have high nutritional values coupled with other unique features. Take for example millets which are a less water-intensive crop and thus is drought-resistant. It is a superfood rich in fibre and minerals like iron, magnesium and calcium and has a long shelf life. As for Taiwan yellow, a papaya variety, it is rich in antioxidants and reduces the risk of heart diseases. Plus, they are sturdy and do not get easily damaged.

He uses the ancient method of preparing fertilizer, 'Jeevammurtha'. It is a mixture of cow urine and dung, jaggery and water that can be prepared in seven days.

"I mix ten litres of cow's urine and dung with one kilo of jaggery, one cup of soil and water. I put this mixture in a pit of 200-litre capacity, and leave it undisturbed. It provides essential nutrients like nitrogen, phosphorus and potassium to the plants," says Patil.

**Rural Development in CIRDAP Member Countries** 

Composting is another method to prepare organic fertilizer. In a 3×10 feet pit, he adds wet waste and covers it with cow dung and water. The top layer of the pit is filled with waste

leaves. He leaves the mix for three months after which the waste converts into compost. On

average, he produces one tonne of compost every 90 days.

The Way Towards Green

Patil dreams of a healthy and green world. He has dreamt of a green world with fresh air and fresh foods through organic farming and farming independent of pesticides. He hopes to

increase the number of yoga students to promote healthy lifestyle via yoga and intake of

nutritional food.

As for organic farming, he is currently chalking out a plan to conduct workshops in his

village for farmers on organic means to grow food.

He has a big message to the world, "At 68, if I am able to do the kind of exertion required for

farming and yoga it is only because of exercise and healthy food . . . these two things have

changed my life for the better. I wish to pass on my knowledge to other farmers and make

them independent of pesticides."

People like 'Mallkiarjungoud Patil' are really rare to find who relentlessly work for a better

India, a better world and spread happiness in a tiny place like Guddad Hulikatti. We should learn and get inspired by his enthusiastic spirit for a better version of ourselves and make this

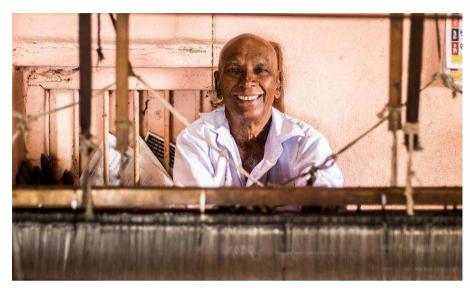
world a better place to live.

Source: https://krishijagran.com 09 September, 2019

110

# A life measured in metres and yards

Only four weavers – among them 82-year-old Vasant Tambe – remain in Rendal village of Maharashtra's Kolhapur district, where thriving handloom karkhanas gave way to falling demand and powerlooms



"Viknar nahi handloom. Aayushya kaadhle tyachyavar [I won't sell the handloom. I've spent my life at it]," says Vasant Tambe, pointing to a loom that stands seven feet tall in the centre of his house. "You can make any type of cloth using this," he adds, with pride.

On this loom of *sagwan* wood, Tambe weaves 66 metres of cloth every two weeks, and on average uses 130 metres of yarn a month, which goes on to be stitched into high-quality shirts. He has been doing this at various looms for more than 60 years – and has spun well over 100,000 metres of cloth. The 1 lakh metres started with a *nauvari* or nine-yard saree. When he was around 18, Tambe, now 82, first sat at a handloom at a *karkhana* in Rendal village as an apprentice, where he learnt how to make the saree. "For a month we had to work in the *karkhana* [workshop] for free," he recalls.



Soon, Tambe began weaving a *nauvari* (a little over eight metres) in four hours, and earned Rs. 1.25 for each saree. "We would compete for weaving the maximum number. The most was 21 sarees in a week," he recalls. In the 1960s and '70s, he and his co-workers would get a bonus of Rs. 2 for such a feat. The *karkhana* apprenticeship was necessary because no one else in young Vasant's family was a weaver. The family belongs to the Dhangar community, listed as a Nomadic Tribe. Vasant's father, Shankar Tambe, worked as a mason, and his mother Sonabai was an agricultural labourer and homemaker. "I was afraid of falling from the tops of houses," he says, about why he didn't take to masonry. "So I decided to do something else."Left: Vasant Tambe bought this loom in 1975 for around Rs. 1,000. Right: The warp passes through 3,500 wire heddles of the handloom, which separates the threads

Tambe attended school till Class 2 but had to drop out because his parents could not afford it. After desultorily accompanying his father to work, he became an assistant to a local silversmith. Soon though, the clacking of the looms in his village drew the young Vasant into the *karkhanas*.

By the 1960s, with the per-saree rate rising to Rs. 2.5, Vasant was earning around Rs. 75 a month, weaving whenever work was available. To supplement that income, he also worked as an agricultural labourer, earning in the 1950s, he says, *char aane* or 25 paise a day for 10 hours of work in the fields. "We would buy a kilo of rice for Rs. 2 in 1960," he recalls, and says the *tur* dal from the farm sold for 62 paise per kilo.

In 1975, after working at the loom in *karkhanas* for 20 years, Vasant, then 38 years old, bought two used handlooms for around Rs. 1,000 each from workshop-owners in Rendal, his village in in Hatkanangle *taluka* of Kolhapur district. On his own loom, he could make Rs. 3 per saree by selling it to local handloom cooperatives.





Speaking of wages, Tambe remembers a time in 1964 when the workers protested against the handloom owners for better wages. He was then the president of the Hathmagh Kamgar

Union in Rendal. "Our demand was an increase from the Rs. 2.5 we were paid per saree," he says. After three months of protest, the handloom owners relented. "We managed to get the rate increased by 5 paise," Tambe says. And the task of folding the woven saree, previously done by the weavers, was assigned to a different set of workers. "When the labourers weren't paid for three months, the farmers from the village helped them by distributing their own produce for free," he adds.

Top left: Vasant Tambe checks the thread count per inch with a magnifying glass. Top right: The 3,500 wire heddles (a looped cord) in the handloom, one for each thread of the warp. Bottom left: Tambe at his handloom. Bottom right: The weaver presses these treadles with the legs to control the up and down movement of the heddles

But by the 1970s, cheaper powerloom alternatives had become available and the demand for plain cotton sarees started declining across Maharashtra. The handloom weavers of Rendal moved from making cotton sarees to producing fabric for shirts.

"The sarees [made on our looms] were simple and even their colour would fade away after a few washes. Who would buy them?" asks Tambe. By the 1980s, Rendal's fabric dyeing workshops (most of them owned by the *karkhandars*) also began facing competition from the growing dyeing industry in Ichalkaranji town (around 15 kilometres from Rendal), which started using chemical dyes and machines that speeded up the process. Tambe estimates that the first powerloom came to Rendal in the early 1970s, bought from Mumbai by a local businessman. It cost, he seems to recall, Rs. 5,000. A few other villagers soon started taking loans from moneylenders and buying powerlooms from Mumbai, Ahmedabad and Surat. Today, a powerloom costs at least Rs. 1 lakh and the weavers estimate there are 7,000 in Rendal, a large village of 19,674 people (Census 2001).





Left: Stones attached to the handloom help control the flow of thread towards the heddle from the mounted beam. Centre: This wooden equipment, called dabi in Marathi, was used to create designs on the sarees and fabric. Right: The shuttle which carries the pirn moves back and forth to interweave the yarn The Handloom Census of India, 2009-2010, says that Maharashtra had 4,511 handlooms with 3,418 weavers that year, while across Maharashtra, there are now 13 lakh powerlooms, says a February 2018 document of the Department of Co-operation, Marketing and Textile Department of the government of Maharashtra.

And only four weavers in Rendal, including Tambe, continue to work at the handloom.

For long, Rendal's weavers would sell the cloth they made to two cooperative societies run by *karkhandar*s in the village – the Automatic Handloom Co-operative Vinkar society and the Hathmagh Vinkar Co-operative Society. This in turn was sold to a bigger society in Solapur city, around 220 kilometres away.

But the societies in Rendal closed down in the late 1990s due to a decline in the demand for handloom cloth. Their offices, spread across two floors of a building, remain shut and one floor has been rented out to a private school. Other handloom societies in nearby villages and towns also started shutting down, so the weavers started to sell – as they still do – to a subcentre of the Karnataka Handloom Development Corporation Limited in Koganoli village of Chikodi *taluka* of Belgaum district, around 22 kilometres from Rendal.

From the corporation, Tambe and the three other weavers of Rendal get a 31-kilo warp beam with 240 metres of cotton or polyester yarn wound around it, and another yarn roll weighing five kilos. "The cloth I weave [using this] is of superior quality [with a higher thread count] and I get Rs. 28 per metre," Tambe says. "Other weavers get even less [around Rs. 19]." His monthly earning from weaving is Rs. 3,000 to Rs. 4,000, and he supplements it by cultivating sugarcane on one acre of land.





Vimal Tambe hand spinning the polyester thread which is wound on a pirn

"A lot of physical work is involved in handlooms, and most people don't want to do it now. On powerlooms you just have to operate a machine," says Tambe. "An additional occupation is necessary. How will we survive on this low income?"

Vasant's wife, Vimal, 75, didn't learn how to operate the handloom. In Rendal, only men work at the loom, while the women work at a *charkha*-like machine that winds weft yarn around a cylindrical pirn or spindle. (The Handloom Census of India 2009-2010 says of the

38.47 lakh adult weavers and allied workers in the country, 77 per cent are women and 23 per cent are men). "I had a lot of household work, and I used to handspin the yarn," Vimal says, when I ask her why she didn't operate the handloom. She worked as an agricultural labourer too, but stopped a decade ago due to advancing age.

It takes Vimal around three hours to wind 25 pirns, and her husband needs three pirns to weave a metre of cloth. In the past, she would sit on the floor, but because of an accident last year that broke her leg, she now sits on a chair.

Their two sons died in childhood, and one daughter, who is married, does tailoring work. Even as early as the 1980s, Tambe broke the second handloom he had bought to make a door frame. It leads to a world that has faded away.

Source: <a href="https://ruralindiaonline.org">https://ruralindiaonline.org</a>

# 'He says I'm even more cursed than my mother'

In Banswara district of Rajasthan, a state that ranks low on gender indicators, women endure multiple deliveries due to the social pressure to have a son. But these views are slowly being challenge.b



Hira Ninama and Kalpana Rawal, both 35 years old, are separated by 15 kilometres but united in their desire for a son. "What good are daughters for their parents?" asks Hira, when I meet her in Sewna village of Banswara district. "It is good to have an heir – at least one boy," says Kalpana, from Waka village in the same district of Rajasthan. Over seven years, since 2012, Hira, who works as an occasional agricultural labourer and homemaker, has given birth to six girls. Her youngest is only a couple of months old. "I was not told that my [sixth] baby was a girl. But when I heard my mother-in-law cry, my tears began to flow. I cried even harder than my husband," she says.



"Since my second daughter [was born], I have been going to a *babaji*. He recites some chants over a coconut. Then I break it open and have the water. But he says I am even more cursed than my mother," she adds with a sigh, the youngest of five daughters herself. Hira is from the Bhil Adivasi community in Sewna, a village of 1,237 people, and is unlettered. She and other women here who survive multiple births often pay a hefty price in terms of their health – she looks much older than her 35 years, is weak, has constant body aches, and is battling emotional distress too.

Niranjana Joshi, the ANM at the Sewna health sub-centre, administers the first set of vaccines to Hira Ninama's sixth daughter

It points to why, in Rajasthan, the decrease in the maternal mortality ratio (MMR) was only 18.3 per cent, compared to the country's overall dip of 22 per cent between 2011-13 and 2014-16, according to data from the 'Special Bulletin on Maternal Mortality in India 2014-16' (issued by the Office of Registrar General in May 2018), That is, for every 100,000 live births, while an average of 130 women die across India, in Rajasthan this number is 199.

The state also ranks poorly on most parameters of the UNDP's Gender Empowerment Measure of the ability of women to participate in economic and political life and their command over economic resources. A <u>2009 report</u> by the Ministry of Women and Child Development finds that Rajasthan has had "consistently low achievement" on the UNDP's Gender Development Index too, which measures disparities between men and women in health, education and economic resources.

Hira though refuses to accept that she might not be responsible for determining the sex of her children, says Niranjana Joshi, the auxiliary nurse and midwife (ANM) at Sewna's health sub-centre and Hira's go-to health resource. She is resigned to the physical and verbal abuse her husband Khema, an agricultural and construction labourer, heaps on her and accepts that he ignores their daughters.





In Hira's and Kalpana's home district of Banswara, where three-fourths of the population is Bhil, there are 980 women for every 1,000 men. This is much higher than the state's average of 928 women per 1,000 men (Census 2011), but only slightly more than half of the district's

population is literate (56.33 per cent), compared to Rajasthan's average of 66.11 per cent. And while close to 7 in 10 women in the state have had some education, in Banswara this number dwindles to 4 in 10.

Kalpana Rawal (in the blue saree) leads a group in her village to promote women's health, but education and awareness don't always spell better health for women

Over time, these ingrained views are being challenged by Kalpana and others. Kalpana, who is from the Rawal community (listed as a Scheduled Caste in Rajasthan), has studied till Class 8 and lives in Waka, a village of 1,397 people in Banswara district's Ghalkiya panchayat. She heads the recently-formed local branch of Tajo Parivar (roughly 'healthy family' in the local Bagadi language), a group of 25 women trying to create more awareness about maternal health in their communities. Tajo Parivar was set up in December 2018 as part of the 'Apna Swasthya, Apni Pehel' (Our Health, Our Initiative) of the Delhibased research and training centre PRIA (Participatory Research in Asia). It disseminates information about maternal health, and works to improve child and adolescent health and strengthen panchayats. Tajo Parivar's work is informed by studies which establish that women display 'poor health-seeking behaviour' in communities that accord low priority to their well-being. A March 2018 study by PRIA with 1,808 women in two blocks (Banswara and Govindgarh) found that almost 7 in 10 women in Banswara had no one to turn to for counselling on maternal and child health, while one-third of the women had no money for emergency healthcare. And more than 3 in 5 of the women had no control over decisions regarding their health and nutrition.

"Our people live in scattered habitations. We go from door to door distributing condoms, calling out for immunisation, speaking about simple methods to prevent infections, and so on," says Kalpana, explaining Tajo Parivar's work. Such groups are now active in 18 *panchayats* of Banswara and Govindgarh blocks. On an average, each group has 20 members, all volunteers.





Kalpana, who is also an 'MGNREGA mate' (appointed by the state government to register people for work under the scheme), says that women suffer in silence. "They will not even

call an ambulance if it is late in the night. Instead of going to the PHC [which is around three kilometres away in Ghalkiya], they trust the *jhola chaap* [local uncertified medical practitioner] who leaves medicines at a provision store in the village," she says.

Left: 'I know being childless is not my wife's fault', says Gorakh Nath, Kalpana's husband. Right: Members of the Tajo Parivar in Waka village

But education and awareness don't always spell better health for women. As Kalpana's own experience illustrates, the bigger challenge of changing perceptions is multi-layered and difficult. Married for 20 years, she and her husband Gorakh Nath (also an 'MGNREGA mate') are childless – a status that has led to bitter arguments within Gorakh Nath's family about their eligibility for a share in three *bighas* [1 *bigha* is 0.40 acres] of ancestral farmland.

Both Kalpana and her husband underwent tests to find out why they weren't able to have children. The tests showed there were no physiological issues for Kalpana, though Gorakh Nath's test results pointed to a low sperm count. Yet, this knowledge has not kept her from thinking that her husband could have offspring if he gets married again. "Why should I object if my husband were to re-marry? It will be good to have a successor, at least one boy," she shrugs. Gorakh Nath thinks otherwise. "I know being childless is not my wife's fault," he says. "I have never thought of re-marrying. I do not care if she insists. Elders in the community and in my family believe that only women are responsible for bearing children. But I know that both parties should stay equal [are equally responsible]."

However, he sees the work of creating awareness and changing perceptions as primarily the responsibility of women. "Men hesitate to talk about such issues [like child birth] to women," he adds. "It is best that women do the work." Kalpana though knows that only the community as a whole can turn around such perceptions. "We have to become our own leaders,' she says.

Source: https://ruralindiaonline.org

# Patraput's saviour of indigenous seeds

Earlier this year, Kamala Pujhari of Odisha's Koraput district received the Padma Shri for her work on seed conservation – an uphill task when many varieties of paddy in her village have vanished



"I was very happy. I said 'namaskaar'. He [the President] greeted me and said, 'Welcome to Rashtrapati Bhavan'," says Kamala Pujhari, recalling her visit to New Delhi in March this year to receive the Padma Shri.

The award was given in recognition of Kamalaji's work on seed conservation (see the cover photo on top). For her, it's a journey that began over four decades ago when, after getting married, she moved to Patraput hamlet in Odisha's Koraput district. At that time, she recalls, the villagers were cultivating around 15 indigenous varieties of paddy, and kalajira, gothia, haladichudi, umuriachudi, machhakanta, bhudei, dodikaburi and others were in abundance.

"Every family cultivated two or three types of paddy, different from each other," she says. "At the end of the harvesting season, people exchanged seeds and grains. That way, the village had plenty of varieties."

But around 25 years ago, the paddy varieties started dropping. "I noticed a decline in the cultivation of landraces [indigenous varieties]. I felt there was a need to protect them," says Kamalaji, who is in her late 60s and from the Bhumia Adivasi community.

The varieties reduced, Kamalaji says, because as joint families divided, smaller family units increasingly started using higher-yielding hybrids. But the shift was also promoted by policy. "All varieties are not procured at the mandi [the government procurement centre] as they do not meet their ['fair average qualities'] standard," says Kamalaji's son Tankadhar Pujhari. "Sometimes, varieties like machhakanta, which are of fine quality, can be sold at the mandi. But mostly, we cultivate machhakanta and haladichudi for household consumption, and 'sarkari dhan 1010' [a new hybrid variety] for selling in the mandi."



Many varieties of seeds and landraces have slowly disappeared from Koraput district, or are cultivated for special occasions on small plots. The others are now found only in seed banks like this one in Nuaguda village, which has 94 varieties of paddy and 16 of ragi

When she saw the landraces disappearing, Kamalaji began scanning villages within a 20-kilometre radius from Patraput, usually on foot, to collect seeds. "The routes were harsh, there was plenty of wilderness," she recalls. Sometimes, she had to stay back in the villages where she went to collect seeds.



Kamalaji began storing the collected seeds at her house or sowing them on small patches of her family's two-acre land. Over time, she began storing them at a seed bank in Patraput set up in 2001 by the MS Swaminathan Research Foundation's (MSSRF) branch in Jeypore, around 13 kilometres from her hamlet. In most families in neighbouring villages, "only two varieties [machhakanta and haladichudi] are still being cultivated," she says, when we meet in Patraput, a 119-household hamlet three kilometres from Kanjeipatraput village in the Dongorchinchi panchayat of Jeypore block. Of the village's population of 966 (including the hamlet's households), 381 belong to Scheduled Tribes. In much of Kamalaji's own two-acre field too, now cultivated mainly by her son Tankadhar, who is around 35, except for machhakanta and haladichudi on small patches, the family no longer grows traditional landraces. Tankadhar says they gradually shifted from local varieties to high-yielding hybrids over a decade ago.

Left: 'Our income depends on how much we produce', says Tankadhar Pujhari. Right: Budra Pradhan shows us two paddy varieties

"Our income depends on how much we produce," he says. "The yield from one or two traditional varieties goes up to 6-10 quintals. It is much less than what we get from high-yielding varieties [15-18 quintals]. How do I care for my family if the production is less? Besides, it is easier to sell one variety instead of many."

Still, alongside her own family's compulsions, Kamalaji continued her seed preservation work, for which she has received awards. In 2002, she collected the 'Equator Initiative' award on behalf of the Adivasi communities of Jeypore. in Johannesburg. In 2009-10, on behalf of the Panchabati Gramya Unayana Samiti, (a rural development society set up in 2003 with help from MSSRF, of which Kamalaji was the vice president in the past), she received the 'Plant Genome Savior Community Award' set up by the Protection of Plant Varieties & Farmers' Rights Authority (PPVFRA).

This award is given annually on the basis of applications received from farmers or community-based organisations for an established record for conserving plant agrobiodiversity. The PPVFRA is a government of India entity, set up under the Department of Agriculture in November 2005 to implement the PPVFRA Act of 2001. The Authority grants rights to breeders and farmers who have preserved, bred, evolved or developed landraces.

But neither the Padma Shri nor the PPVFRA award have helped Kamalaji in getting rights over the seeds she once cultivated and is now conserving. She did not even know of the PPVFRA and that she could claim rights. The rights over *kalajira*, for example, are with Jogendra Sahu from Harichandrapur, Odisha, since October 8, 2013 (and will remain with him till October 7, 2028). Jogendra's application for rights on *kalajira* was advertised in June 2013 in the *Plant Variety Journal of India*. The Act says Kamalaji or any other farmer or community, who think they have rights, should have filed an opposition to the claim within three months.



Left: Chandramma Masia of Nuaguda hamlet says her family too switched to an 'improved' variety from desi dhan. Right: Rukmani Khillo cultivates muktabali on half acre and machhakanta on two acres for local festivals

But Kamalaji does not read the journal. In fact, many farmers do not know of the PPVFRA or that they can claim rights to seeds they have been using for years. This means registration goes to whoever files a claim first. So Jogendra alone will enjoy the benefits of *kalajira*, if the variety makes commercial gains, for the next 9 years, at least. Till May 2019 the PPVFRA has issued certificates on 3,538 varieties – of which 1,595 are farmers' varieties. The others are with private seed companies, research universities or individual commercial breeders.

Farm activists though point out that no individual farmer or community should have rights unless they have bred a new variety. "Seed thrives only if it is used in the fields consistently, season after season, and not otherwise [ by methods like rights and certification]," says Kamalaji.

Meanwhile, in the absence of robust cultivation, many varieties are vanishing. Chandramma Masia, 55, another Bhumia Adivasi farmer from Nuaguda hamlet of Limma village in Kundura block, around 35 kilometres from Kanjeipatraput, says her family too switched to an 'improved' variety from *desi dhan* (traditional varieties). "We got around 18-20 quintals [from this 'improved' variety]. Seeing the yield going up, farmers from other villages have been approaching me for seeds," she says. Chandramma cultivates a 100-day upland landrace called *pandkagura* in half an acre only for her family's consumption.

Similarly, 40-year-old Rukmani Khillo, an Adivasi farmer from the Paroja community, cultivates *muktabali* on half acre and *machhakanta* on two acres. "These can be harvested within 90 to 100 days from sowing day [as compared to 120-140 days for longer duration varieties], and there is a good demand for these short-duration varieties among farmers, locally," says, Rukmani, who is from Jholaguda hamlet of Limma village.

And Kamalaji' daughter, 42-year-old Raimati Ghiuria, cultivates just landraces on her family's six acres in Nuaguda, a hamlet around 35 kilometres from Patraput.. This year she has cultivated *kalajira*, *machhakanta*, *haladichudi*, *gothia*, *dangar* and *bodikaburi*. "Of the six acres, produce from two acres is enough for our family of 10. We sell the rest [to local farmers]. All these are short duration varieties," says Raimati.





Left: Raimati Ghiuria has packed kalajira in a basket for the sowing and the Nuakhai festival. Right: "We have our first meal of the year cooked from grain harvested that year, after submitting the food to our village goddess," says Damu Paroja

The short-duration varieties sell locally because they are central to an Adivasi festival, Nuakhai, celebrated for a few days around September-October. "We have our first meal of the year cooked from grain harvested that year, after submitting the food to our village goddess, Gaon Budhi Thakurani. That day, we do not eat machine-processed grain but eat hand-ground grain," says Damu Paroja, 38, who belongs to Paroja Adivasi community and is from Kundura village in Kundura block.

All the other indigenous varieties are stored in seed banks – there are three community-run banks in Patraput, Nuaguda and Jholaguda villages (set up by MSSRF). "We have 94 paddy and 16 *ragi* varieties in the Nuaguda seed bank. Every year, all these are planted in a conservation plot. This year we have gathered more varieties from different places and

increased the paddy number to over 110," says Budra Pradhan, 25, a community resource person in the state government's Odisha Millets Mission.

"In agriculture, seed has to be sown, grown, collected, stored, distributed. Of all the activities, I like distributing seeds to people. Even if I lose what I have, they will be safe with someone else," says Kamalaji. "The government's support will take us a long way in protecting our seeds. I request their support in preserving the landraces for our future."

Her son Tankadhar adds, "From next year, I'm switching to local varieties. Many people who come to visit my mother have been asking: how can you cultivate *sarkari dhan* when your mother got award for conserving landraces."

For their help with inputs and translation, the author acknowledges Susanta Sekhar Choudhury and Thrinath Taraputia of WASSAN, Koraput, Odisha, and Pratap Chandra Jena and Prashant Kumar Parida of the MS Swaminathan Research Foundation, Koraput, Odisha.

Source: https://ruralindiaonline.org, Harinath Rao Nagulavancha. June 12, 2019.

# Charubala: joy and Jhumur, sorrow and song

In Senabana village of West Bengal's Purulia district, 65-year-old Charubala Kalindi, who has danced as a nachni for decades, still whips up a high-energy performance along with her rasik and their troupe.



The colourful napkin in Charubala Kalindi's hand glimmers like lightning for a moment. The red and blue ghaghra swings vigorously to the Jhumur song. The musicians gathered for the performance begin to play in unison.

An audience of 80-90 people – old and young, men, women and children – is watching the performance in Senabana village in Arsha *taluka* of West Bengal. Though 65 years old, Charubala dances briskly.

It is said that the word '*jhumur*' came from the sounds made by the anklets worn by the dancers. The dance form is popular mainly in the south-west parts of West Bengal and adjacent regions of Jharkhand (while another variant is performed in Assam). Most of the poets who have traditionally composed Jhumur songs are from the oppressed castes, and some of their songs speak of social issues, and of drought, flood, politics and other ills. The love and longing between Krishna and Radha is also a recurring subject of Jhumur songs.

Charubala's own life reflects some of these themes. She once lived in Belma village in Purulia II taluka of West Bengal's Purulia district (Puruliya in the Census). When she was around 16-17, her father Mohan Kalindi – the family belongs to the Kalindi community, listed as a Scheduled Caste in some states – an agricultural labourer and construction site worker, got her married to Shankar Kalindi of nearby Dumdumi village.

Shankar was in his 20s, and he too did whatever labour was available. He turned out to be physically abusive. The beatings got so severe that Charubala left him and returned to her father. But Mohan turned her away, saying he was too poor to take care of her. So Charubala became homeless and lived on the streets for a while.

This is where she met Shravan Kalindi (neither of them remembers the year). Shravan, a Jhumur artist, took her in. He trained Charubala to be a *nachni*, with help from Bimala Sardar, another *nachni* who lives in a neighbouring village. Over time, Shravan, now 75, became Charubala's *rasik* – her manager, agent and coordinator of her performances. He also collaborates with groups associated with Baul, Bhadu, Chau, Karam Kirtan, Tusu, Kirtan and other performing arts. And he is an occasional agricultural labourer.

A *rasik* is regarded as a connoisseur of poetry and music. The *nachni* and he are usually in a conjugal relationship, which can often be exploitative of the woman. Just like other *rasiks*, Shravan too is married, and his large family includes his wife Sarala, sons, daughters, daughters-in-law and grandchildren. Charubala and he have a daughter too, 24-year-old Kamala, who is married and has moved to Uttar Pradesh.



Shravan helping Charubala dress up before a performance

The pressure to earn for the large family keeps Charubala performing even at her age. This, however, has not earned her the respect of Shravan's wife, Sarala, who still refuses to accept her.

Charubala earns Rs. 1,000 per show organised by the state government; these shows are around 1 to 1.5 hours long, and Charubala, manages, at her age, to do just one or two shows a

month. She also gets Rs. 1000 a month as a stipend for folk artistes from the state's Department of Cultural Affairs.

Villagers in Purulia watching Charubala Kalindi dance, with Chepu Kalindi playing the dholak and Amrito Mahato on the dhamsa

During the Juhmur season, from around October to May, private shows, organised by clubs or puja committees, can go on for the whole night, during which a *nachni* has to sing and dance for at least five hours. For this, the troupe of five to seven people is paid Rs. 6,000- Rs. 8,000, which is divided among them. The supporting musicians play the *dhol* (a double-sided drum), a *madal* (a small double-sided drum made from a hollowed tree trunk), a *dhamsa* (a large kettle drum), a *maracas* (a hollow gourd or gourd-shaped container filled with dried beans) and the *shehnai*.



Charubala Kalindi dancing with currency notes – Rs. 10, sometimes even Rs. 100 – pinned to her saree by audience members. A typical nachni performance touches upon the themes of love, devotion, longing caused by separation, and desire. The performance starts with an introduction and then moves into devotional renditions. Slowly, as the music progresses, the rhythms become more vigorous, and the dances more sensual.

Charubala has accepted this work as her destiny. "What more can be done? If the almighty had written it as my fate to be a *nachni*, who am I to change that? What will I eat if I leave this profession?" she says with a wry smile.

Source: https://ruralindiaonline.org. Abhijit Chakraborty. 19 July 2019.

# The designers of Dhoolpet's deities

An array of artisans, most of them migrants, come to Hyderabad months before the ongoing Ganesh Chaturthi festival to make idols, but say the work is not regular now due to cheaper items in the market

Holding onto the trunk of a 10-foot idol of Lord Ganesha seated on a throne, one arm raised in blessing, Shankar Mirdwad is adding the final touches to it with clay. Coconut husk and sacks full of plaster are strewn around, next to paint bottles, containers of rubber dye and idol frames. "The POP is missing from some portions," Shankar says. "After that, the idol is ready to be painted."

The tarpaulin and bamboo shed where he is working is barely visible behind an array of ready and in-progress idols on Mangalhat road in the bustling Dhoolpet locality of the old city of Hyderabad. Trucks and tempos are moving like snails along the narrow lanes ferrying big and small Ganesh idols – the biggest ones made here are 21 feet – covered in tarpaulin and accompanied by cheering crowds of men, on their way to community *pandals* and homes.

Shankar has been working at this shed since the last week of June. The owner, who is out of town, runs three more such workshops, he says. In each, when I visited in the last week of August, 2-3 artisans were busy readying the idols for the Ganesh Chaturthi festival in the first week of September this year.

Another batch – the sculptors – had come to Dhoolpet's worksheds around January and left by April, as they do every year, Shankar explains. "In our shop we call a Kolkata-based *murtikar*," he says. "He makes the idol with *chini mitti* [fine-grained soil]. It takes around 25 days for the *murtikar* to complete a [big] idol."



Shankar Mirdwad painting over a bruised portion of a backdrop

A few weeks later, Shankar and other artisans step in. He explains the process: the sculpted clay idol serves as a template. Shankar and his co-workers coat it with a rubber dye, which hardens into a sheath in around 10 days. It is then covered with liquid resin. Together, these coalesce into a mould which is removed from the base idol. The mould is stuffed with plaster and husk to make another idol. For tall idols, bamboo is placed inside to provide support. The plaster hardens within 10-15 minutes. The mould is then removed. Using clay, the workers fix any chipped portions. After that, the new idols are painted and decorated according to the customers' demands.

This way, Shankar and the others in this workshop make, he says, around 50 idols of each design – and a total of around 400 Ganesh idols during season in the four workshops owned by Shankar's employer. They make only big idols, 10 feet or more, and depending on the design, each is sold for prices ranging from Rs. 15,000 to Rs. 60,000.

Shankar, now 29, has been making idols for over a decade – of Ganeshs, Durga, and other deities. He belongs to the Kumbhar caste, which traditionally specialised in making pots. "I first came to Dhoolpet with my uncle when I was 16, during vacation after my tenth standard exam," he says. "I did small jobs like carrying things or helping with the paints." He stayed for three months, earning Rs. 3,500 a month.

Shankar's family is in Varni village in Varni *mandal of* Nizamabad district of Telangana, around 180 kilometres from Hyderabad. After that vacation, he went to study for a BA degree in a college in nearby Nanded district of Maharashtra. "I left the course in the second year," he says. "I was the eldest in the family and it was my responsibility to take care of them.

Shankar's three brothers (they don't have sisters) are all idol-makers. He and his wife Swati, who makes *beedis* for an income, have two daughters, eight and three years old. His parents live with him, and are potters in the village.



Idol-making in process: Shankar with a rubber dye cast (top left) in which he will put a mixture of POP and coconut husk to make this hand (top right). Shailendra Singh colouring the eyes of the Ganesh idol (bottom left), the toughest part he says, of the painting. Badri Vishal giving it the final touches (bottom right)

Soon after leaving college, he returned to Dhoolpet. "Watching and helping the other idol makers in their work, I too learned to make *murtis*. From then on, I have kept working as an idol-maker on contract in different places like Kurnool, Guntur, Nellore, Vijayawada, Hosur and Bangalore," he says. "Earlier there used to be work for all 12 months, but now I get this work only for eight months. The production has dropped in Dhoolpet with outside idols coming in the past 3-4 years."

Shankar says he is paid as much as Rs. 30,000 a month for his two months of idol-making in Dhoolpet. "I contract directly with the owners and they employ me because of my skill and pay me higher [amounts]. Beginners and workers who stay in one place get paid less. I complete the work in lesser time and more efficiently," he claims.

"After that, I go back to my village and take up any job that I get. I work as a [house] painter or in eateries as an attendant, earning around Rs. 600 a day," he adds, standing on the throne with a spray gun to add white paint to the face of a Ganesh idol.

Like Shankar, many other workers from Telangana and other states come to Dhoolpet's idol workshops before the Ganesha and Dussehra festivals. During those months, they stay in and

sleep in the workshops. Among them is 22-year-old Babban Dawlekar, from Badur village in Biloli *taluka* of Nanded district. He has been coming here in the first week of June for five years, and then returning to his village to drive an autorickshaw. His father is an auto driver too, and mother is an *anganwadi* worker. "We start work at eight in the morning and it goes on till midnight or later. There is no fixed time," he says.

Balvir Singh, 32, is from the Mangalhat locality itself and employed in another workshop in Dhoolpet for 10 years. "I get 12,000 rupees a month. But my working months have reduced to six or eight," he says. "Dhoolpet's idols have lost their fame because of the growing popularity of idols made in Maharashtra. Shops in Begum Bazar [around a kilometre away] sell them for lower prices. I work as a watchman or [house] painter in Hyderabad for the remaining months, but I don't want to give this up. I am happy doing this work," he says.



No longer just clay, plaster and husk, the idol has now taken on bright colours. Top right: Shankar using a spray gun to fine-tune the shades. Top right: An idol is ready to be moved to a truck and taken to its pandal. Bottom left: Further touches are added on the street sometimes, while some idols await their buyers on the street of Dhoolpet.

Ganpath Munikwarar, 38, who works in a workshop owned by a *murtikar* in Dhoolpet, is heating the charcoal used to dry the idols in the monsoon's damp. He helps in polishing the idol with sandpaper and attaching the hands and trunk. He has come here for the first time with his brother-in-law during a break in agricultural work in his village, Doultabad, in Tanoor *mandal* of Adilabad district (now in the redrawn Nirmal district) of Telangana. There he is an agricultural labourer, earning Rs. 250 a day; he also cultivates two acres of leased land. "I have been working here since mid-July. I get paid 13000 [per month]," he says. "From farming, I get around 50,000-60,000 a year. I grow soya, *urad, tur, moong, jowar*,

chana... I don't like this [idol-making] job. I have to work at night too. Next year, I won't come," he says.

After he, Shankar and the other artisans have made the idols from the moulds, the decorating begins. While they also do some of the painting, a different batch of painters work in groups of 2-3 – one doing the face, another the hands and so on. "We start working from June, two months before the [Ganesh] puja," says 31-year-old Badri Vishal, who is from Dhoolpet, holding a spray gun and a paint bottle. "It takes half a day [eight hours] to paint an idol. We work on 5-6 idols at one time." Badri has painted idols for 15 years. "For the remaining months, I sell kites in wholesale which I bring from Kanpur," he says. "Here, I got a half-day off on Raksha Bandhan, otherwise we don't get any holiday for two months. The work has got easy with the paint compressor machine [spray gun], but detailing takes up most of our time. I don't know how much I'll get paid this time, it depends on the kind of work we do."

The eyes are the most difficult to paint. In the same workshop, 20-year-old Shailendra Singh carefully uses a brush to colour the eyes and forehead of Ganesh idols. "Two years ago, I started working as a painter here," he says. "I work for two months and for the remaining months I study [he is trying to clear Class 12] and help my parents [in their *dosa-idli* stall in Dhoolpet]. I want to become the main painter who can colour the eyes of Lord Ganesha. Colouring eyes is the hardest, it has to be done in a way that devotees can feel that Ganeshji is looking at them from any angle they stand."

https://ruralindiaonline.org.

# 80, 250- crore programme to connect village roads



Pro-agriculture reform States will get priority access to funds

States that have undertaken agricultural reforms will get priority while the Centre plans to consolidate 1.25 lakh km of rural roads at a cost of  $\square 80.250$  crore.

The Cabinet Committee of Economic Affairs (CCEA) has approved the launch of third phase of Pradhan Mantri Gram Sadak Yojana (between 2019-20 and 2024-25), Prakash Javadekar, Minister for Information & Broadcasting, told media persons after the Cabinet meeting here on Wednesday.

This involves consolidation of 1.25 lakh km at an estimated cost of  $\square 80,250$  crore, which will shared by the Centre and States. The roads will be selected based on population served, market, educational and medical facilities.

#### Marketing produce

Also, States that have adopted reforms in State Marketing Produce will be prioritised for connecting village roads. "States that have amended State marketing regulations to adopt major pro-reform provision of State/UT Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Model Act, 2017 shall be accorded priority," said the release.

Plastic waste, among others, can be used for constructing these roads. Moreover, the Cabinet nod has a provision for allowing people to plant trees along the roads, for which they will be paid through Mahatma Gandhi National Rural Employment Guarantee Scheme and other State and Central schemes.

From the total cost, almost  $\square 53,800$  crore will be borne by the Centre. Projects will be built after the States enter into agreements with the Centre and States have responsibility to maintain the roads for five years.

For all State barring those in hilly terrains, the Centre and State will share the cost in 60:40 share. For the eight North Eastern and three Himalayan States – Jammu Kashmir, Himachal and Uttarakhand — the cost will be shared on a 90:10 ratio.

The PMGSY was launched in December 2000 to provide single all-weather road connectivity to unconnected habitation of with populations of over 500 in plain areas and over 250 in North-East, hill, tribal and desert areas as per Census, 2001.

The release stated that 97 per cent of the eligible and feasible habitations have already been connected by all-weather road. The CCEA, on August 9, 2018, approved continuation of Pradhan Mantri Gram Sadak Yojana - I and II, covering the remaining habitations by March 2019 identified as those hit by Left Wing Extremist blocks (with population of 100-249) by March 2020.

Source: The Hindu. India. July 10, 2019

# `Internet Saathi' programme to be expanded to Punjab, Odisha

Launched in July 2015, the Internet Saathi programme has so far, trained 70,000 'Internet Saathis', who have in turn impacted 2.6 crore million women in the country.

Google India-Tata Trusts' initiative is aimed at facilitating digital literacy among women in rural India

Google India and Tata Trusts on Tuesday said their Internet Saathi initiative, that aims to facilitate digital literacy among women in rural India, will be expanded to villages in Punjab and Odisha. Launched in July 2015, the Internet Saathi programme has so far, trained 70,000 'Internet Saathis', who have in turn impacted 2.6 crore women in the country.

"The programme now reaches 2.6 lakh villages across 18 states and we are adding two more - Punjab and Odisha. Internet Saathi has contributed towards bridging the digital gender divide in rural India - female to male ratio was 1 in 10 in 2015 and in 2018, it has increased to 4 in 10," Neha Barjatya, Chief Internet Saathi, Google India told PTI.

In Punjab, the program will cover around 5,000 villages, like Paras Rampur, Kotli Than Singh, Burj, Vehra and from Hoshiarpur and Kapurthala districts.

In Odisha, the program has been kicked off from Sindhia in Baleshwar, Parakana in Puri, Bhuinpur in Kendrapara, and will cover over 16,000 villages. The programme started as a pilot in Rajasthan and has been expanded to states including Gujarat, Jharkhand, Andhra Pradesh, Uttar Pradesh, Assam, West Bengal, Tripura, Maharashtra, Madhya Pradesh, Bihar, Haryana, Tamil Nadu, Goa, Karnataka, Uttarakhand, Chhattisgarh and Telangana.

"Internet Saathi program has shown us that with the right opportunities, there is no limit to what women can achieve. These women in rural India are learning about the Internet, not just for their own needs but for their families, kids and their communities," Barjatya said. She added that some of the women trained under the programme have started their own microbusiness like stitching, honeybee farming, and beauty parlours.

"There are also many who are driving awareness for issues like girl child education, menstrual hygiene and more within their communities," she added.Raman Kalyanakrishnan, Head - Strategy, Tata Trusts said it is imperative that women in rural India are provided with adequate opportunities and knowledge for inclusive growth and societal progress.

"The Trusts have increasingly been using technology in all its programmes across 29 states in India. Punjab and Odisha being a geography of focus for several Tata Trusts' existing initiatives gives us an added advantage in planning and implementing the Internet Saathi programme in these regions," he added. Barjatya cited a study with Kantar that found a

significant number of the Internet Saathis saying they believe they are seen as a source of information in their village -- people are coming to them consistently for answers to help children with school work, to learn new cooking recipes, search for jobs, or to run a business.

The study was based on interviews of over 2,500 people across rural India. "The study shows that 8 in 10 Saathis and their beneficiaries believe people in their village respect them more. Also, 9 in 10 women beneficiaries believe in a woman's right to express herself, and earn a living for her family," she said.

Source: The Hindu. India. July 16, 2019.

## Towards a barrier-free life

How tweaking a design helped leprosy patients in Rourkela access community toilets

After hobbling to the community toilet some 50 metres from her mud house, 70-year-old Surya Mahe had to sit down on the ground before dragging herself inside. She was scared that if she didn't do so, she would slip and fall. Her 80-year-old neighbour, Lalita Pradhan, had an equally tough time. Though she managed to reach the toilet with the help of her crutches, the steep incline meant she had to wait for someone to take her inside.

Sometimes, it was so hard that both these leprosy-affected women didn't even try on their own.

But ever since the slope was lowered and anti-skid tiles and railings were put alongside the ramp, life has become much easier. They no longer have to wait for help to arrive.

It's not just Mahe and Pradhan who now have easy access to basic sanitation and hygiene. The barrier-free community toilet has given a new lease of life to all the residents of the Leprosy Colony in Rourkela, Odisha. "I have cataract in both eyes and can't see very well. My fingers and toes have shortened due to leprosy, so I can't walk straight. It was difficult for me to use the new community toilet. I preferred to use the old one although it is dilapidated and lacks water facility. But now, the new toilet has hand rails and user-friendly water taps. At last, it is in accordance with our needs. Now, I lead a more hygienic and healthier life," says 76-year-old Magi Adivasi.

#### Changing mindsets

The improved community toilet has triggered a change in the lives of this community, especially women. Forced out with their leprosy-affected families from their villages in Chhattisgarh, Bihar, Jharkhand and Odisha and then settled down in Leprosy Colony in Rourkela's Naya Basti, women have been the worst affected. For many, begging was the only option to keep the home fires burning in the absence of education and livelihood opportunities. However, since the maintenance of the community toilet was given by the government to women self-help groups, their incomes have increased and many have given up begging.

"I didn't like to beg. I am affected by leprosy and no one was willing to give me a job. Now I have a better source of income. I have understood that I can give up begging and still give my children a better life," says 45-year-old SHG member Ukia Majhi.

However, changing mindsets wasn't easy. When the Centre for Urban and Regional Excellence (CURE), a not-for-profit working for community development, first met them in 2017, they were suspicious.

It took several meetings to convince the community that they were working in conjunction with the Rourkela Municipal Corporation (RMC) to improve their living conditions and empower them to lead independent, dignified lives.

"Our aim was to motivate the community to identify its problems and then come up with its solutions. But we needed to build a rapport first," recalls Siddharth Pandey, associate director, CURE.

Several participatory activities were carried out to engage the community. It was only after the CURE team joined the community in cleaning the dirty, swampy area in the colony and later shared a meal jointly made by all of them that the ice was finally broken.

After the community identified livelihoods and sanitation as the pressing problems, meetings were held to discuss the solutions.

Residents pointed out that there were two community toilets. Majority of them, including the elderly, preferred to use the old run-down one because the new one had slippery tiles, no railing and taps and hence could not be used by leprosy-affected residents. Further, insufficient ventilation led to a foul smell in the toilets during the peak hours of use. This is why, although there was no special access for disabled people in the old bathroom and despite the lack of water facilities, they still chose it over the new one.

Based on feedback from the community, CURE designed renovations. Once approved by the residents, the changes were carried out. The RMC will be using this design to upgrade community toilets in four other leprosy colonies. "Until CURE told us, we didn't realise that there were gaps in our design. These gaps, pointed out by the community, continued to exist as some of our staff were reluctant to go there because of the stigma attached to leprosy. We were going to demolish the old toilet. But now we will renovate it according to CURE design," says Ashok Parida, executive engineer, RMC.

#### Livelihood options

It was while exploring sanitation solutions and designing a barrier-free toilet that livelihood options were also discussed. The women SHGs took the lead and decided that mushroom, floriculture, and compost formation were best suited to them. The Krishi Vigyan Kendra, a district-level Farm Science Centre established by the Indian Council of Agricultural Research, swung into action after an MoU was signed with CURE and training was given in all these activities.

According to Savitri Naik, president of Ma Tarini SHG, this helped the women improve their knowledge and income. "Our lives started changing for the better. As our incomes slowly rose, our confidence began to rise. People started buying our products and we lost the fear of stigma. When we received the best SHG award for maintenance of toilets and for best livelihoods in March this year from the RMC, it was a dream come true".

Source: SWAPNA MAJUMDAR, The Hindu. India. June 28, 2019.

## This mill helps its women staff spin success stories



Anandi is from Salachipuram village

Sree Meenakshi Mill empowers its workers with its 'learn while you earn' policy

Every year, hundreds of young girls from low-income families seek employment in the women-dominated spinning industry in Tamil Nadu's Madurai district. Most of the girls are either school dropouts or have finished school but do not have the resources for higher education.

This was the case with T Dhanalakhsmi, whose parents are daily wagers. She started working in a yarn-making unit in 2014. Today, she sends almost her entire salary of  $\Box 10,000$  every month to her parents back home in Amachiyapuram. She is studying for BA Tamil through distance education, has gained a working knowledge of computers and is also getting skilled in tailoring and catering.

Dhanalakhsmi has managed this, thanks to the 'learn while you earn' policy to empower women, pursued by the Sree Meenakshi Mill run by GHCL Ltd at Paravai in Samayanallur town panchayat of the district. She is among over 350 women staying in the hostel provided by the mill. Here, besides boarding, they get toiletries free of charge along with 24-hour medical facility and proper security. That is why some of them are able to send almost their entire earnings to their parents.

This is the advantage of working at Sree Meenakshi, say Dhanalakshmi and the other girls as they are encouraged to pursue their studies after their shift. They are also provided vocational training in over half a dozen disciplines. Nearly 1,600 girls have benefited in terms of acquiring new skills and continuing their education in the last three years. To gain exposure, the girls working in the mill are sent for Quality Circle competitions in India and abroad and a few have also won gold medals at international events.

Once a girl joins the mill, she is provided up to one month of training in cleaning or carding to enable her to work in different units of the yarn division.

Out of the 1,300 employees at the mill, 900 are women, with most drawn from 40 villages around the town panchayat.

Women who cannot stay in the hostel are picked up from their homes and dropped back. This facility is provided for those living within a 40-45 km radius from the mill. Anandi is a case in point. She is from Salachipuram village 24 km away and joined the mill seven years ago after completing Class XII. She has been able to complete her graduation. "My parents couldn't afford to send me to college so I began working here," says Anandi, who is now looking forward to her marriage in July. "I have saved enough for my marriage, even bought gold jewellery worth □6 lakh and have been able to graduate."

#### Win-win proposition

The 'learn while you earn' scheme is a win-win for both employer and employee. M Sivabalasubramanian, CEO of GHCL's yarn division, admits that the company benefits from the services of the girls working with them, but he says that in return their endeavour is to make them financially independent once they stop working at the mill. Hence, certificate courses under the All India Council for Technical Education are offered in vocations like computer programming, mushroom cultivation, soap making, catering, beauty, yoga and tailoring.

While 16 girls were able to complete their school education after joining the mill, 58 became graduates through distance education during 2017-2019. The management pays 75 per cent of the fee and the rest is borne by the girls. "The idea is to ensure that they are able to start their own work or able to take up a job on the basis of the training we provide so that they are not financially dependent on any one once they leave this job," says the CEO.

Take the case of Divyabharathi who joined the mill five years ago. She is hopeful she will land a good job in Chennai where she will be relocating this year after getting married. She has learned computers while working at the mill. For now, she sends □15.000 a month to her parents in Viraganur. Through this she has helped with the marriage of her two sisters, one older and the other younger, and has the responsibility of paying for the education of her college-going brother. A confident Divyabharathi is determined to help her parents, who work as daily wagers, even after her marriage.

J Pandiselvi has a different dream. From Sathiyamurtinagar, she started working at the mill seven years ago after she dropped out of school in Class VIII. Married, with two sons, she hopes to provide her children proper education. "I wanted to continue my education but could not do so. Now, I want to ensure quality education for my sons and save money to build my own house." Her husband is employed in the milk industry.

Source: SARITA BRARA The Hindu. India. May 31, 2019

# Waiting for rain — with three ponds and a determined will.



Young girls drawing water from the only public well in Lakshmipur-Kosmai villages in Koderma, Jharkhand Kamal Narang



All for water People of Kosmai village building a canal to connect the ponds; (right) Girls draw water from the only public well in Lakshmipur-Kosmai villages Kamal Narang - Kamal Narang

Koderma district in Jharkhand is all set for water harvesting

It is only once in the last four years that Koderma district in Jharkhand received annual rainfall that can be somewhat called normal in meteorologists' parlance. In all the other years

the precipitation was deficient. The year 2018 was the worst with the district, which abuts Nawada district of the State, receiving a mere 559 mm, just half of what it normally gets in a year.

The twin villages of Lakshmipur-Kosmai in Koderma's Domchanch block, in fact, were among the worst hit. There are 92 households in these villages, but they have just one public well whose water they share with at least one more village in the vicinity. The water available in the well is limited and muddy at best. The village women say fights break out often over the quantity of water drawn from the well.

If this was the case regarding drinking water, one can well imagine what would be the condition about availability of water for farming. The villages are nestled in a degraded forest, which the villagers have vowed to protect from illegal loggers. There are several patches of fields where the villagers grow rice and maize in the years they get adequate monsoon rains.

"Last year too, we sowed rice as we received some rains in the beginning, but all the plants perished as a prolonged dry spell persisted. My family of nine people, including my mother and two married sons and grandchildren, received not even a single grain from our three-acre land in the 2018 kharif season," says Devki Singh, a 55-year-old farmer.

The efforts to grow maize by some other farmers in the village also came to naught because of patchy rains, he says.

#### Forest as catchment area

The villagers, however, were lucky that Savera Foundation, a not-for-profit organisation based in nearby Jhumri Telaiya town, stepped in. "We realised that the topography of the area is such that water availability can be easily secured. The forest around can serve as good catchment area, what we needed were harvesting structures where we can store water," says Ashok Kumar Singh, Secretary of the Foundation.

With funds raised from some donors, Savera Foundation got down to designing a watershed project for the villages. "The idea was to have three ponds — one after another. While the first pond has a dimension of 60 by 40 feet, the second was of 60 by 60 ft dimension. The third, which is closer to the habitation in the villages, was the biggest — 400 ft long and 200 ft wide — each with a depth of 12 ft," he says. "We could convince the villagers about the potential of such a watershed project. They readily agreed to be part of the effort. We designed the project in such a manner that they would be paid for part of their physical labour and the other half would be their equity," says Singh. As a result, they could make these water harvesting structures ready at a paltry expense of □2.25 lakh.

"We are waiting for the rains now. All these ponds are interconnected in such a way that the overflow from the first pond will go to the second and that from the second will fill the

**Rural Development in CIRDAP Member Countries** 

third," says Phoolmati Devi, a 35-year-old woman from Kosmai village who volunteered to

help in constructing the watershed.

"Water is a real problem in our village. The quality of water available is very poor. Besides, there are several instances of chorachori (stealing) of water, leading to fights between

households," she says, adding that the watershed would help solve such issues.

Afforestation drive too

The Foundation has also been creating awareness about conserving water, maintaining

quality of drinking water as well as the need for protecting trees around to ensure better water recharge. "In fact, we have given each family in the village five saplings of fruit trees such as

mango, jackfruit, and guava, and made them responsible for planting as well as taking care of

them," says Savera's Singh.

The Foundation plans to work with the villagers to further increase the density of such fruit-

bearing trees in the village, once water security is ensured. They hope that ensuring water availability will also help improve economic activity in the villages, bringing prosperity.

Currently, the villagers are not in a position to keep any livestock. With water becoming

available this can change, points out Mahadev Singh, a village elder.

"What we target is an all-round development of the village. We want to work with other

villages, even though the models can vary," the Savera Foundation official says.

They are already working with some villages in the neighbouring district of Giridih.

According to him, not just the villagers, even animals such as bears, jackals and rabbits in the neighbouring forest will benefit from such water harvesting structures. Currently, there are no

sources of water available to them in the neighbourhood. Come monsoon, the water woes of

these twin villages will be mitigated completely — hopefully.

Source: The Hindu. May 31, 2019.Indi

144

# Pune farmers reap benefits of expert advice



Apply training provided by philanthropic arm of Cybage Software to boost yield and income

When farmer Shivaji Shinde first planted ash gourd in a small part of his field in Surwad village in Velhe cluster in Pune district, he was both anxious and excited.

Since he had never grown anything else but rice, Shinde was anxious. This was the first time he was growing vegetables in the interim period before the next rice season. He was also excited at the prospect of increasing his income as it would help him repay his loans.

After 90 days, when the first crop of ash gourd was ready for harvest, Shinde's nervousness turned to joy. So good was the yield that it earned him a net profit of  $\square 37,000$ . He has now planted the entire field with ash gourd. Shinde no longer has to depend on one crop to survive. Even if the rainfall is poor and his rice production goes down, he can now rely on ash gourd to boost his income.

In nearby Sonde Mathana village, farmer Shantaram Bodke has also learnt a new lesson. He wasn't aware that his practice of flooding the lady's finger seedlings growing in his field was counterproductive. Instead of increasing production, the over-watering led to fungus. Consequently, many of the seedlings shrivelled up and died. After he was introduced to drip irrigation technology (where the quantity of water can be controlled), there were fewer weeds, which reduced labour costs. Importantly, the production of lady's finger at Bodke's field went up from 50 kg to 70 kg. He managed 17 harvests and earned a profit of □40,000 at the end of three months.

It is not just Shinde and Bodke who have benefited. Around 800 farmers in 11 villages in Bhor and Velhe cluster in Pune district are using their new farming skills and knowledge to increase agricultural production and income.

The option of growing an additional crop, better variety of seeds and, using better farming technology and water management techniques are proving to be a boon in an area where hilly topography and water scarcity make worse the vulnerability of farmers.

"I was not aware that lady's finger required a measured quantity of water and that flooding was leading to fungus and aeration. It was only after learning about drip irrigation that I understood that by controlling the watering I could improve the porosity of the soil, thus boosting production. I now save water and labour. I am really happy that I adopted this new technique," says Bodke.

However, it wasn't easy convincing the farmers in the beginning. Two years ago, in 2017, when CybageAsha, the Pune-based charitable trust and philanthropic arm of Cybage Software, began working here in partnership with the BAIF Institute for Sustainable Livelihoods and Development, farmers were not ready to give up their agricultural practices. They didn't believe that there were ways to improve their yield and incomes. "We were aware of rural distress and that many farmers were migrating to cities in search of better incomes. So, we wanted to make a difference through our integrated livelihood development programme. Considering the climate conditions and the fact that the majority of farmers here grew rice, we had to ensure sustainable development, livelihoods and incomes even during the off season. This could only be done through modern agriculture practices and incomegenerating activities," says Ritu Nathani, head, CybageAsha.

So a study was conducted to check the soil fertility and the socio-economic condition of the farmers in Bhor and Velhe to enable identification of problems and then design livelihood opportunities accordingly. The study revealed that farmers here were mostly small, with minimal education and had reduced the soil fertility due to excessive fertiliser usage. Farmers had no awareness about integrated water management or about maintenance of soil fertility and its role in improving productivity. Neither did they have any knowledge about integrated pest management or managing pest damage by the most economical means.

Several meetings were held with the farmers to explain how production and incomes could increase if these practices were adopted. Having found that almost all farmers grew the traditional *Indrayani*, a variety of paddy that was more prone to pests and diseases, CybageAsha and BAIF introduced *Phule Samruddhi*, a hybrid version of the same rice variety developed by Maharashtra's famous MPKV Rahuri University. "This would lead to a 25-30 per cent more yield than the other variety. Also, it was best suited for the climate and was disease resistant," says Pradip Khose, joint programme chief, BAIF. Modern techniques of rice plantation were taught, like the distance to be maintained between plants and rows, as well as urea deep placement technology suited for smallholder farmer agriculture production systems, to manage soil nutrient and crop disease. "Farmers were also taken for exposure visits to other districts so that they could see the benefits on ground. Once they were convinced, 300 farmers were trained in the new techniques," discloses Pankaj Katte, BAIF project manager.

Market linkages. Within a year, in 2018, the rice yield increased from 1,328 kg/hectare to 1,800 kg/hectare, giving these 300 farmers growing *Phule Samruddhi* a 140 per cent rise in incomes, according to project records. The number of farmers opting to grow vegetables increased from 15 to 350 after doing so brought an additional income of at least  $\square$  35,000.

Now, these villages are growing vegetables never sown before, like cucumber, chillies, ridge gourd, bitter gourd, brinjal, capsicum and coriander. "More importantly, it has prevented mono-cropping and initiated crop rotation," points out Sunil Chavan, agricultural expert, BAIF.

The success of this intervention is also due to the market linkages provided and shared-costing strategy. "We help with the equipment, seeds, training and linkages. The farmer has to chip in with costs of labour, fertilisers and pesticides, and water tanker needed for drip irrigation. This way, they are invested in the process. This partnership makes the process sustainable and brings the smile back on their faces," says Nathani.

Source: Swapna Majumder. The Hindu. India. May 03, 2019

## **Sweet Success**



Beekeepers in Mima Village, Nagaland were getting poor quality honey because of a crude and unhygienic bee-rearing technique that involved using wooden boxes. Under NABARD's Rural Innovation Fund (RIF), a modern honey processing unit was built and 60 traditional beekeepers were trained to operate it. This resulted in an increase in the production capacity as well as the market value of Mima's organic honey.

#### The Challenge:

The method of using wooden boxes in Mima Village, Nagaland for bee-rearing was crude and unhygienic due to moisture and dirt seepage, which led to poor quality of honey The Solution:

The concept of using concrete or stone hives for underground beekeeping was introduced under NABARD's Rural Innovation Fund (RIF) A honey processing unit with a 50 kg capacity was constructed and sixty traditional beekeepers were trained to operate it

#### The Impact:

A thousand improved underground hives were constructed by the beekeepes Improved efforts in collecting, storing, bottling and packaging honey Increased the market value of Mima's organic honey Mima now produces three tons of honey Generates an annual income of twelve lakhs from honey alone

Source: <a href="https://www.nabard.org/casestudiesdetails">https://www.nabard.org/casestudiesdetails</a>. India, Nagaland.

## **Doing more with less**

The traditional method of transplanting rice was leading to over-exploitation of water for paddy farmers of Kaithal, Haryana. NABARD played a role in disseminating Direct Sowing of Rice (DSR) technology that provides water savings of up to 50%. Due to the success of this initiative, the technology is now being replicated in 15 new villages covering 750 farmers.



#### Initiative:

Dissemination of Direct Sowing of Rice (DSR) Technology

#### BENEFICIARIES:

Paddy farmers of Kaithal, Haryana

#### The Challenge:

- The traditional method of transplanting rice resulted in over-exploitation of water
- It was also labor intensive, leading to lower returns

#### The Solution:

- DSR technology which utilizes just 50% of the water as against traditional method
- Farmers selected and educated about DSR technology
- Project implemented under supervision of agriculture scientists

#### The Impact:

- 109 farmers participated in the pilot as against the target of 100
- 150 acres across 5 villages of Kaithal district covered under the project
- Project covered by media as an inspirational story
- Technology being replicated in 15 new villages covering 750 farmers owning over 3000 acres.
- Better crop price discovery.

Source: <a href="https://www.nabard.org/casestudiesdetails.">https://www.nabard.org/casestudiesdetails.</a> India, Haryana.

# Beating pollution, one plastic bag at a time

How a female waste picker in Mumbai is doing her part to save the environment

Sushila Sable was only 10 years old when she and her mother left their village in search of a better life and found home on the streets of Mumbai, India's financial capital. But soon, the city with one of the highest cost of living in the world, pushed them into poverty and they had to collect waste to make their ends meet.

But 10-year-old Sushila saw an opportunity in what she did and continued to work informally as a waste picker. Two decades later, she met with volunteers from Stree Mukti Sanghatana, a local NGO, who educated waste pickers like her on the importance of segregating waste before selling it waste when segregated in the right categories fetches better returns. Sushila knew she had found a calling.

Within two years, Sushila started a self-help group of women waste pickers and soon saved enough money to start a dry waste collection centre. That's when her journey as an environmentalist began. She quickly realised that not only did waste segregation increase her income, it also had positive environmental impact.



In India, only 15-20 percent waste is properly managed.

Mixed waste typically ends up in landfills or open dumps. Some of it is burnt, adding harmful particulate matter in the air, while the rest rots in landfills, releasing methane gas, adding to the greenhouse effect.

Waste pickers do the important task of ensuring that waste is collected, segregated and recycled, thereby ensuring that the air we breathe is cleaner. UNDP, in partnership with Hindustan Coca-Cola Beverages, works with 30,000 such waste pickers, most of whom are women, to better manage 85000 metric tonnes of plastic waste, while improving the socioeconomic conditions of these waste pickers.

Through this initiative, *PRITHVI*, we aim to reduce over 60,000 metric tonnes of carbon emissions, through effective plastic collection, with *safaii saathis* like Sushila forming the backbone of this initiative.

Today, Sushila is the elected president of the Indian Waste Picker Society and represented India at the UN Framework for Climate Change in Copenhagen 2009, Bejing 2010, Durban 2011, and Rio 2012, where she spoke on the critical role waste pickers play in combating climate change.

"Safaii saathi's are crucial in the fight against climate change. 1000 kg of waste that is recycled by safaii saathi's saves 17 trees from felling. I am pleased to be helping the environment and being a role model for women in similar conditions like me".

Source: <a href="http://www.in.undp.org/content/india">http://www.in.undp.org/content/india</a>. June 5, 2019

# Making a Difference, One Bag at a Time

In 2005, Gurunath Rane left behind an advertising job in Mumbai and moved to Malvan, a small town along the Konkan coast in Maharashtra, India, to pursue his calling. Passionate about protecting the environment and promoting sustainable tourism in Konkan, Rane pioneered efforts to clean up waste around the Sindhudurg Fort – a 17<sup>th</sup> century monument protected by the Archaeological Survey of India by Chhatrapati Shivaji Maharaj.Now, Rane is president of Kille Sindhudurga Prernotsav Samitee, an NGO that aims to create awareness among locals and tourists to protect the heritage value of the fort and maintain the pristine ecosystem around it.



Replacing plastic bags with jute bags around a 17th Century fort in Sindhudurg, Maharashtra

Sindhudurg was declared as the first tourism district in Maharashtra by the state government in 1997. However, Sindhudurg lives in the shadow of the success of the neighbouring state of Goa, an international tourism hotspot. The economic benefits of tourism activities are an attractive prospect. But the damages to the environment through unsustainable activities are visible in Goa and increasingly in Malvan as well. Around the Sindhudurg Fort in particular, unregulated scuba diving tours and more visitors than the site can handle, puts pressure on the rich biodiversity that is found in the region. The Sindhudurg partnership aims to drive tourism in a more sustainable manner and balance it with the economics.

In 2014, the NGO partnered with the Sindhudurg project, a joint partnership between the Government of India and the United Nations Development Programme, for a plastic-free campaign at Sindhudurg fort. The partnership provided funding for around 36,000 jute bags to be handed over to tourists visiting the Sindhudurg fort. The plastic-free campaign lasted for a period of 20 months and witnessed a footfall of over 2,80,000 tourists.

"Regular cleaning of the fort area is expensive. So, we started the jute bag practice. The idea was inspired by a similar practice in Sikkim where mountaineers would be given bags to collect waste," describes Rane. A total of 48,000 plastic bottles, along with other plastic waste, were collected through the initiative. Most tourists have reacted positively to the initiative. Education is key in initiatives like this, stresses Rane. Awareness about the impact of plastic waste and an actionable solution for tourists to avoid littering has been important in the success of the initiative.

Rane's efforts to clean up the 350-year-old fort have found resonance with other community members as well. Local scuba divers have started cleaning underwater waste around the fort. Local fishermen are also playing their part in helping with cleanup effort. When Rane is asked what drives him to take these efforts to protect the environment, he shrugs: "Someone has to do it."

Source: <a href="http://www.in.undp.org/content/india">http://www.in.undp.org/content/india</a>.

# Solar Energy: Boost to farmer income in India



As markets shift to cleaner energy sources, India has been declared as the cheapest producer of solar energy by International Renewable Energy Agency's survey. Earlier, people in India were not very familiar with solar energy but now the situation has reversed. The usage of solar energy has seen steady rise in past few years and now it's been used both in rural and urban parts of the country.

The use of solar energy was confined previously but India is accelerating in the direction of solar energy with the initiative taken by the government to double the income of farmers. In a report released by International Renewable Energy Agency, India is producing the cheapest solar energy whereas Canada is the most expensive producer in the list. Since last few years, India is continously pacing forward in solar energy sector.

With constantly rising consumption of electricity per person in India, its high time that India must start boosting it's feet in Renewable energy.

Prime Minister Narendra Modi has called for investments to the tune of \$100 billion in the solar sector by 2022. The government has also targeted to reach capacity of 175 gigawatts in 2014, which can reduce carbon.

Prime Minister Narendra Modi was awarded with the United Nations' highest environmental award 'Champions of Earth Award' for his positive initiatives for pioneering work and environment is a proof of how much the government is moving forward towards solar power.

In a country like India, where renewable energy is cheap is a positive sign which can lead to a revolution of clean energy. Along with this, it can be a major halt, where the countries which are dependent on fossil fuel, will lead their path towards Green Energy.

Source: http://ddnews.gov.in. 15-07-2019. India

# Success story of guava fruit in Thailand.



There is a miracle happened. The miracle is nothing but you might have heard that normally for 1 kg but here we have only one guava for 1 kg. This has been manufactured in Thailand and it has named as Thai guava. It has became famous in super market and in all shops. They are thinking that they can produce more guava's or not in the farm. According to traditional the distance of one guava fruit will be from 5-6 meters was now it is growing easier. For 112 acre it is grown 200 meters fruit. In Lucknow CHIS institution has given more suggestions for Maharashtra farmers have acquired this technology and they growing more guava and achieving the success. For acre's they are growing 5 tonnes of guava's from there garden they are giving 2 tonnes of guava for supermarket.



According to tradition it takes 6 days to grow but now usage of technology they are growing in 2 days. They have learnt this from Maharashtra farmers now telgu farmers are growing more and earning profit. It has got a name of table fruit, allahabad safed, lucknow 49 and for processing they are using good technology and producing it. The country newly came Thai German they are also producing this Thai guava and earning more profit. This guava looks so beautiful green in color, big in size, if we see that only we think to eat and ya, it tastes very sweet and good when we eat that. It looks very small but one guava weights some 90 grams and it won't get spoil soon, we can store for 1 5days and if we store in refrigerator it will be good for 30 days.

It has been produced in Thailand.Now we are also producing it. It is called as hybrid guava.It tastes very good and the smell remains the same as other guava's. Now we are going to see a garden which is situated in narasimhapura. your seeing those trees are covered by papers because to protect from birds and insects. Come on let's c who is gardener for this garden.He is from gudur and his name is veeraprasadh. His wife is padma. After his retirement he started to grow those plants in his 20 acre land.He used 4 acre's of land for growing this guava on Jan 2nd 2014. After harvesting in one year the fruit has grown.Now it has became 3 years. For 4 acres they got 20 tonnes of guava and they exported it to markets. He speaks few words about his success. He kept 4000 trees in little space.He took to much care for trees. He applied pesticides and other products like magnesium sulfate of 1 grams to grow plants.

Again he started to grow in December in between he had invested in building the shelther in his farm land and it had got a good water supply from 5 acres he has got a 5 tonnes of guava he sold 1 kg for 80 rs. they exported in supermarket.

It takes 5-6 kgs and he exported to gadag, kopa etc. for everything he got 60-70 rs for per kg. It is hybridian plantation it will be small because it should be healthy and strong and it should not have any bow, for 4 stems it should have 4 bow's we call them as training and if we have cross-cross branches we will cut them and make to grow again. Naturally flower will come but by the use of technology they will make to grow. They has got naturally flower for first time but for second time they had done corning in August and he got fruit in December to till March.He had given rest for the Plants and in June he pot more water and growed it. In advance it had grown in advance. It was very tasty. He applied magnesium sulfate, calcium nitrate, for those plants. For getting maximum size. We have to decide how many fruits we need that we will do thinning. For this fruit the major problem is fruit fly so he will cover it by two layers of paper that is called non-fogging paper it is poly thin paper it protects from fruit fly then they will cover it with newspaper because to get protection from sun, if guava is exposed to sun it will get spoil soon. It won't get shade. After 45 days we can pluck it from tree and we should wash it in water and do grading which is 300 grams they will send to market which is less than that we didn't get a good price.

Till now there was only one fruit growing but now they are trying to grow more trees and for a tree it will come 10 tonnes of fruits. Now it was 20 tonnes of fruits. In this for 1 acre they got 4.44 tonnes of fruits they sold it and for 1kg he got 80 rs. He got the profit of 3,55,200. The expense is only 2,00,000 for 1 year. He earns more income. For planting trees he has invested 76,500 for food,50,000 for all the plants 23,500 the expense in 1,50,000. Then for maintaining if we see the expenses are for foods are 31,000 and for other expenses 3000 and after cutting the branches 1500 for maintaining 3000, for covering the plants 82,500 for maintaining the environment 5000 for grading, packaging, is 44,400 all expenses are 1,70,400. If we maintain this and give a credit it takes some 6300 for maintaining 6000 all the expenses are 1,98,700. What he have invested starting he had earned in 2 years by 2 trees of fruits and he earned more profits and after all his expenses he earned a profit of 1,56,500. If we grow now till June ,July he will do corning and grow more fruits 1 kg single super phosphate, calcium phosphate, nitrate phostach for growing it takes more time when it will be in the size of lemon they will do trimming for 1 tree it grows 10 kg of guava and they will sell and he earns more profit.

Source: http://www.lionnewsindia.com. March 15, 2019. India

# **INDONESIA**

# Aging remarkably



Tati (Tatik) Soepijarniwati, 86 years, seems too small, too slight and too old to agitate / AuthorDuncan Graham

The proverb 'banyak anak, banyak rejeki' (many children, many advantages) implies there should be enough kids to look after the parents when they retire. That care is most likely to be provided at home and to be total, as less than 25 per cent of Indonesians retire with a pension.

Longevity is also an issue in Indonesia, which has the fifth largest population of older citizens in the world. The Global Age Watch 2015 Index recorded that 8.2 per cent (around 21 million) of Indonesia's population was aged over 60, with well over half of them women. However, based on Indonesia's slowing birth rate and lengthening life expectancy, they and other agencies project this will be close to 20 per cent by 2050.

Government facilities are few. The Social Affairs Agency in Jakarta (population 10 million plus) reports that just over a thousand elderly people are getting care at three city-owned nursing homes. However, not all older Indonesians expect to or want to be a burden on their families. 'Women must empower themselves. Whatever our age and status we need to work together and understand the feelings of others. Never be a burden on your children – they have their own lives. I don't feel guilty about being alone and independent.'

A stirring statement, delivered with force, knuckles rapping the table, the coffee cups jumping as in an earthquake. Tati (Tatik) Soepijarniwati seems too small, too slight and too old to agitate – but doubters beware. This is not someone new to asserting their rights; she started when aged eleven. It happened in Singosari where her family has lived for generations. It was the capital of the thirteenth century Tumapel Kingdom, which she admires and depicts on the batik she designs. Tatik's test came in a sudden confrontation with a Japanese soldier during the occupation.

'He stopped me in the street and told me to salute his flag,' she recalled. 'I refused and he got angry. I had no intention of obeying so I told him I had to get home to care for my dying mother and had no time to follow his orders. Fortunately, he let me go.' Tatik, now 86, has only strengthened her attitudes since she was a little kid staring down raw power, an armed invader who could have bashed her – the usual treatment to humiliate citizens who flouted rules.

Now she runs an angklung group of retirees making music from shaking bamboo tubes and giving public performances. When not on stage she designs batik to illustrate the rich history of central East Java. In between she does all she can to keep her generation from slumping into misery. Her quest includes visiting the psycho-geriatric ward in the nearby Lawang Psychiatric Hospital where she talks to staff about the issues of growing old. She was recently in Singapore to look at their facilities for the aged ('we do things better here' she says) and also gives pep talks to the depressed and distressed.



Tatik with staff at the Lawang Psychiatric Hospital / Author

The hospital ward is clean and bright, but it's the raw end of the spectrum and not for the delicate. Staff and volunteers deal with a caseload of shattered lives and hopes, offering cheer

to those patients discarded by their families and suffering from the ennui psychologists label 'resignation syndrome'.

Tatik has assembled a long list of mnemonics, the easy-to-understand memory jerkers built around commonplace words she shares with the patients. A favorite is saiki, the Javanese word for now. In her system the letters stand for Sehat (health), Aktifitas, Inspirasi, Kreatifitas and Inovasi. 'Use these principles and all will be well', she says. Coming from a



youngster, however well qualified, the words would bounce away. But her manner and age give them weight. Tatik went to a Catholic school and learned Dutch which she still speaks despite getting little practice, for that generation has almost passed. She trained as a health professional and developed her ideas while working as a family-planner with a German doctor.

This was during the Suharto New Order government when an intense national campaign rammed down the brakes on runaway population growth.

In one of the world's largest social engineering exercises, thousands of women community leaders were employed to advocate 'dua anak cukup' (two children is enough). The two finger V-sign was plastered everywhere and often featured in garish statues showing the Ideal Family – with the eldest child usually a boy.

It worked. Tatik's mother had 10 children, and she had two daughters. Though not everywhere. Cynics noted that while the second president was urging contraception his wife Siti 'Tien' Hartinah had tripled her quota. When the government program stabilised, Tatik became a midwife, mainly working in the villages. Here she used the moments of intimacy to urge women to space their pregnancies and insist their husbands use condoms.

Inevitably some guys grumbled that she was a trouble-maker by poking into their bedroom behaviour. Which worried her about as much as the Japanese soldier's bayonet. 'Women are

so often the victims,' she said. 'Men need to have much greater respect. We get tired from raising children and doing housework and are often too exhausted to enjoy sex.'

'Husbands have to understand these facts. Things are getting better but they are not yet good enough.' Despite her frankness she retains some prudery, complaining about a huge statue on the road to Malang of Ken Dedes, the first queen of Singosari and mother of the Rajasa dynasty that later ruled all Java, because she is portrayed topless.

Tatik's husband, who worked for the state oil company Pertamina, died last century but she refused to remarry, saying she was a 'one-man woman'. Physically agile, she doesn't use glasses and only has some slight problems with hearing. Unlike many pensioners she has embraced modern technology. She uses a cellphone and has a Whats App account. A diary helps her track appointments.

But on some issues she remains implacably in the past, an ardent supporter of the 10-point Pembinaan Kesejahteraan Keluarga (PKK, family welfare program) launched in the era of Sukarno, a man she admires: 'I went to every rally he spoke at.'

Criticised for regimenting women, or 'manipulating motherhood', PKK has since moved from health and hygiene towards education, a cause Tatik urges to all who come within earshot, though always politely. The elderly can get apathetic if they don't get involved in society,' she said, dissociating herself from the stay-at-homes in her cohort.

'Don't be jobless, or a floater. 'Grab knowledge from the tree and reach as high as you can. Then when you've found education, open your mind. Don't be arrogant or lazy; mix with people who can inspire.

'Eat meals together. Read books – take an interest in everything. I have my cat and chickens. I am never lonely. I go to the mosque twice a day to pray and contemplate; to seek peace.

'I don't care what religion you follow, you can still get guidance from God. You don't need to depend on your children.'

Source: https://www.insideindonesia.org

# Agro- tourism village launched in Indonesia's Jambi under SDG partnership with BAZNAS, local government



**LUBUK BANGKAR, Jambi, 2 September 2019** – The United Nations Development Programme (UNDP) together with the National Zakat Board (BAZNAS), Bank Jambi and the provincial government of Jambi today launched a partnership to launch an agro-tourism village in Jambi, one of Indonesia's key commodities' pockets.

The partnership is part of a larger collaboration with the aforementioned partners on Sustainable Development Goals (SDG) initiative which saw the development of a microhydro plant. The micro-hydro provided much-needed electricity to more than 4,000 residents in Lubuk Bangkar village and surrounding areas. Under this new partnership, residents in Lubuk Bangkar village will now be able to process local commodities such as coffee into finished products and attract visitors.

Lying on 1000 meters above sea level, the highland village of Lubuk Bangkar offers a scenic views of coffee plantation and vegetable field dotting the green hills. This initiative was launched on Monday (2/9), attended by members of Baznas, ir. Nana Mintarti MP, Director of Distribution and Utilization of Zakat BAZNAS, Irdan Syauqi Beik, PhD; UNDP Indonesia Deputy Representative, Sophie Kemkhadze and Deputy Regent of Sarolangun, Hillalatil Badri

The micro-hydro was built through a blended financing mechanism system using funds from zakat – an obligatory payment for Muslim – local financial institution Bank Jambi, and Global Environment Facility. It was the first SDGs infrastructure initiative that used funding from zakat. The village initiative was the second SDGs initiative using zakat managed by Baznas.

"Thank you for the support from the Bank of Jambi, the Provincial Government of Jambi and UNDP so that the potential development program of the Lubuk Bangkar Village can continue. The participation of the Lubuk Bangkar community is also the key to an ideal program implementation." Said BAZNAS representative, Ir Nana Mintarti, MPUNDP Indonesia Deputy Resident Representative Sophie Kemkhadze said harnessing local economy is one concrete way to bring SDGs closer to communities.

"Implementing SDGs at the local level requires an integrated approach. UNDP believes that local economic development can effectively reduce inequality, foster social cohesion from the bottom up, generate local business opportunities and much-needed jobs. We look forward to seeing the fruition of the initiatives which I'm sure will involve marginalized communities, particularly women in the decision-making process," said Ms. Kemkhadze.

The outputs from the this livelihood initiative is to improve the sustainability of agricultural sector in the village by providing a technical assistance both on-farm and off-farm. After the identification of the potential aspect in Lubuk Bangkar, value-addition opportunities can be provided to the local farmers for the significant profit achievement. The improvement of the production equipment through soft loans and targeted micro grants are expected in this tourism village.

UNDP hopes through this partnership could help in eradicating poverty and prosperous communities in achieving SDGs in particularly goal no 1 (No Poverty). The partnership is done under UNDP Indonesia's Innovative Financing Lab which has been an integral part in the country's pursuit on alternative SDG funding, particularly in harnessing the full potential of Islamic finance.

Source: https://www.id.undp.org. Indonesia. September 3, 2019

# In Indonesia, cleaning up the Citarum, 'the world's dirtiest river', is now a military operation

- President launched a seven-year clean up of the Citarum River, but critics believe the move more political than ecological
- Activists say that by supplying jobs and occasionally bribes, polluting textile industry unlikely to be tamed

#### **Nadine Freischlad**



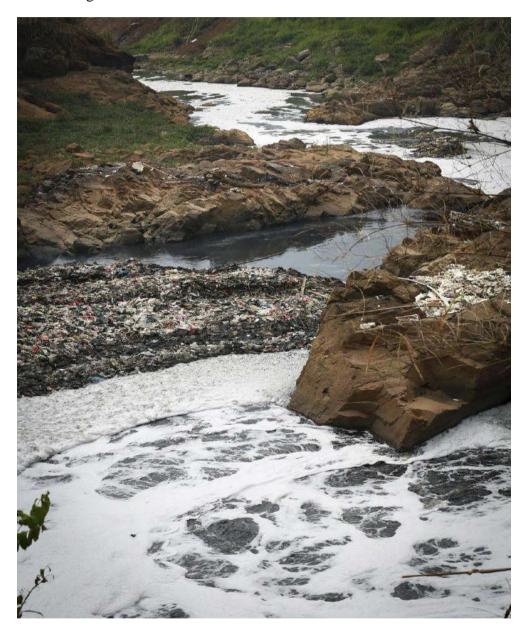
The clogged Citarum river, West Java, Indonesia. Pictures: James Wendlinger

West Java is the heartland of Indonesian manufacturing, and industrial zones on the outskirts of the provincial capital city, Bandung, are, according to the Ministry of Industry Indonesia, responsible for more than 14 per cent of the Southeast Asian nation's gross domestic product. Most factories here produce textiles, with some operations being essential links in the supply chains of global fashion brands such as Zara, Gap, Adidas and H&M.

Access to cheap and plentiful water has been key to the area's rapid growth since the 1990s: processes such as textile bleaching and colouring consume large amounts of the natural resource. According to recent data from the Coordinating Ministry of Maritime Affairs, some 2,800 factories now rely on the Citarum, the longest river in West Java, for their supply and for the disposal of waste water.

#### E-waste and other toxic pollution threatens hundreds of millions

By law, such factories are required to clean up their waste water before flushing it back into the river, but activist groups claim that minimal enforcement, coupled with widespread false reporting and bribery, mean facilities continue to dump a cocktail of toxic and hazardous chemicals into the Citarum and adjoining canals. In 2013, an investigation by environmental action group Greenpeace found hazardous chemicals including cadmium, lead and cobalt in waste water entering the Citarum.



Decades of neglect and mismanagement have, activists insist, turned the waterway into a toxic swamp, and the once pristine Citarum has earned its epithet as the dirtiest river in the world, bestowed by the World Bank a decade ago.

The Citarum empties into the Java Sea at various points along the north coast of West Java, about 80km east of the nation's capital, Jakarta. According to a study by America's University of Georgia, Indonesia – with its population topping 260 million – is, when it comes to plastic waste, the second greatest ocean polluter, trailing only China.

The Citarum has been dubbed the world's "dirtiest river" by the World Bank. Picture: James Wendlinger

In response to the river's degradation, in February, President Joko Widodo initiated a seven-year clean-up campaign. The decree puts the Citarum in West Java into the hands of the military, while the Coordinating Ministry for Maritime Affairs leads strategic direction. The army now has the right to "improve, revoke, and/or alter existing regulatory provisions", a controversial move signalling that, when it comes to the environment, conventional law enforcement has been deemed to have failed in the region. Dr Safri Burhanuddin, deputy coordinating minister for maritime affairs, expects visible and measurable improvements in the Citarum river basin to be achieved in four to five years.

Quick wins are badly needed, uncontrolled development having come at massive ecological and human-health costs in West Java, which is Indonesia's most densely populated province. Some 46 million people live here, 27 million of them within the Citarum river basin. Among them is 43-year-old Bambang Wiharsa, a rice farmer in Majalaya, a district that is home to numerous textile-manufacturing businesses.

Majalaya's residential houses are dilapidated, the streets are prone to flooding and farmers plough forlorn patches of land that sit between roads and factories, the air thick with smoke from nearby coal furnaces. Little of the wealth created by the textile businesses, it seems, remains in the area.

Sitting on a couch at a friend's house, Bambang points to his feet and arms. Rashes have broken out on the parts of his body that come into contact with the water when he wades through paddies and bends down to tend the rice saplings. Other villagers show the same symptoms.



Farmer Bambang Wiharsa's skin is damaged from contact with contaminated water. Picture: James Wendlinger

Textile factories are not the only source of pollution in the Citarum, the main branches of which, according to government estimates, extend to 297km.

Over three decades of urbanisation and industrialisation, the Citarum and its tributaries have been forced into channels, canals and artificial reservoirs to irrigate fields and provide a water supply for tens of millions of people. Degradation began on high: in mountainous areas, deforestation led to soil erosion and a corresponding increase in silt in streams, worsening flooding in lower lying areas. Population growth and intensive farming meant that more fertilisers, and animal and household waste, ended up in the river system. Three giant dams – Saguling, Cirata and Jatiluhur – have created artificial lakes. Used to produce hydropower, they are also home to large-scale commercial aquaculture facilities.

A new report – the first to systematically analyse water quality in various parts of the Citarum, as well as the health of fish and other aquatic animals, including those farmed commercially – was due to be released last month but has been delayed. Professor Etty Riani, from the Department of Water Resources Management at Bogor Agricultural University, in West Java, who led the study, tells *Post Magazine* that the findings are disturbing. The ecosystem in the reservoirs is "damaged and heavily polluted", she says, and the researchers found mercury and other heavy metals in the tissues of fish, and deformations among fish larvae.

"You can still eat the fish but you have to control the amount and frequency," Etty says, adding that she will share recommendations for safe consumption with the country's Ministry of Health.



Rubbish on the banks of the Citarum. Picture: James Wendlinger

The aquaculture in the reservoirs – which provides fish for many tables in Jakarta – also creates pollution, says Burhanuddin, through fish food and associated waste. The number of cages in the dams should be reduced to 10 per cent of the current total, he suggests.

Few of the attempts made to manage the river's ecosystem over the years have worked.

One ambitious plan, designed by the Ministry of National Development Planning, plotted out multiple initiatives to be implemented between 2009 and 2023. Some US\$3.5 billion was allotted to restore the Citarum river basin, and the Asian Development Bank lent the Indonesian government US\$500 million for the cause.

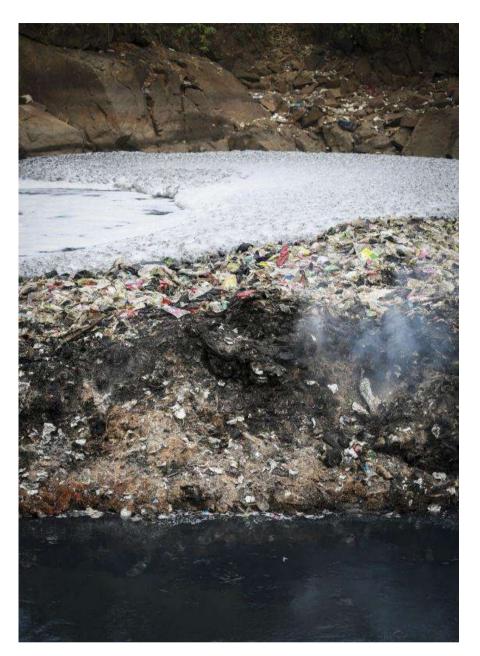
New canals were built, as was a reservoir to ease flooding. Reforestation was undertaken in areas most prone to landslides and soil degradation, but the issues of water quality, rubbish removal and industrial waste are only now beginning to be addressed.

The military is like a strong dose by a specialist doctor; the other measures are like generic drugs. But their time is limited and we have to build up the backup structure in this timeAsep Kusumah, director of Bandung's Natural Resources Conservation Agency

What complicates matters is the fact that the river system is spread over many administrative districts. The river itself falls under the control of the central government, but land management, waste management and the policing of communities and small to medium-sized businesses are the responsibilities of individual districts, or sometimes overseen at provincial level.

Asep Kusumah, director of Bandung's Natural Resources Conservation Agency, says his office is understaffed and that there is simply not the manpower to keep a tight rein on industry. When a factory is suspected of dumping contaminated water, for example, department regulations stipulate that a staff member must be present from the moment a water sample is taken until it is brought to the lab and analysed, which can take days. Warnings must be issued to polluters before penalties are imposed, and because factories can easily change the point at which their pipes empty into canals, making a case against them often requires extensive investigation.

Being strict with factories is not without difficulty, textile manufacturing being a major employer in West Java. Many farmers such as Bambang, though personally affected by the toxic water in their fields, have friends and family working in the industry.



A clogged section of the Citarum. Picture: James Wendlinger

For these and other reasons, many are happy to see the military now on the frontline in the battle against polluters. "The military is like a strong dose by a specialist doctor; the other measures are like generic drugs," says Kusumah. "But their time is limited and we have to build up the backup structure in this time. They are here for seven years."

Importantly, as part of Widodo's anti-pollution push, soldiers are allowed to seal off factory pipelines they suspect of funnelling contaminated water into streams and rivers without first gathering evidence and issuing warnings.

Colonel Purwadi, who oversees an area with many textile factories, has used this power liberally, and tells *Post Magazine* that, having had their pipes sealed without warning, some factories have flooded because their waste water had nowhere to go. Purwadi also tells of

how his troops force factory workers and their manager to join them in clean-up work. The public shaming is intended to send a signal.

Having studied in Japan and China, Purwadi holds a degree in water management, and during a routine factory check he will engage the general manager in a conversation about filtering methods and the chemicals used in textile treatment. Under his watch, a new communal waste-water treatment plant has been built in his sector.



Colonel Purwadi, head of the Citarum Task Force Sector 7. Picture: James Wendlinger

A few kilometres closer to Bandung, Colonei Yudi Zanibar's sector previously contained one of the most visibly polluted stretches of the river, where mountains of household rubbish, even animal carcasses, had accumulated. In an earlier effort to manage the Citarum, a canal had been built to direct water downstream. An amputated oxbow no longer flowed into the river system, and it quickly filled with refuse, most of it from a nearby rubbish dump.

"This is where Al Jazeera took photos in April," Zanibar says cheerfully, recalling a shocking photo-essay by the broadcaster that highlighted the state of the Citarum.

What we criticise about the presidential order is that there's no starting evaluation, no initial data. How do we know what has improved? We see this as more politicalDadan Ramdan, of Walhi

Zanibar's men greet everyone they meet with a holler and a raised fist. They have been sleeping at the site, steadily dredging truckloads of junk from the water. The rubbish dump will soon be compressed and flattened and the colonel wants to see a football pitch there. The

dredging will also remove silt that has accumulated in the canal, a symptom of deforestation and soil erosion upstream.

The army's "shock therapy", says Burhanuddin, is making a difference because it is around the clock. "We never had this before," he says, adding that in the past, new rubbish quickly piled up in areas that had been cleared. Textile factories would dump their waste at night, knowing that investigators would not be snooping around after dark.

Civil-society groups have raised eyebrows over the army's involvement, however.

"We did not expect [Widodo] to involve the TNI [Tentara Nasional Indonesia], the Indonesian Armed Forces," says Dadan Ramdan, director of the West Java chapter of the Indonesian Forum for Environment (Wahana Lingkungan Hidup Indonesia, or Walhi), the country's largest environmental organisation, which has lobbied for better environmental management of the Citarum since the 1990s.



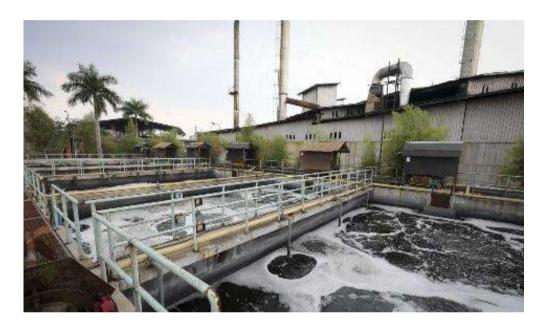
Dadan Ramdan, director of the West Java chapter of Walhi. Picture: James Wendlinger

Ramdan says that while the public appreciates the help of the military, their deployment has not been effectively organised, and is likely a political move by Widodo, who is coming up for re-election this year.

"That they do the cleaning, that's seen as positive," he says. "What we criticise about the presidential order is that there's no starting evaluation, no initial data. How do we know what has improved? We see this as more political. If we just count the two districts here, it's almost 20 million potential voters."

"Many of the projects are not yet coordinated," adds Burhanuddin, who points out that dredging silt in the canals is ongoing while the soil erosion upstream is not yet under control, so new dirt just keeps being washed up. Burhanuddin and his team at the Coordinating Ministry of Maritime Affairs have brought in foreign experts to help assess the situation.

One such assessment carried, out by Melinda Laituri, professor of ecosystem science and sustainability at Colorado State University, in the United States, stresses the need for a long-term, coordinated effort that will last well beyond the seven-year presidential order. "The Citarum River Basin represents a challenging situation where successful solutions will be measured in incremental steps," Laituri writes. "While long-term investment is essential (20-30 years), short term projects (2-5 years) are needed."



A communal waste-water-treatment plant in Cisirung, West Java. Picture: James Wendlinger

Laituri notes that military units have been effective in conducting waste removal, revegetation, and relocation of settlements, but points out that these activities "need to be inclusive of local villagers and non-governmental organisations, based upon sound scientific practice, and identified sustainable approaches".

In 2015, Walhi was one of a group of NGOs that launched a campaign targeting West Java's textile industry. The goal was to expose international brands buying from factories that were known polluters.

They collected evidence about the waste-dumping practices of such factories, and three facilities had their waste-water-management approval licences revoked. Greenpeace, which was among the NGOs, declared that "this court victory in Indonesia could send shock waves across the fashion world", forcing brands to pay closer attention to their supply chains.

Launched in July 2011, Greenpeace's Detox Campaign, which has highlighted the sorry state of the Citarum, presses fashion brands to commit to zero discharge of hazardous chemicals

by 2020, and work with their suppliers around the world to disclose releases of hazardous chemicals to communities living with water pollution. The initiative has brought commitments from brands such as Valentino, Levi's and Zara to work only with suppliers who adhere to waste-water-management standards, and mobilised more than half a million activists, fashionistas, bloggers and designers to insist that fashion does not cost the Earth.

Adi M. Yadi, whose grass-roots organisation, Pawapeling, was also involved in the West Java campaign, says the result was not as dramatic as Greenpeace had hoped. Of the three factories penalised, one committed to making changes to its operation, one simply started operating under a new name, and one shut down, only to be replaced by others.

Adi describes ways of cheating and cutting corners that he has come across, such as factories paying for a positive outcome in routine environmental checks, or misreporting their waste-output volume. "Maybe the production volume of the factory grew that year," Adi says, "and they should have invested in a larger waste-water-management system to deal with the surplus, but they didn't. They only report the regular waste volume and dump the rest."

Adi is also aware of corruption, the officials tasked with directing factories to invest in wastewater management recommending the work be conducted by businesses owned by family members and friends.

While the army is on the ground here, the trade minister has been telling the media how important the industry is, and that they will continue to support itAdi M. Yadi, of Pawapeling

It's a mindset, Kusumah says of the prevailing attitude in the local textile industry, that extends to factory employees at all levels, even though environmental laws are clear. And factory owners or end buyers, who think their production processes are clean and their apparel ethically made, may be fooled by false reporting. "There are inconsistencies at the level of the owners, the management and the operators. It goes all the way down to those who guard the facilities." Ultimately, Walhi and other NGOs – even with Widodo's seven-year plan now having been in effect for more than 10 months, and with military boots pounding riverbanks – are not optimistic that practical, long-term and rigorously enforced measures will be taken to rein in polluters in West Java's textile industry.

"While the army is on the ground here," says Adi, "the trade minister has been telling the media how important the industry is, and that they will continue to support it."

Source: https://rb.gy/09345d

### **Indonesian solar lessons from Vietnam**



This photograph taken on 23 April, 2019 shows solar panel installations and a wind turbine at the Phu Lac wind farm in southern Vietnam's Binh Thuan province. (AFP Photo)

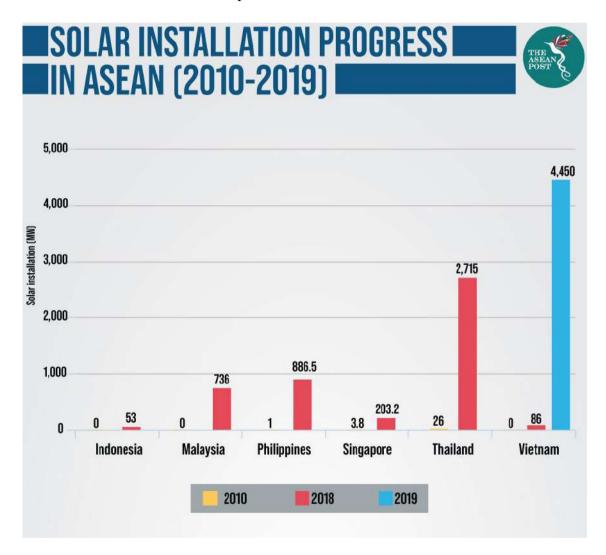
This photograph taken on 23 April, 2019 shows solar panel installations and a wind turbine at the Phu Lac wind farm in southern Vietnam's Binh Thuan province. (AFP Photo)

During the recent Jakarta Car Free Day on 28 July, Indonesia's Minister of Energy and Mineral Resources, Ignasius Jonan, led a campaign called the National Movement of A Million Solar Roofs (Gerakan Nasional Sejuta Solar Atap) to promote the country's solar rooftop utilisation.

The campaign is an effort to bolster solar installation as listed in Indonesia's National Energy Plan (RUEN), which targets solar photovoltaic (PV) installation of 6.5 gigawatt (GW) by 2025 and 45 GW by 2050. However, solar installation in this archipelagic country has been seemingly stagnant over the years, with only 0.1 GW of solar installation (on-grid and offgrid) up to today. This means that Indonesia requires a tremendous effort to add 6.4 GW of solar addition in only six years if they are to meet the target set out in the RUEN. Indeed, there are doubts as to whether it is possible Indonesia can make such a leap.

Indonesia's solar installation is also lagging when compared to neighbouring countries. Based on data from the ASEAN Centre for Energy (ACE), as of June 2019, solar installation across ASEAN is about 9.1 GW – a significant surge from only 0.03 GW in 2010. This growth is contributed by solar installation spurts in Thailand (3 GW), Malaysia (0.7 GW), Philippines

(0.8 GW) and recently in Vietnam (4.5 GW) thanks to successful government incentive programmes for renewable energy. Solar installation growth in these five countries resulted from well-designed incentives for renewable energy, mainly from the Feed-in-Tariff (FiT) system. In all these five countries, solar installation significantly increased after the establishment of FiT. Solar is enjoying a boom in Vietnam, which recorded 4.5 GW as of June 2019 – only two years after FiT was launched. This makes Vietnam the largest solar PV installer in ASEAN, with traditional pioneers Thailand now second.



Source: ASEAN Centre for Energy

Indonesia can take a leaf out of Vietnam's book after their success in boosting solar energy. Vietnam and Indonesia are rich in coal reserves and still predominantly use coal in their power generation mixes, and both are still developing countries which have high energy demands in response to their economic growth. In addition, Indonesia and Vietnam both have similar electricity market structures under a single buyer model with one state-owned utility – in Indonesia, the State Electricity Company (PLN), and in Vietnam, the Vietnam Electricity (EVN) – as an off-taker. Noting these similarities, it is not impossible for Indonesia to replicate the success of Vietnam in generating more than 4 GW of solar installation in two years.

Price incentive, financial support. Using Vietnam's success as a reference, there are four key points Indonesia can learn from.

The first is the right solar incentive price setting. Vietnam launched FiT rates for solar at US\$0.0935 per kilowatt hour (kWh) in 2017 which was eligible in the first-round for plants that are commissioning no later than June 2019. The solar FiT rates were set higher than the electricity rate in the average retail price – which is at US\$0.0803 per kWh – so it incentivises renewable energy developers and attracts investment, but it is also not too high a burden for EVN to pay.

In Indonesia, referring to the cost to PLN of procuring power (commonly referred to by its Indonesian acronym, BPP), the country's renewable energy pricing, including solar, is capped to the maximum local electricity retail tariff – which is at around US\$0.07 per kWh for high electricity demand areas like Java. This does not provide incentives for the generation of solar power since the local electricity tariff reflects the production costs from coal or other fossils.

Since the BPP is composed of the cost of fossil-based generation, this is unattractive for renewable energy developers as renewables are high in this archipelagic region. Learning from other ASEAN pioneers which have succeeded in significant solar PV addition, the government needs to invest in incentives before they can reap the rewards. After that, the government can further help reduce the price of renewable energy when the market is mature. Adjustment of the FiT or an incentivised price will enliven the stagnant solar PV market.

In addition to tariffs, support from the financial sector is important. In Vietnam, the banks and financial sectors are well-aware of solar PV projects, hence they are supportive of the standard power purchase agreement given by the utilities and can provide loans for developers since they see their projects are bankable. A lot of listed lenders for renewable energy projects in Vietnam are from domestic banks, but in Indonesia, the financial sector's awareness of renewable energy projects leaves a lot of room for improvement. A credit guarantee to the bank is one way the government can support such projects, and capacity building and government facilities to rise these projects' bankability is another option for Indonesia – in particular among state-owned banks.

#### Mature local industry

A mature local industry to support the demand of solar is vital. Vietnam has a mature solar manufacturing industry to cater to the high demand when FiT was launched. In Asia, Vietnam is the third-largest solar PV manufacturer with a capacity of 5.2 GW per year in 2016, after India and China. Prior to FiT, the solar module production was mostly for export, but Vietnam's manufacturing capacity has prepared the local market for FiT's establishment. This way, it made sense for developers to use local solar modules rather than imported ones since they provided more economic benefit.

In Indonesia, solar PV production was 416 megawatt (MW) per year in 2017 according to the Association of Solar PV Manufacturers in Indonesia (APAMSI), which makes the local solar module price much more expensive than imported ones. Meanwhile, Indonesia has regulated that a minimum of 40 percent of local products have to be used for renewable energy projects. This certainly creates a burden for renewable energy developers as the prices of local products are still high – which discourages them from investing in renewable energy

projects. Learning from this, the government needs to not only incentivise the purchase of electricity from solar, but also support the manufacturing capabilities of local solar manufacturers to increase their production capacity.

#### PLN buy in, less red tape

Thirdly, Vietnam's EVN is open and welcoming of solar and renewable energy in their grid system — and have been improving their capabilities to adapt to these technologies. Investment to increase grid flexibility and capacity are required to ensure the intermittency from solar is well-handled, and EVN sees this intermittency as a challenge rather than a threat — hence motivating them to improve their grid capability. EVN also realises that more renewable energy will naturally decrease the intermittency effects as projects can compensate for each other in a large system.

Solar PV and wind are intermittent by nature. Nevertheless, other countries handle this by conducting thorough planning and advanced renewable energy forecasting. As a result, renewable energy penetration will enhance the utility grid system's reliability instead of depending on fossil generation. Renewable energy will also help PLN to upgrade its monitoring and planning systems, and the capacity building and study of renewable energy grid integration will ultimately help PLN embrace solar PV adoption.

Finally, easing the process of getting permits and support from local government for solar projects are also critical in ensuring rapid solar deployment. In Vietnam, several local authorities in regions where solar potential is high have developed a regional solar roadmap for the region which identifies the allowable places and available capacity for solar developers to submit proposed projects. Developers no longer have to deal with the lengthy process of getting permits, and in some parts of the region, local authorities even provide their own incentives on top of national incentives – such as land which can be rented by developers. This shortens the time spent on red tape and speeds up the amount of time spent on installation.

Indonesia can support its solar industry stakeholders by transforming the BOOT (build-own-operate-transfer) scheme into a friendlier scheme such as BOO (build-own-operate). Local governments' participation needs to be improved to create streamlined policies which are in line with the national target and roadmap. By adopting these four points from Vietnam, Indonesia will likely find it easier to hit their target in six years' time. Vietnam has provided a very valuable lesson, and Indonesia should have learnt by now that achieving the impossible – installing 6.5 GW in less than six years – is possible if immediate actions and well-designed strategies are put in place. Aloysius Damar Pranadi and Nadhilah Shani are research analysts under the Policy, Research, and Analytics Programme at the ASEAN Centre for Energy (ACE) in Jakarta. Established in 1999, ACE is an intergovernmental organisation within the ASEAN structure that represents the 10 ASEAN Member States' (AMS) interests in the energy sector.

Source: https://theaseanpost.com.

## Islam inspired renewable energy



Muhammad Djawis Masruri with Arahmaiani Feisal/Source Kristina Großmann

Verse 80 of Sura 36 of the Qur'an tells of a green tree out of which fire can be made. It was this sura that inspired Muhammad Djawis Masruri, the leader of the Islamic boarding school Amumarta, near Yogyakarta, to become involved in renewable energy production. Djawis recalled stories from his childhood about the fruits of the region's nyamplung tree (Calophyllum inophyllum) used for lamp oil. People extracted oil from the fruit, poured it into small bamboo tubes then simply added a wick and lit it.

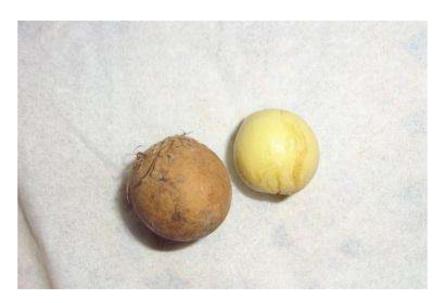
Inspired by the sura and driven to counter global warming, Djawis worked with farmers in the remote Bantul area in the south of Yogyakarta, a region with weak infrastructure but naturally growing nyamplung trees, to gather local knowledge about the potential of the oil it produces.

Working as a cooperative, hundreds of farmers collect the ripe fruits from the tree which they harvest alongside other crops. They deliver the fruit to a nearby factory where the stones are removed, skinned and pressed and the oil purified. Djawis and his team developed and built special machinery for the process. The oil from the nyamplung fruit can be used as fuel for power generators and even cars.

#### Fossil fuel subsidies linger

For several years, until 2010, the cooperative produced about 100,000 litres of nyamplung oil per month, selling the fuel to a nearby manufacturing company for their energy supply. The contract ended because the relatively high cost of the biofuel at Rp.14,000 (A\$1.30) per litre

could not compete with the highly subsidised fossil fuels at Rp.7000 per litre. Fossil fuel subsidies have existed in Indonesia since independence in 1949. The current president, Joko Widodo, whose key policy objective on his election in 2014 was the reduction of fuel subsidies, has continued and even increased them in order to keep fuel prices stable. Currently, fuel is subsidised at Rp.500 per litre and this may be increased to approximately Rp.700 to 1000 per litre in the future.



Peeled stone of a nyamplung tree fruit/ Source Kristina Großmannhis price differential has been a major obstacle for the business. With the support of current and past students of the Islamic boarding school, Djawis and his team developed a business plan for expanding the production of the biofuel in order to convince the government to provide subsidies and to identify potential investors. Until now, however, negotiations with government have proved unsuccessful and the farmers currently supply only the nearby cosmetic industry with their oil.

Djawis and his team have met with state representatives who, although they showed interest, demanded unacceptable conditions from the cooperative. As Djawis explained, 'I met the head of the province, the district head and representatives of the Ministry of Energy and Mineral Resources. But their offers in regard to revenues, loans and regulations were so tight that the farmers and I would go bankrupt. At the end, they just wanted to take pictures with me and were not interested in discussing the project any further'. Negotiations with potential private investors were also unsuccessful.

Presidential Decree No. 26/2006 set Indonesia's renewable energy target at 17 per cent of the total energy mix. However in reality both national and local government processes hamper the development of renewable energy. Moreover, although they subsidise fossil fuels, they are unwilling to support local renewable energy initiatives through subsidies. Djawis explains this reluctance by pointing to the strong connections between politicans and the fossil fuel industry. 'Many members of parliament have shares in the coal and oil industry – they stick to fossil fuels because they don't want to lower their profits.'

Sustaining the socio-ecological environment

The production of this biofuel is seen not only as a means of providing the locals with another income stream but also to improve the socio-ecological environment of the region. The nyamplung trees can live and produce fruit for a long period of time and they have deep roots which means they prevent erosion. The trees and surrounding ground retain moisture and contribute to a positive water balance which is important in the dry region of Bantul. People need incentives to stop logging trees and selling off the wood. 'If people can profit from living trees, they protect them,' Djawis explains.

With the biofuel business stagnating since 2010, Djawis and his team have looked to alternative uses for the nyamplung, including extracting colour from the skins of the fruits and leaves for dyes in batik production. Already in the prototype stage, the aim is to produce cloth locally then decorate it with locally produced batik colour. 'To produce batik is easy and provides fast cash in order to bridge the gap until the renewable oil project is established. The farmers need money and advancement now.'

Despite the current lack of support from private investors and governments for local renewable energy production, this initiative offers hope. Djawis and his team are entrepreneurial, innovative, creative and passionate about improving the socio-ecological environment and people's livelihoods, attributes necessary to advance renewable energy production and use in the future.

Dr Kristina Großmann (kristina.grossmann@uni-passau.de) is assistant professor at the Chair of Comparative Development and Cultural Studies at the University of Passau, Germany. Her work is focused on Southeast Asia.

Arahmaiani Feisal is an artist living in Indonesia and working on environmental, social and religious issues.

https://www.insideindonesia.org September 04, 2018. Indonesia

# Jobs at what cost: The Impact of electronic waste management on health.

Amid mounds of garbage, 50-year-old Supriyati sorts stacks of plastic waste into several piles, occasionally wiping the sweat on her face. Supriyati is a plastic sorter at plastic recycling enterprise and has been doing this job for 10 years.

Every day she rides her motorbike a few miles from her village in East Java - Mojoagung to Trowulan. "My grandchildren are my motivation to work. I want to make a living for my family." Said Supriyati who has three grandchildren. At work, she is often cut by metals, or flaked glass. She also admits that she senses weird smells coming from the waste. It causes shortness of breath and dizziness. Every day she brings her own medicine that she purchases from the local shop to reduce her pain.

Supriyati's job might not be an ideal or desirable profession for most people, but she tries to be grateful and does everything wholeheartedly. She hopes in the future that cleanliness in her workplace can be well maintained. Other than sorting the garbage in recycling industry, Supriyati also works in the sugarcane fields. She has a dream to sell coffee from her house so she can provide more for her family.

Supriyati shares her joy and sadness with her co-workers, who have become close friends. She shares anything, including the health problem she has suffered for the past three months. Her nose can suddenly bleed for no apparent reason. She has tried to see the doctor several times and has not been able to identify the cause of her sickness. She spends 700 thousand rupiah (\$50 USD) every time she sees the doctor and buys the prescription medicine. From her earnings (around 200 thousand rupiah per week / \$15 USD), she is not able to cover the cost of the medication. In addition to the blood from her nose, Supriyati also feels the pain on her stomach. To reduce the pain and fatigue, she sometimes sleeps between the garbage mounds. She emphasizes her hope to help her mother and her grandchildren, and with a smile on her face, continues doing her job.

Long in the Roots; Plastic Recycling Industries East JavaThe Trowulan, is known for its heritage, the most-powerful kingdom in its time, Majapahit. With more than 20 archeological sites it has been shortlisted as a UNESCO World Heritage Site as the only Hindu-Buddhist archeological site in Indonesia that still exists today. In addition to its immense cultural value, the village is also home to one of Indonesia's largest electronic waste management center, where thousands of workers are operating small to medium-sized recycling enterprises.

"It was long before I was born. I think it has been since my grandparents' era they have started the collection and the processing of waste. It started with only municipal waste in this area, but now we cover waste from Java, Bali, Sumatra, Kalimantan, and even Sulawesi," says Mr. Ali Mustofa head of Temenggungan Orchard, Kejagan Village, Trowulan, when asked about how long the factory has been processing waste. The amount of plastic and rubber waste sent to Trowulan reaches 150,000 kilograms every day.

"The majority of people here ask for bank loan to start their own recycling business. We have been doing this since long ago." Back then, as mentioned by Mr. Ali Mustofa, it did not require a lot of money to invest on the sector, yet it can generate adequate profit for the owners, especially during the financial crisis in 1998, when the raw materials price dropped by 50 percent from its usual price. There are currently 34 industries handling about 2-4 tons of plastic waste and 11 larger scale industries handling several trucks worth of plastic waste sent to them every day. Out of 45 industries in Temenggungan Village, only three women are business owners.

Every day, the road entering Kejagan is filled with people from neighboring villages ready for work. Most workers are educated, with formal education. Upon completing their schooling, most young people enter the recycling industry. UNDP data shows that 85% of the people from Kejagan Village earn an income from the recycling. Although the work is profitable for business owners, it comes with a safety risk: the exposure to dangerous chemicals.

Chemical substances including flame retardants are used to manufacture plastic waste like household items and disposed of kitchen appliances, electronic or automotive parts. If not handled properly, these chemicals can cause harm to the worker recycling them. The emission of the chemicals can cause cancer, hormonal disease, and affect reproductive health systems of women, or contaminate breast milk.

Plastic waste recycling and gender roles

Women are more vulnerable to harmful chemicals in the e-waste supply chain. There are several steps on the waste recycling chain, including sorting, crushing, milling, washing, drying and packing before it is processed into microplastics – often, your role in the supply chain will depend on whether you are male or female. Data shows that 77% of plastic waste sorters in cities including Mojokerto, Banyuwangi, Jombang, Depok, Bekasi, Cianjur and Bandung, are women. To identify different types of plastic before sorting, the women smell the odors, exposing them to higher levels of to toxic chemicals.

Workers rarely wear safety masks, gloves, or boots, and have little to no awareness about the harmful chemicals they are exposed to.

Rigid gender roles have also resulted in income pay gaps. Women are paid based on how much plastic waste they can process per day. A survey conducted in seven cities in West and East Java has found that while 95% of men workers get paid more than one million rupiah per month, 89% of women workers are paid below one million rupiah (\$80 USD) per month.

UNDP together the Ministry of Industries is working on health and safety solutions for workers in Indonesia's plastic waste industry, with a particular focus on women and gender roles that drive inequality.

Source: Angeline Calista and Yenny Widjaj. <a href="https://undpindonesia.exposure.co">https://undpindonesia.exposure.co</a> Oct 30, 2017

## Passing it on



Image/ Lisa Favazzo

From opposite sides of the country and some of its poorest communities, Resa Boenard and Billy Mambrasar, both 32 years old, are doing all they can to make sure that no child in Indonesia is left behind.

Resa is from Bantar Gebang, 40 kilometres west of Jakarta and home to Indonesia's largest landfill. Eight-thousand tons of rubbish is processed here each day. Around 6000 families call it home. Gruelling days are spent picking through decaying food-scraps and glistening coloured plastic. The work is so painstaking that locals tell of the need to dose up on painkillers in dangerous quantities in order to continue. Resa's little sister, Iin, told me the hardest part about growing up in Bantar Gebang is the way people treat you. 'They think, "she's just a girl from the dump", Iin recounted. People told her she 'smelt bad' and would 'never go to university'. A lot of scavengers' children drop out of school to work on the dump.

Billy is from the Ansus, Yapen, in Papua province. Ansus is a place of remarkable beauty and struggle. It is a region rich with gold, gas and other highly valued resources. The government and foreign developers have engaged in massive resource extraction here, dating back to the period of Indonesia's second president, Suharto. But, Billy tells me, indigenous Papuans have not yet seen enough real investment in their people. Billy described his home province as one

of the poorest and least developed parts of Indonesia. Twenty-eight per cent of its people live below the poverty line and education is considered a privilege.



Billy teaching English to children in Papua at Kitong Bisa / Billy Mambrasar

Unlike most people from their communities, Billy and Resa were able to get a university education. Resa has a degree in Information Technology from the University of Gunadarma in Depok. Billy has a Bachelor of Science with a major in Engineering from the Australian National University in Canberra. Resa progressed through her education with the support of a benefactor who visited Banter Gebang as a part of zakat, the Islamic obligation for wealthy Muslims to give to the less fortunate. Billy's academic brilliance allowed him to reach the highest levels with the aid of government scholarships. He is now a candidate in the Project Management Masters program at Oxford University. Both are strong willed and thick skinned, which has been important for their individual successes, but both also have a strong sense of their obligation to now contribute to their communities.

I travelled up 42 floors of Jakarta's World Trade Centre to hear Resa speak at an event hosted by the professional woman's group from the British Chamber of Commerce Indonesia. Guests enjoyed mini-quiches from pristine white plates as they waited for Resa's presentation. The rubbish dump appeared to leak from the flat-screen televisions around the room. Standing five foot tall in front of an audience of diplomats and journalists Resa said, 'If you send your waste to Bantar Gabang, come here and help us clean it'.



Banter Gebang / Lisa Favazzo

Resa had a successful career in recycling technology. By her late twenties, she ran her own consulting business and was travelling the world. Now, she has returned home to give back to her community through a project called <u>BGBJ</u> (Bantar Gebang Biji, or seeds of Bantar Gebang). The organisation attracts volunteers and sponsors from around the world, allowing it to provide English classes, learning activities and other forms of supplementary education to the children of scavengers in Bantar Gabang. Resa encourages the children to 'dream big' and make the most of their opportunities. 'People call this place nasty, disgusting and stinky, but I say this is the best dump ever,' she states proudly.

I met Billy Mambrasa when he was the guest speaker at an event for Oxford University alumni held in Jakarta's affluent Mega Kuningan area. Billy wore a cap and a T-shirt. While he spoke with quick-wit and eloquence, his energy was tender. His purpose for being there: 'I want to tell a story about the poor kids of eastern Indonesia'. In 2009, Billy was working offshore as an engineer when he felt the pull of home; he wanted to give something back. His program, Kitong Bisa, started with just a few children at his family home. Today Billy runs 13 informal learning centres across Indonesia, operated by 152 committed volunteers. Billy told me this shows 'how committed the young Indonesian generation is to being part of change'. So far, Kitong Bisa has helped over a thousand children.

Both BGBJ and Kitong Bisa are programs designed to supplement the state education and welfare systems. Resa aims to transform the self-image of children who see themselves as somehow less worthy. 'Just because they are from the dump, doesn't mean they shouldn't be educated,' she explains. Billy wants Papuan children to learn to think critically so they are

#### **Rural Development in CIRDAP Member Countries**

able to 'solve the real problems facing their communities.' He is determined that the future generations of Papuans will be active in the development of their own communities, not simply passive observers. Both Resa and Billy believe that providing the opportunity for the children to learn English is highly important, for it gives underprivileged children access to the broader world and the opportunities they may find there.

Neither see their work as charity. They are investing in the future of their communities. As Resa said, 'children are the seeds of love, and we want them to grow into big trees.'

Lisa Favazzo (lisagrace95@gmail.com) is a journalism student from RMIT University in Melbourne. She recently returned from Indonesia where she was part of the Australian Consortium for 'In-Country' Indonesian Studies (ACICIS) journalism program.

Source: <a href="https://www.insideindonesia.org">https://www.insideindonesia.org</a> (Inside Indonesia). May 02, 2019

## Returning to life as a farmer

Conservation agriculture in Indonesia gives farmers choices other than migration



Climate change is hitting developing countries and island states, like Indonesia, the hardest. Changing weather patterns meant that Amaq no longer made enough money off of his farm to feed his family. He thought migration was his only option.

Munggah aq Amaq Genap, a 58-year-old farmer from Sekaroh Village in Indonesia, looks serious but content. He has the build of someone who has been a farmer for all his life. Amaq planted corn once a year. If there was rain, his harvest was good. If there wasn't, his harvest was poor. But with the changes in climate, he was finding that he could hardly grow enough maize to meet his family's needs.

In the last years, climate change has been affecting when the rains come and how much there is. Temperature norms are changing, sea levels are rising and extreme weather events are becoming more frequent. Indonesia is already prone to events like tsunamis, earthquakes, floods and landslides. As climate change intensifies, so does the frequency and magnitude of these events. Developing countries and island states like Indonesia are the hardest hit.

With increasingly unpredictable rains and more than seven dry months a year in Indonesia, farmers have been struggling to make ends meet. For Amaq, the situation was becoming too difficult. He just couldn't make enough money off of his farm.

Like many people who feel that they have no other choice, Amaq decided to migrate to earn a better income and try to improve his family's life. He made the risky and bold decision to go to Malaysia and work in construction.

"Being a migrant worker far away from home and loved ones is a kind of deprivation. I did not enjoy it at all," he says.

#### **Rural Development in CIRDAP Member Countries**



Climate-smart agriculture helps farmers become more resilient to the effects of climate change on agriculture while also helping to reduce agriculture's impact, for example greenhouse gas emissions, on the environment. ©FAO/ Zaenudin Mansyur

More than 75 percent of the world's poor and food insecure live in rural areas and depend on agriculture and natural resources for their livelihoods. A large share of them become migrants.

By helping farmers find better techniques that increase their resilience to climate change and improve their incomes, FAO is strengthening rural communities and giving people the option to stay home.

These new techniques work to off-set the effects of climate change on agriculture while also helping to reduce agriculture's impact, like greenhouse gas emissions, on the environment. FAO calls this Climate-Smart Agriculture (CSA).

After some time in Malaysia, Amaq decided to come back to his village and rekindle his passion for farming. Driven to make his farm a success, he borrowed money from the bank, using his land as collateral. Amaq was still cultivating his fields in a traditional manner when he came into contact with FAO's conservation agriculture techniques. He decided to try this new approach.

Conservation agriculture (CA) is part of the broader CSA approach. It teaches farmers to disturb the soil as little as possible, keep the soil covered, and mix and rotate crops. These methods produce high crop yields while reducing production costs, maintaining the soil fertility and conserving water. It is a way to achieve sustainable agriculture and improve livelihoods. CA techniques have been introduced to provinces in Indonesia since late 2013 with very good results, but it requires a shift in thinking.

"At first, I had doubts about the CA approach. How can this work: not tilling the soil and the farm dirty with crop residues?" he wondered.

However, Amaq began applying CA techniques for the 2015-2016 planting season. Instead of tilling the soil, he used crop residues as mulch and applied organic fertilizers to provide nutrients for the soil. He also planted chili peppers among maize that had been harvested earlier – a method to minimize soil erosion and to increase soil fertility.

Farmers practicing climate-smart agriculture are seeing a significant increase in yields as well as incomes. These improvements help to give rural people options other than migration. ©FAO/Zaenudin Mansyur

There was a prolonged drought during this season and the threat of crop failure was real. To his surprise, despite crops failing in surrounding areas, the maize on his farm kept growing. These results encouraged him to use CA techniques for the following season too. He expanded his land to 1 hectare and planted a different type of maize seed. His harvest averaged 7.6 tons per hectare, earning him US\$ 2,076.



"This is a very extraordinary yield, something that I have never experienced before. With the money, I was able to pay off the amount (US\$ 358) I borrowed from the bank, putting aside some money as savings for my children's education. I also bought goats; I have 12 goats now," he says proudly.

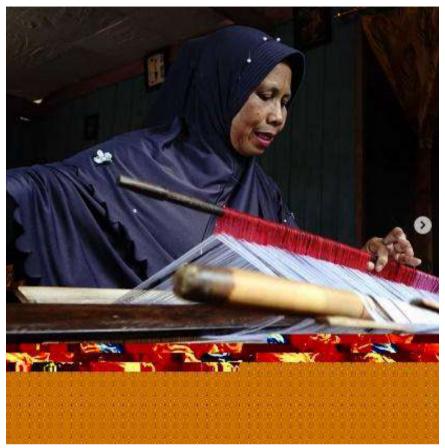
"Compared to my income as a construction worker in Malaysia, I am now better off as a farmer thanks to CA techniques," he concludes.

Amaq is a member of the Moga Sukses Farmer Group of Sekaroh Village. The group of 35 members started practicing CA on demonstration plots in 2014. Amaq and his fellow farmers were among the first to practice CA on their own farms in the West Nusa Tenggara Province.

Now, in the East Nusa Tenggara and West Nusa Tenggara provinces, CA practices have been expanded to more than 650 farmer groups with more than 12 500 members. These farmers are seeing a significant increase in maize yields as well as earning additional income from beans, chili peppers and other inter-crops. The Indonesian government plans to scale up the technique as part of the CSA intervention and mainstream it into agricultural practices across the country to support the national food security programme.

Source: <a href="http://www.fao.org/fao-stories/article/en/c/1116663/">http://www.fao.org/fao-stories/article/en/c/1116663/</a>

## Weaving the future through textiles



WOMEN Reviving Dying Tradition in Indonesia

Renowned for diving, the islands of Wakatobi may be a speck on Indonesia's map. But in the small village of Pajam, Kaledupa, the women here are a powerhouse of economic enterprise. Culturally in Kaledupa, women are the financial figurehead their households. And these women are bringing in a new source of income through preserving traditional weaving. Using the traditional hand-woven textile, women create a variety of products, from scarves to keychains that can be sold up to IDR 500,000 – 1 million (\$35-\$100 USD) which goes back into the community. By diversifying their income, women do not only have rely on fishing as their primary source.

But traditional hand weaving was not always possible.

"There was a time where we had to stop our tradition, [because] we couldn't access the materials needed to continue it. But now we can.", says 45 year-old Ratna as she effortlessly weaves a tenun (traditional handwoven fabric) that will later become a scarf to be sold at the market or tourist shops.

The Impact of Gef Grant

Ratna is referring to the impact of UNDP Indonesia's Sixth Operational Phase of the Global Environment Facility – Small Grant Programme in Indonesia or 6th GEF-SGP Project in Indonesia in her community.

The GEF-SGP Project in Indonesia supports community-based initiatives that enhances and maintains social, economic and ecological resilience of forested and coastal landscapes in Southeast Sulawesi, East Nusa Tenggara, and Bali which benefits local sustainable development.

This initiative focuses on supporting women entrepreneurship while simultaneously preserving local weaving tradition. In partnership with PKK (Pembinaan Kesejahteraan Keluarga) and local organization Forkani, a 3-month entrepreneurship hub was created to teach women like Ratna how to plant, harvest and dye cotton for traditional weaving.

Thanks to the grant, the women can now earn additional income to support their daily lives. But it's not just about the extra money. Having locally sourced cotton ensures the materials will readily available and economically feasible. The nearest source of cotton used to be in the main island of Sulawesi - a two hour boat ride away. This proved to be economically nonviable due to the rising cost in transportation and cotton.

For the women of Kaledupa, reviving the dying tradition of weaving have given them renewed sense of pride and purpose to safeguard their tradition. Hidden in a forest area lies a cotton plantation, filled with cotton plants ripe for picking. Standing under the scorching sun, one woman in pink headscarve explains, "we had the men clear the land, and later we planted the cotton seedlings and then we wait 6 months to harvest it. It usually takes 8 women to harvest the plantation".

Hidden in a forest area lies a cotton plantation, filled with cotton plants ripe for picking. Standing under the scorching sun, one woman in pink headscarve explains, "we had the men clear the land, and later we planted the cotton seedlings and then we wait 6 months to harvest it. It usually takes 8 women to harvest the plantation".

In the lower level of the house, sits two groups of women – one huddled together preparing the cotton and another adding the finishing touches on their pieces. "I take pride in creating something that is celebrated and used in times of celebration, like a wedding. Something that is appreciated both by locals and tourists alike" one of the other women in the group mentioned.

Through the project the community has been able to source the material needed to start weaving again and revive the local wisdom. "It is important for kids to learn [weaving], to maintain the local traditions. My parents taught me how to weave and now I pass it on to the next generation" says Ratna.

Source: https://undpindonesia. August 2, 2019

## Women spearheading sustainable production of Blue Swimming Crab in Indonesia



BSC fisher boat on Pegagan Village beach – Des Syafrizal/UNDP Indonesia

The Indonesian coastal village of Pegagasan offers a picturesque view found in many tourist postcards. Every morning, hundreds of fishermen tether their traditional wooden boats on the shore, as the sun emerges from the horizon, with the morning rays floating over the vast expanse of clear blue waters.

But Pegagasan village offers more than just a pretty view. Lying on the southern coast of Madura island, the village is home to some of the largest Blue Swimming Crab cultivating communities. As the day dawns, hundreds of fishermen bring their catch to cooking stations owned by crab collectors, locally known as 'suppliers'.

At these cooking stations, BSC are steamed and distributed to several mini plants spread throughout the island.



Many of these cooking stations are managed by women like Adaifah.

Fresh crab must be cooked immediately to maintain quality. – Des Syafrizal/UNDP Indonesia

The 41-year old Mother of three is in charge of inspecting and sorting out the crabs for further processing. The data includes the names of fishers and the total number of their catch. She also records the types of fishing gear used to catch the crabs. She reports all data to the mini plant owner. This reporting is a central part of a system called 'Control Documentation' initiated by <u>Asosiasi Pengusaha Rajungan Indonesia</u> (Indonesian Blue Swimming Crab Association (APRI), with support from UNDP.

This system was developed to ensure traceability of BSC meat from Indonesia. Almost 90% of blue swimming crabs from Indonesia is exported -- mainly to the U.S. market.

To maintain the sustainable production of BSC she only accepts those of a specific size and condition. "I do not accept small-sized crabs less than 10cm in length, or female crabs that are bearing eggs.," she said adding "In the past, many fishermen were angry because I did not receive small crabs. I felt sorry for them. However, slowly, they accepted the rules ", she explained. "Now most fishermen understand the rules, though sometimes they still bring one or two small-sized crabs, but the numbers are far less than before."

In 2016, the Indonesian Ministry of Maritime Affairs and Fisheries established the minimum size of blue swimming crabs that are permitted for capture. According to the regulation, only crabs with a carapace measure of at least 10 centimetres in width, are allowed to be caught. Fishermen are also barred from catching egg-bearing crabs. This regulation was issued to maintain the sustainability of crab stocks in their natural habitat.



Blue Swimming Crab fisher - Des Syafrizal/UNDP Indonesia

According to Adaifah, up to 40 crab fishermen come to sell BSC to the cooking station every day. In the peak of the Rajungan catching season—between March and July—she can work all day long from 8 am to 3 pm, due to the abundance of the catch. "During the peak season,



I can accept up to 80 kilograms of crabs daily", she adds.

For Adaifah, ensuring that the carried process is out sustainably has become the of her core daily work.Adaifah has managed the Blue Swimming Crab Cooking station in Pegagan Village, Madura, since 2001 -Des Syafrizal/UNDP Indonesia

"Nature does provide us resources, but it depends on how wisely we use it," she said. "Hopefully, my work will benefit the fishermen as well as my family. I am sure the blue swimming crab industry can continue to provide a livelihood for many people."

Adaifah is one among many women in the Indonesian BSC fisheries supply chain who are champions in achieving sustainable national fisheries industry targets.



Blue Swimming Crab or Portunus Pelagicus, is the third highest exported seafood commodity in Indonesia. – Des Syafrizal/UNDP Indonesia

"Blue swimming crab fishery involves various stakeholders in its supply chain, including at least 90,000 fishermen and 185,000 women who are involved in crab cooking stations and miniplants,"said Aik Wulandari of APRI. "The success of the industry's effort to continuously improve sustainability of these fisheries through <u>Fisheries Improvement Project</u> (FIP) lies in the enormous contribution of our partners like Adaifa"

"Adaifah's story provides a clear example of the importance of women's role in fisheries and recognises the need to address gender issues in fisheries. To effectively improve sustainability of fisheries, gender equality must be continually promoted in the fisheries supply chain." said Sri Yanti Director of Marine Affairs and Fisheries at the BAPPENAS (Ministry of National Development Planning). Her ministry, alongside UNDP, through GEF's Global Marine Commodities project provides support to the Indonesian Blue Swimming Crab Association (APRI) to accelerate improvements in the crab fisheries of Indonesia.

"Strengthening the role of women and promoting gender equality in the fisheries sector are aligned with the policy direction of Indonesia's 2020-2024 mid-term national developmentplanning," adds Sri Yanti Story by Dewi Rianty and Jensi Sartin, edited by Ranjit jose and Tomi Soetjipto Photograph by Des Syafrizal

Source: https://bit.ly/2o7vBFyz

## **IR IRAN**

## A Success Story about Investing in Iran`

Nestle now has a 93% share in Iran's market for baby cereal and a 49% share for infant formula; it has created 900 direct and 2,000 indirect jobs; and exports from Iran to all Middle Eastern countries, except Saudi Arabia



Nestle is aspiring to become one of the 10 biggest food and nutrition companies in Iran by 2028.....

Global businesses started to reconsider their stance regarding the Iranian economy after Tehran signed the Joint Comprehensive Plan of Action with world powers on July 2015 and implemented it in January 2016.

Since then, foreign delegations have explored opportunities in the country's largely untapped economy.

However, companies that had set up base earlier are now consolidating their foothold in Iran. One such company is Nestle that has footprints worldwide.

After 15 years of activity in Iran, the world's largest food company recently decided to share its experiences of working in the country with the media.

"When it comes to Iran, this country is, I would say, a special market for us with considerable opportunities. We have here an 80 million population who have a lot of interest in premium-quality food. Iranians look for variety, which is what we can deliver," Nestle's Qazvin Factory Manager Faisal Haroon told Financial Tribune.

#### \$150m of Investments by 2018

Given the prevalent misconceptions in the global arena regarding the Iranian economy and its business environment, it is upon local officials and media to reflect the ground realities in Iran.

But the success stories of foreign businesses in Iran, which had established offices and production units before the sanctions were imposed, can serve as exemplars for potential investors who have their doubts regarding the Iranian market.

Nestle started production in Iran in 2001 and has two factories in the country: one in Qazvin where seven kinds of infant formula, eight kinds of baby cereal and Nesquick are manufactured and Nescafe is packaged, and another in the northern Mazandaran Province's Polur where mineral water is produced. The company's central office is in Tehran.

"By the end of 2018, Nestle will have invested around \$150 million in different projects it has and will be carrying out in Iran, some \$100 million of which have already gone into the Qazvin factory. Within the next one and a half years, we will be investing \$15 million in an extension producing cooking aids and Nescafe. Another \$15 million are going to be spent on our upgrading and renovation programs to maintain the standards of this factory over the next two years," the Nestle manager said.

The Qazvin factory, according to Haroon, has the same standards and technology as any other Nestle factory around the world.

#### Figures of Success

A look at sales figures by Nestle's Qazvin factory officials reveals that their investments have paid back quite considerably.

Nestle Iran has, over the years, engaged in activities ranging from sustainable production, social responsibility, environment preservation and shared value creation.

Despite handicaps in the way of production, which are more or less experienced across the world, the scope of success in such activities is high in the Iranian economic environment.

"In 2016, our sales amounted to \$150 million in the Iranian market, but that's not where it ends. We are not producing for Iranians only but we export from Iran to all Middle Eastern countries, excluding Saudi Arabia. Our exports stood at between 4,000 and 5,000 tons of products worth \$25 million last year," he said.

"What is very important for us is local sourcing. We have tried to supply our raw materials from domestic sources over the years. In 2015 and 2016, we spent \$20 million and \$30 million on locally sourced raw materials respectively and our mission is to go for \$40 million by 2020."

#### Sustainable Production

Over the past two to three years, Haroon said, the Qazvin factory has been working on a project called RISE. Before this project kicked off, the factory supplied its milk demand through imports from New Zealand.

"In the RISE project, we have partnered with six milk farms with about 35,000 cows. Milk, in these farms, is produced based on the standards and qualities Nestle demands: that is with low levels of aflatoxins and antibiotics," he said.

"About 600 tons of milk are produced in these farms on a daily basis, 75 tons of which are purchased by the Nestle factory. The rest is bought by other firms, our rival companies included, that need high-quality milk. This is one example of how we create shared value in the business."

The factory manager added that the RISE project is being carried out with the cooperation of Switzerland's University of Bern and is aimed at producing not only premium quality but sustainable milk.

#### Sizable Market Share

Alireza Sarabchi, the head of communications and marketing services at Nestle's Qazvin factory, told us that Nestle Iran has created 900 direct and 2,000 indirect jobs.

"Nestle is a strong number one shareholder of the Iranian market in most of the products it manufactures. It has a 93% share in the market for baby cereal and a 49% share in infant formula for example," he said.

Sarabchi noted that the company is aspiring to become one of the 10 biggest food and nutrition companies in Iran by 2028.

"We, as well as other companies, which depended wholly or partly on imports for production, incurred losses during the sanctions. Yet, I believe, the sanctions transformed us into stronger producers. We never laid off workers over the sanctions and it was mainly during that period when we tilted toward local sourcing," he said.

#### **Promising Prospects**

Foreign companies in Iran can dream big and fulfill them, as have other businesses in the country.

Hassan Rouhani has, since his first presidential term and especially after the nuclear agreement, taken measures to facilitate foreign direct investments in Iran.

Ahmad Jamali, director general of the Foreign Investment Office with the Organization for Investment and Economic and Technical Assistance of Iran, said that up until now, FDI in Iran has amounted to around \$8 billion, Exim News reported on Dec. 16.

He added that over the last two years, foreign countries have shown much interest in investing in Iran.

#### MoU With Iranian Nutrition Association

To expand its humanitarian activities in the country, Nestle Iran and the Iranian Nutrition Association signed a memorandum of understanding in November.

Based on the MoU, the two sides agreed to cooperate in promoting the culture for healthy nutrition, providing assistance in technological matters, transferring know-how in the field of nutrition and eliminating malnutrition in deprived regions of Iran.

Jalaleddin Mirzaye Razzaz, the head of the association, said 75-80% of patients in Iranian hospitals are suffering from non-communicable diseases like diabetes, hypertension and obesity, the cause of which is unhealthy lifestyle and bad nutrition.

"If nutrition is put right, we can lower NCD disease rates. Together with Nestle, we will be working to arrive at this goal," he said.

Source: https://bit.ly/2mw8AMn

## **Opportunities in Iran's Consumer Goods Market**

Business Development Manager at Menas Associates



Opportunities in Iran's Consumer Goods Market

<u>....</u>

Consistently low oil prices and government plans to diversify revenue streams have turned investors toward other sectors of the Iranian economy. One of those to watch in the year ahead will be the consumer goods market.

Total value of trade in this area has risen sharply since the nuclear deal was reached, but nowhere near to that of its potential. However, it is important to note that even before the deal's "Implementation Day" on Jan. 16, 2016, Iran's consumer goods market was relatively well developed, supported by a strong retail and distribution infrastructure.

Recent developments will, therefore, now benefit from these pre-existing foundations, allowing for much further and faster growth in the sector.

#### **Building on Pre-Existing Foundations**

Iran's modern shopping spaces, for instance, were reinvented in the aftermath of the Iraq-imposed 1980-88 war under the late Ayatollah Akbar Rafsanjani's urbanization plans.

High streets and shopping centers were at that time expanded to boost supply of goods while curtailing the costs of distribution for controlling inflation. These spaces are now commonly used among Iran's population of over 80 million, many of whom fall into the urban middle-class bracket.

McKinsey Global Institute reported that in proportionate terms, Iran boasts a "consuming class" double in size to that of China and Brazil, with more than half of Iranian households receiving income in excess of \$20,000, much of which is disposable, especially in Tehran where per capita consumer spending reached \$4,700 in 2016, according to Planet Retail.

#### Luxury Goods

Luxury goods market would be well served by the abundance of urban shopping spaces and middle-class consumers; indeed anyone who has visited the major cities will be familiar with the taste for high-end designer goods.

From the beauty market-which Euromonitor International estimated to be worth \$3.68 billion in 2015-to luxury cars, where even during the period of sanctions Maserati and Porsche built corporate offices in Tehran and total imports of all cars almost doubled-from \$830 million in 2011 to \$1.6 billion in 2013, despite the extravagant premiums on importing.

Coffee is another consumer good that could benefit from this demographic. From a very low base, coffee consumption is growing rapidly in what is still a traditionally tea-devoted nation.

Bourse & Bazaar noted that the total value of the market is expected to reach \$200 million by 2020; potential investors should note that only a tenth of the coffee currently being consumed is freshly ground, while Nestle is the only brand with a significant share in today's Iranian coffee market (circa 20%).

#### Distribution

The consumer goods market in Iran has also long thrived off the internal distribution networks, which again were developed in previous generations. Oil price rises in the 1970s enabled major investment towards modernizing Iran's national transport system; Tehran became a key transport hub, with several terminals set up around the capital connecting it to most major cities. These routes were later reinforced during the Iran-Iraq war for food and military transportation, and now form the spine of Iran's internal distribution network.

In turn, this has aided the dramatic rise in e-commerce platforms such as Digikala, Iran's own online shopping site and the biggest of its kind in the Middle East with a total value of \$150 million, employing 760 people, and boasting a same-day delivery service in Tehran.

Digikala and its competitors have changed the way goods are delivered and they will be helped even further by plans to boost telecommunications networks in Iran, as seen last year when the government issued new 3G and 4G licenses to more mobile broadband companies.

#### Strategic Location

Iran's strategic location has also been a traditional enabler for trade, as it shares land borders with seven countries, bridging South Asia with the Middle East and Turkey, and connecting the Caspian region to the Persian Gulf.

Coupled again with recent developments--such as the warming of ties with Turkmenistan, Oman and Kuwait-this provides even further encouragement for the consumer goods market.

It was for this reason that MMAS Eurasia Logistics, a German-based joint venture, announced earlier this month that it would provide international cargo transport services through Iran; and also why the Iranian port of Chabahar is now the focal point of a trilateral transit agreement with India and Afghanistan.It is, therefore, a good time for international companies to manufacture consumer goods in Iran for export across the region, which is helped by the fact that full foreign company ownership is permitted in Iranian law.

Such moves would inevitably help address unemployment in the country-MGI's 2016 Iran report predicted that the fast-moving consumer goods sector alone would create an additional 850,000 jobs by 2035. This chimes well with the Leader Ayatollah Seyyed Ali Khamenei's New Year message that specifically called for greater employment and support for domestic production. But the latter must also be heeded by international companies when entering Iran, although more as an opportunity than a hindrance.

Indeed, domestic brands dominate the consumer goods market and there is a desire to strengthen them further as part of the "Resistance Economy"—the concept aimed at promoting domestic production and reducing oil dependency, but foreign firms still have a role to play. The local consumer goods market is fragmented and not fully modernized, particularly in supply chain management and R&D, so there remains a demand for international partners capable of transferring the relevant skills and technology.

For instance, Arj Company, a famous Iranian home appliances manufacturer, was forced to close last year due to inefficiencies and mismanagement, but efforts have been made, with the support of the Ministry of Industries, Mining and Trade, to attract investment from European firms to help turn things around. So while international companies should be mindful of Iran's economic priorities, they can align with them and add value.

Ultimately, Iran's consumer goods market has for some while benefited from the country's shopping spaces, distribution networks and geographic location. Now with a sizable consuming class, e-commerce platforms and improving regional ties, it can truly flourish.

Investors should also note that success in this sector could also pave the way for development in the more capital intensive area of the economy. In any case, the consumer goods market should, like tourism, become an Iranian economic success story over the coming years, helping to create jobs and wealth, while offering considerable opportunities, both old and new.

Source: <a href="https://bit.ly/2mtpawe">https://bit.ly/2mtpawe</a>

## Seoul Keen to Share Smart City Solutions with Tech-Savvy Iran

Seoul pursues the policy of "urban diplomacy" and is ready to engage with other cities to share its technological know-how and achievements in the area of urban management

The Seoul Metropolitan Government, widely acclaimed as a success story in implementing e-governance and now a leading force behind promoting the concept of smart city, is eager to join hands with other global players to embrace the technologies of the Fourth Industrial Revolution for the betterment of the global community.

This offers a precious opportunity for Iranian megacities desirous of utilizing ICT solutions to improve the standards of living for their citizens.

Iranian authorities, spearheaded by the Information and Communications Technology Ministry, Tehran Municipality and Vice Presidential Office for Science and Technology, have made significant efforts to employ ICT for delivering government services.

They are now looking into the tremendous potential presented by technologies associated with the latest industrial revolution, such as 5G Internet networks, big data analysis, blockchain, Artificial Intelligence and Internet of Things (IoT) for the enhancement of administrative efficiency and citizens' access to public services.

Seoul, as the bustling capital of a country that has experienced exponential, innovation-driven, broad-based and sustainable economic growth in recent decades on the back of exploiting cutting-edge technological solutions, has embarked on a full-scale mission to position itself as a frontrunner in the global pursuit of a better future for humanity through harnessing the ever-evolving technological landscape.

#### Seoul's Aspiration

In an interview with Financial Tribune, Seoul's Mayor Park Won-soon said, "Seoul is aspiring to become a smart city. We believe that a smart city is very important for increasing the convenience of citizens and raising urban competitiveness, so we are making a lot of efforts to become a smart city."

A smart city deploys IoT sensors to accumulate data from citizens, devices and assets that are processed and analyzed to use resources efficiently and manage transportation systems, power plants, water supply and waste management networks, information systems, schools, libraries, hospitals and other community services.

The concept integrates ICT and various types of physical devices connected to the IoT network to optimize the effectiveness of city operations and services.

Mayor Park stressed the launch of the initiative to pave the way for the smoother movement of people and more efficient distribution of public facilities and services.

If city officials worldwide are looking for a treasure trove of creative ideas, they could find no better place than Seoul, where an amalgamation of tradition, leading-edge innovations and environmentally-conscious and people-oriented initiatives offers a truly dazzling display

"In terms of transportation, we are utilizing technologies such as big data and IoT. We identify the traffic flow and provide this information to citizens to increase their convenience. Also, in terms of population, we have analyzed the call data of KT Corporation [formerly Korea Telecom] and identified the actual number of [floating] population [in a given area of the city at a particular time] and we are formulating many policies based on this big data," he said.

Big data refers to extremely large data sets that may be analyzed computationally to reveal patterns and trends, especially those related to human behavior and interactions to help the authorities devise well-informed policies and make more efficient decisions.

#### **TOPIS Center**

Park cited the example of the Transport Operation & Information Service Center in Seoul, through which city officials can monitor in real time the traffic flow and provide this information to citizens, apart from formulating better strategies.

As explained on its website, TOPIS is a general transport control center responsible for operating Seoul's overall traffic. It does this by collecting traffic information from various systems and institutions such as the Transport Card System and Seoul Metropolitan Police Agency.

The system is designed to clear heavy traffic and avoid sudden traffic issues by collecting information on bus operations, the number of people using public transport, traffic density and speeds, incidental situations such as traffic accidents and demonstrations and the status of expressways, and establishing scientific public transit policies through the analysis of this integrated traffic information.

The mayor also pointed to the Smart City Platform, a state-of-the-art display mounted on the wall of his office, and said, "I can see and monitor and give feedback on everything that is happening in the city in real time and also take the right policy decisions based on that."

#### Urban Diplomacy

Park said Seoul pursues the policy of "urban diplomacy" and is ready to engage with other cities to share its technological know-how and achievements in the area of urban management.

"We have currently 70 sister cities and friendship cities in the world. Most of them are capital

cities of countries. Through these partnerships, we are increasing and promoting economic, societal and cultural partnerships with citizens around the world. And Seoul is sharing and

exchanging its development expertise and experiences with cities worldwide."

He said the Seoul Metropolitan Government believes that it needs to cooperate with other

cities regarding the concept of smart city, so it launched an organization called WeGo or

World Smart Sustainable Cities Organization.

"Currently, 171 city members and corporate members are registered in WeGo and we have a

general assembly that convenes every three years and Seoul is the chair city of WeGo," he

said.

The World Smart Sustainable Cities Organization, established in 2010, is an international

association of city and other local governments, smart tech solution providers and national

and regional institutions committed to the transformation of cities into smart sustainable

cities, according to its website.

WeGo serves as an international platform with a vision to create "Smart Sustainable Cities

for All"; in other words, these innovative cities leverage digital technology and connectivity

to improve the quality of life, efficiency of urban operations and services, and the economic prosperity of all citizens.

Master Plan

Another case in point is a major drive launched by Seoul to move from the world's best e-

government to a much-coveted smart city.

The local government earlier this year unveiled the big data-based Smart City Master Plan in

several categories, including IoT-based Shared Parking System, AI Taxi and intelligent

surveillance cameras, according to the website of the Seoul Metropolitan Government.

Under the scheme, Seoul will invest 1.4 trillion won (\$1.19 billion) to introduce innovation in

the daily lives of citizens and plans to install 50,000 IoT sensors throughout the city to amass

diverse urban life data.

The list of remarkable technological endeavors made by the Seoul Metropolitan Government

is long and if city officials worldwide are looking for a treasure trove of creative ideas, they

could find no better place than Seoul, where an amalgamation of tradition, leading-edge

innovations and environmentally-conscious and people-oriented initiatives offers a truly

dazzling display.

Source: https://bit.ly/2mwcfK7

203

## **LAO PDR**

## Creative Lao woman is proud winner of Outstanding Asean Women Entrepreneurs Award

Mrs Dalyvanh Sitpraxay was one of nine Lao businesswomen who received the Outstanding Asean Women Entrepreneurs Award (AWEN) 2018 in Bangkok, Thailand, recently. She was nominated for the award by the Lao Business Women's Association in recognition of her two products - biological fertiliser and organic rice. She said she was very happy and proud to have won the award because it was honourable, important and meaningful for herself, Lao women nationwide, and her country.



The award ceremony took place at the Department of Social Development and Welfare in Bangkok on May 10, where almost 100 nominated businesswomen from Asean countries including Laos and Mrs Dalyvanh were presented with a trophy and certificate. All of the awardees were very happy and proud to be on this important regional stage. They particularly valued the ceremony because it honoured women's empowerment in business and strengthened networks.

Mrs Dalyvanh said "At the event I met many businesswomen from other Asean countries. We made friends, discussed our experience in business operations and introduced ourselves, our business and products to each other. I enjoyed it very much." *Mrs Dalyvanh with her trophy*.

"It's a very special and important and valuable stage and title for all Asean women particularly Lao women because it promotes Laos and its women's qualifications, abilities and talents to people from other Asean countries and around the world. Awardees from many countries asked me about Laos because they didn't know much about our country. I used the occasion to promote our country and I'm very happy about it."

Mrs Dalyvanh is the President/CEO of Phool-NgeunTrading Export-Import Sole, Ltd. in Vientiane. Her company makes a biological fertiliser and grows organic rice. Receiving the title doesn't necessarily mean that all the awardees are successful in their business but it honours their vision, effort and diligence in working towards success. Mrs Dalyvanh said she was one of the awardees who were not yet successful in their business, because her products are still new on the market. But she has a strong vision, and has worked hard to invent her own formulas and to make high quality products. She has been in business for a long time and has tried her hand at various fields including handicrafts and agricultural products.

She started out in 1998 by opening a store selling handicrafts and expanded her business in 2003 when she began to make her own biological fertiliser.

When she was satisfied with the formula she had created, she firstly started to test the fertiliser on her own rice field. She found that it worked well and she got good results from the rice crop.

She continued to use it for some time to make sure it was really effective before further improving the mix of ingredients and then going public with it. She said her interest in agricultural products, nature and land protection inspired her to make the fertiliser, while the importance of healthcare also encouraged her to grow clean and organic rice which she felt sure would be a success with consumers. "I decided to make the fertiliser because I was concerned about how the soil and the environment was being damaged by the daily use of chemical fertiliser. I wanted to contribute to the protection of the soil and the environment. I also wanted people to be able to eat clean and organic rice and other foods. So I worked on making products that were friendly to nature and the environment as well as being healthy."

"I would like the land to remain uncontaminated for as long as possible, so I wanted to make a biological fertiliser. My product's logo is "Golden Champa" and it's friendly for users, farmers, gardens and the land. This fertiliser is an important food source for land; it enables the soil to stay naturally healthy and maintain its nutritional make-up for a long time. It ensures that soil stays healthy, and can restore essential nutrients to soil that has been degraded by chemicals."

"My contribution on a world scale is small, but I felt I must do something to help protect nature, the environment and the soil. Fortunately, my passion has become reality and I'm very happy about it."

"In addition, my vision to protect nature, environment and the land by using biological fertiliser is in line with the vision of our government and the world. So it's very important and meaningful for me. My fertiliser can be used in the cultivation of rice and all crops, and

produces good yields. Many sectors and people agree with my ideas and have congratulated me on my vision and products. I would like to ask everyone to realise the importance of nature and environmental protection and to work together on this matter. I also would like to ask agriculturists and farmers to use my fertiliser and everyone to eat my clean or organic rice."

Mrs Dalyvanh is an active lady who sets a good example to others, particularly young women, with her diligence and patience in working in many fields and taking on many tasks. She has certainly achieved a great deal so far. Besides being the director of Phool-Ngeun Trading Export-Import Sole, Ltd., she is a freelance writer and a director of the Dokketh Printing

Press.

She was born on January 26, 1959, in Nongbone village, Xaysettha district, Vientiane. She graduated with a Master's Degree in Literature from the State University of Varonesh, Russia, in 1983.

From 1983-90, she worked at the National Literature Research Institute, as a journalist and an editor of Vannasinh Magazine (a monthly publication on Lao literature), the National Radio and the Fine Arts Department of the Ministry of Information and Culture (as it was named at that

She loves writing and has written stories and poems since she was young. She has had many of her short stories published in newspapers and magazines.

Mrs Dalyvanh was one of two Lao winners of the Mekong River Literature Award in 2017. She won in the short story category with a piece titled "Paynamhaphor" or "Looking For Father".

The Asean Women Entrepreneurs Award is an initiative of women's organisations in the 10 Asean countries to create private sector networks by the Asean Committee on Women. The group established the award to honour outstanding entrepreneurs who champion fair, gender-sensitive labour practices for women and have made an impact in society through their commitment, vision, and leadership. According to the Lao Business Women's Association, the first eight outstanding Lao women entrepreneurs received the AWEN award in 2016 and three women received the award in 2017, who were joined by this year's nine awardees including Mrs Dalyvanh.

Phool-NgeunTrading Export-Import Sole, Ltd. produces biological fertiliser and runs an organic farm managed by Mrs Dalyvanh, "a woman with a million hearts" who loves Laos' fertile land and wants it to be preserved. The company exhibited its products at the recent Intellectual Property Fair in Vientiane where they attracted a lot of attention and proved popular with shoppers.

The biological fertiliser, called Champa Kham or Golden Champa, and the organic rice named Phool Ngeun, are becoming increasingly popular. They are on sale at markets, minimarkets, and M-Point Mart outlets around the country. Customers interested in these products can call 020 58881666 or visit the company's Facebook page.

Source: https://bit.ly/2n8PdJH. and Vientiane Times

### Disasters beyond the headlines



All disasters do not make the evening news. In his blog post, UNDP Lao PDR's Coordination and Recovery Advisor Gerson Brandão reflects on the role of the United Nation's Central Emergency Response Fund in reminding us about disasters forgotten by the rest of the world.

We often estimate the severity of a disaster by the number of times it appears on the news. We are petrified by island-sweeping tsunamis, record-shattering earthquakes and lavacoughing volcanoes, but fail to understand the severity of devastating droughts, scorching heatwaves and ever-worsening seasonal floods, even though they often cause just as much damage to communities. Immediate shock value, as displayed on international news channels, burns an image into the back of our mind. The lack of audiovisual, global coverage turns disasters in regions that rarely break international news thresholds into non-issues, forcing communities to resort to their own facilities in an attempt to recover.

Over the past few months, natural disasters have been reported all over the globe. From the islands of the Caribbean to Africa's Sahel region and the Indonesian archipelago, people have experienced the devastating effects of climate change.

Lao PDR was not excluded from the list of countries ravaged by disasters this year. During July and August, two tropical storms induced heavy rains and major floods, hitting all of the country's 18 provinces. Although seasonal floods are nothing new to the landlocked nation, this year's floods were worse than in the past 20 years, affecting around 10 percent of the country's 6.5 million people. Blind spots and their impact on communities

The destruction caused by these floods, particularly to the country's agriculture, infrastructure and the livelihoods of its people, didn't capture the attention of international

news outlets. Even disaster sites with global coverage don't consistently include mention of the recent disaster in July-August this year.

No audience is required for a tragedy to happen. Those in need of assistance will continue to need it, regardless of whether their misfortunes make headlines of around-the-clock news cycles.

While local communities, aided by the Government of Lao PDR and its development partners, brought together by a surge of solidarity, were efficient in meeting the most immediate needs of the flood victims, it became evident early on that local coping strategies would reach their limits and that help from outside the country would be needed.

In a world where natural disasters abound, mobilizing resources for recovery efforts is a challenging task, particularly if the disaster in question has not garnered global attention.

"Someone listens to our concerns" The United Nations Central Emergency Response Fund (CERF) is devoted to providing resources for underfunded emergencies and overlooked disaster victims around the globe – which is Lao PDR's case exactly. The country's submission to CERF was successful, leading to a pledge of USD 3.5 million for emergency response.

This grant will be used in the country's Khammouane Province to ensure that essential services remain accessible and that farmers left without harvests or employment are able to make ends meet until the next harvest.

When our team recently visited Khammouane, it quickly became evident that the impact of the floods was even felt in places where little physical damage was visible. One of the most memorable encounters we had was with Untha, a 50-year old landless farmer who was working at a rice farm that had not been flooded. Unwilling to take a moment's break from slashing her sickle through the ripe rice stalks all around her, she calmly shared her story while the season's harvest effortlessly piled up next to her.

"My husband lost his income these past months, since the farm he works at was badly flooded. Although I am happy that I am able to work during these tough times, it is tiring to be the sole provider for my family," she told us. "It is nice that someone listens to our concerns. Usually nobody bothers to see how we are doing."

#### **Beyond CERF**

While the grant will offer much-needed relief for the people of Khammouane, further support is required for the country to get back on its feet after a historically difficult year. Khammouane is just one of the eighteen provinces affected, and the USD 3.5 million grant is far from enough. The Lao PDR's Humanitarian Country Team has set the funding needs for the country-wide Disaster Response Plan at USD 42.7 million.

The world needs to hear Untha's story. CERF has a great potential to help with that. While implementing the funded interventions, we will be able to hear and relay these stories, in order for them to reach international platforms and mobilize resources for Lao PDR. So that Untha, her family and other villagers in similar situations can rely on international relief and solidarity, just like so many communities in distress around the globe.

Gerson Brandão is the Coordination and Recovery Advisor with the UNDP in Lao PDR. He started his career at the United Nations in 2006. During his extensive career he has worked in disaster and conflict situations in countries around the world, including Bangladesh, Colombia, The Democratic Republic of Congo, Mali and Sri Lanka.

Source: https://cutt.ly/cetkSli

## **Forest Supermarkets**

A source of life under threat in Southern Laos.



#### IN FOREST CONSERVATION

The smell of diesel hangs in the air as the 'iron buffalo' tractor grumbles to life, breaking the serenity of the cool morning underneath the green forest canopy and signaling to the gathered villagers it is time to set off. The shopping trip has begun. 'Shopping', or community harvesting of non-timber forest products in the dry forests of Southern Lao PDR is a natural part of life for rural communities who have been coexisting with these dry forest for hundreds of years. A young boy waits to board the 'iron buffalo' and head into the forest supermarket. lieu of buses and personal vehicles, my villagers rely on the 'iron buffalo', a multi-purpose farm machine, for transport.



Open fields of grass, sparsely dotted with dark-trunked trees characterise the dry orests of Southern Laos.

Lao PDR is a Least Developed and landlocked country in South East Asia. Foraging trips to collect, consume and sell forest products are essential for many rural communities - the total annual value of forest products (excluding timber) are an estimated \$510 million, or 9.7 per cent of the country's GDP (2010 figure). A grand sum impossible to imagine by many a villager in Laos.

In Savannakhet, the dry forests span as far as the eye can see, accounting for 1.63 million hectares of Lao PDR's largest province, and are sustained by a complex system of wetlands and waterways with headwaters as far north as China. Most of the forests are National Protect Areas.

#### WHEN THE FOREST IS PART OF THE HOUSEHOLD

For the estimated 300,000 people who coexist with the forests and rely on their natural resources, they are much more than supermarkets. The forest is like an extended part of the household. Villagers, especially the very poor, out of necessity, still live in a close relationship with the local environment, relying on the forest ecosystems for food, water and income.



Assisted by her baby boy, a woman collects rice seedlings from her paddy in view of the forest's edge.

#### STOCKING THE SHELVES

As the 'iron buffalo' slowly rumbles deeper into the forest, following a winding path through the tall wet grass and sporadically placed dark timbered trees, small groups of twos and threes quietly slip from the tractor bed and melt into the forest. Some plan to collect forest fruits and vegetables to sell at the local market, others will check on their frog and insect traps, collect wild honey and some will look for remedial herbs to treat sickness.

Indigenous mushroom species make for delicious and wholesome dinners, and folded leaves can double as a hat for sun protection.



Woven bamboo baskets showing forest vegetables like bamboo shoots and edible leaves.



Inspecting the 'shopping' - ladies sorting through the spoils of the day.



Nutritious treats – frogs and other local amphibians collected from the forest make nutritious additions to many dinner tables.



The naturally dyed cotton is spun into thread and then woven sheets of cloth by the resourceful ladies of the village.



The rich indigo color of natural dye for cotton is made from a mix of special clay, leaves and roots collected from the forest.

#### TREES IN TROUBLE

Savannakhet's climate, landscape and infrastructure development makes it one of the most suitable locations in Laos for agricultural production. The province accounts for 22 per cent of all the land area under rice production in the country. Forests are being cut down to create arable land – and this is bad news for the communities, wildlife and plants that call the forests home.



The climate of Savannakhet Province is ideal for agriculture, and much of the forest area has been cleared for rice production.



The dry forests of Southern Laos are under threat from logging and clearing of land for agriculture.

#### **CLOSED FOR BUSINESS**

When shopping trips to the forest behind the village are becoming impossible, villagers have to look for other ways to support themselves and put enough food on the table. Traditional, sustainable ways of living together with the ecosystem, taking only the amount needed and giving back where possible, are slowly but surely becoming lost - if not halted through targeted, community-lead initiatives.

The rural communities who rely on the forests are key to their preservation and keeping the forest supermarkets open for business. They know the forests and waterways intimately and can read the natural signs and cycles of its complex ecosystems. This local knowledge and expertise, as well as the cooperation and support of forest users, is essential to saving the forests.



Building on this knowledge and advocating for low impact and sustainable forest usage, UNDP is working with the Government of Lao PDR on poverty reduction and the preservation of a way of life in Savannakhet for current and future generations of rural forest communities.

Source: UNDP, https://cutt.ly/aetkLGB

## From a pig farm to an energy bank with a breath of fresh air



Vientiane, June 7 2018 - 18 months ago it was hard to draw a deep breath in Ban Phao village of Vientiane capital. A pig farm located in the village was creating more than just discomfort. An increasing number of villagers were falling ill from diseases that seemed to be caused by the pig farm's wastewater polluting the local air and ruining fertile land. "People were having difficulty breathing, which had a negative impact on their health. Even the monks from the village temple were affected", says the Deputy Head of Phao Village, Mrs. Senhamphone Paseuthsack. Local rice fields didn't yield as much as before, supposedly due to the wastewater from the pig farm polluting the soil and groundwater in the area.

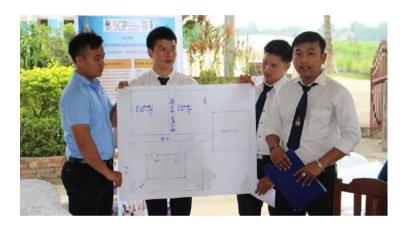
As complaints kept coming, it became clearer and clearer that the village needed help to resolve this problem. After reconciliation efforts at the local and district levels failed, the villagers eventually filed a report to the National Assembly about the issues caused by wastewater and demanded that the problem be solved. "We had to deal with this. Otherwise, I would have to close my business", Mr. Manh Phimphachanh, the owner of the pig farm remembers.



Just 18 months ago, pig farm owner Mr. Manh Pimphachanh was afraid that his business would have to be closed down.

Contacting the National Assembly was clearly the right choice. A link to the Faculty of Engineering from the National University of Laos was made. The faculty had been in search of a site to implement a project that would utilize modern technology to transform wastewater into biogas that local communities could use for cooking. As Mr. Phimphachanh's pig farm and his strained relationship with the villagers seemed to provide an ideal setting for the project, he was offered the opportunity to participate in it. As a condition, Mr. Phimphachanh would have to provide the villagers with free biogas for the 18 months of the project duration, after which he could start to earn some extra income by selling it to local communities.

The funding for the project was be provided by the Global Environment Facility's Small Grants Program (GEF SGP) that supports community projects all around the globe tackling key environmental issues. In co-operation with local engineering students, a gas pipe providing 29 nearby houses most affected by the farm's operation with access to biogas was built from the farm to the village.



In the closing ceremony of the project, students from the National University of Laos gave a presentation about the technology used to make biogas out of wastewater.

The manager of the project, Dr. Khamphone Nanthavong from the National University of Laos was as enthusiastic about the solution his project would provide as the villagers and the farm owner. "This technology is in wide use in Thailand, where it has been a great success and very popular among villagers. We even organized a study trip to Thailand for the local village chiefs," he says. Biogas provides a more affordable and environmentally friendly alternative to charcoal as a source of energy. "The monthly cost of biogas can be up to four times cheaper than the cost of charcoal", Dr. Nanthavong claims.

The 18-month project has just come to an end. Villagers are generally happy that the smell and the negative effects on their health, air and land are gone. But there are still some outcomes to be achieved. While the project's primary objective of getting rid of the stench of the farm was achieved, none of the 29 households that would have received biogas for free have allowed their houses to be connected to the pipe. "There are two reasons for this. Firstly, villagers are afraid that the smell of the biogas is as bad as that of the wastewater. Secondly,

they are frightened of getting sick from the biogas. Both concerns are of course unfounded", Dr. Nanthavong explains.



Dr. Khamphone Nanthavong and Deputy Resident Representative of UNDP LaoPDR, Balasubramaniam Murali exploring the project site.

Village deputy heads Mrs. Thongdeeyalath and Mrs. Paseuthsack remain optimistic that the villagers will change their minds with the passing of time. They are convinced that if only a few curious villagers let their houses be connected to the gas pipe, a rapid shift in the attitudes of the rest of the villagers would occur. While speaking at the closing ceremony of the project, Deputy Resident Representative of UNDP Lao PDR, Mr. Balasubramaniam Murali, said that UNDP, GEF SGP's implementation partner, could kick off this process by organizing an educational campaign in the near future. "This has been a truly unique project involving many actors from various sectors. It would be tragic if the benefits provided by this innovative technology would be left unutilized due to simple misconceptions. That is why it is essential that we find a way to explain to the villagers why their reservations about biogas are not true", he said.

This project serves as a valuable reminder of the fact that technology does not benefit the people unless the people understand its benefits. Now that the air has been cleared from the smells, it is time to start working on clearing up myths about biogas.

Village deputy head Mrs. Thongdeeyalath (on the right) and local villagers are happy that the smells and the health problems caused by the farm are finally gone. For more information on how UNDP implements Global Environment Facility's Small Grants Program in Lao PDR,

http://www.la.undp.org, June 6, 2018

# Going closer, probing deeper: My transformative journey to a remote community in Lao PDR



Solar home systems could be part of the solution for providing electricity to Kobong village in rural Lao PDR. Photo: UNDP Lao PDR/Ildiko Hamos-Sohlo

How much difference would a renewable energy supply make to rural communities without access to energy and markets? Understanding the ramifications of such transformational development, as well as assessing the possibilities for rural electrification, were the objectives of my recent mission to Khammouane province.

As an employee of UNDP's Global Programme Support, dealing with high impact climate change actions, I am providing technical assistance to national project focal points and country offices, with the overall objective of ensuring high quality programme outputs.

A recurring discussion within the global team is around the level of support we can and should provide to national counterparts, and how much we should be involved in the actual design and implementation of project outputs. There is a certain dissidence on this which has not been resolved, despite efforts from all team members.

When I decided to participate in a recent site visit to a rural off-grid community in Lao PDR, I had a strategy about how UNDP would help the government to achieve their Rural Electrification Master Plan and their nationally determined contributions towards the Paris Agreement on climate change. The objective of the site visit was to assess the villagers' energy needs and the affordability of electricity for these rural communities. The technical details that built the basis for the energy solutions the team presented to local government

representatives prior to the on-site visit were provided by a consultant, who had visited the site to pre-assess possible permanent electrification solutions for the target communities.

Despite these preparations, when I arrived to this remote community after a 2-day journey by car and boat, the reality turned out to be very different to what had been described before. The UNDP mission team and government representatives had to go back to the drawing board and develop electrification solutions that best fit the communities' needs and their challenging socio-economic context.

Confronted with beginning the design process from scratch at this advanced stage of project implementation, I learned two important things: First, that responsible and meaningful development work requires me to be in the field and that I must dive deep into the reality of the communities that we want to serve. Second, that the shifting paradigms of our development work are all about trust and accountability. At the core of this is that we cannot delegate programme design to others. It's imperative to verify information ourselves. It's our responsibility to find sustainable solutions together with the affected stakeholders and government partners. Being on site, seeing the reality and deeply understanding the needs and capabilities of the people is a pre-requisite for responsible development work, no matter how long the journey takes. As a matter of fact, such a journey always takes us further than expected. But probing deeper will ensure that we provide the most sustainable solutions for development of the communities – at the same time delivering on our promise to constantly re-examine and renew our approach to development work in times of quickly changing global scenarios.

This site visit also helped me to realize that grant support is not always replaceable with 'bankable' private sector driven approaches. It also highlights where we as the UN are still irreplaceable: Which business would be able to provide sustainable solutions for subsistence farming societies that have no income, no jobs, and no cash system yet? In such a context, there are no easy solutions that fit the complex socio-economic needs of these communities – no quick, private sector driven, bankable solution can be offered.

We can proudly present a UN approach that ensures no one is left behind. A very targeted grant support will help those most in need. In the case of these rural communities I visited, solutions include subsidized solar home systems. Receiving electric power, even if small capacities, will help the villagers to familiarize themselves with electrification services that they never had before. In addition, a village development fund will be established, seed-funded by the villager payments for the solar home systems. This fund will help the communities to identify and develop new skills and roll-out new income generating activities. Proposed solutions include sustainable agricultural processing to sustain their pristine natural habitats, handcrafting for women and access to new markets.

It is imperative that our proposals are carefully designed to ensure that remote communities have the ability to absorb new electrification systems without being rushed into financial obligations they cannot meet yet. If this is done successfully, it is evident that energy access

can help to slowly transform rural societies, with dignity, towards a green and sustainable development pathway.



About the author Alexandra Soezer is a Climate Change Technical Advisor at UNDP's Nationally Determined Contribution (NDC) Support Programme.

Source: https://cutt.ly/detk0Xf

## Mystic Mountain Coffee and Home stay brews up perfect recipe for success

During Visit Laos Year 2018, Vientiane Times is publishing a series of feature articles and images inviting you to experience the authentic nature, culture, history and hospitality of Laos, Jewel of the Mekong.

Mystic Mountain Coffee and Home stay is a relatively new community-based tourism venture that is prospering by attracting many visitors to Pakxong district, Champassak province in southern Laos. In just four years the venue has established itself as a must-see for many American and European travellers to Laos and has been featured in numerous travel guidebooks, magazines, newspapers and online media talking about its amazing programmes.

Mystic Mountain Coffee and Home stay provides many interesting programmes for visitors such as taking a trip to the Laven ethnic group village and visiting a hidden waterfall in Pakxong district by old Jeep, discovering about the area's history during the Indochina War including bomb craters, as well as learning about Lao culture and coffee growing, cooking and environmental protection.

And it is also such a relaxing trip as you feel completely immersed in the lush rainforest of the Bolaven Plateau. I first planned to stay just one night and two days last week but ended up spending a delightful four days taking in the daily excursions.

We were picked up by a Jeep in Pakxong town and arrived in the evening at Mr Khamsone's house where we were served a delicious meal prepared by his wife.

Khamsone Souvannakhily is the founder and owner of Mystic Mountain Homestay.

The place has two lovely bamboo home stay lodges providing two big beds in each to cater for two or four people but visitors can also camp around his house.

Every day Khamsone briefs staff and visitors on what the programme will be.

At first light, they take visitors to a lookout for some exercise and to see the sunrise before walking back through his coffee farm for breakfast. They serve an American and European style breakfast including bread with pumpkin, eggs and of course Mystic Mountain Coffee.

After breakfast visitors are given a class in making a great cup of coffee and the history of Mystic Mountain. Mr Khamsone explains everything. The Jeep tour starts after 9am when the visitors are together. We drive down a dusty road through many villages and through some forest to visit some unknown and well-known waterfalls.

Visitors have a packed lunch to enjoy near one of the waterfalls.

On the way back we stop at interesting villages including that of the Laven ethnic group to learn about their lifestyle and culture as well as stories about the old jeeps left behind by US forces after the Indochina War along with some imported from Vietnam. In the afternoon the programme switches to trekking and we walk for a few hours to a

stunning high view. Our path takes us over old bamboo and wooden bridges crossing a small river to a local village to witness them farming their crops and coffee. We walk through fields of yellow flowers and see many tractors carrying farmers home after a long day of picking coffee beans. All the while being greeted with a smile and a friendly "Sabaidee". Mystic Mountain Coffee and Homestay is located in the middle of the coffee farm so during the day you will see workers going about their daily duties. November and December is coffee bean harvest time and visitors can join in picking the crop.

After a long day tour, foreign visitors can learn the basics of preparing famous Lao dishes such as sticky rice and papaya salad. We have a lovely dinner every evening in the open air while Mr Khamsone also fries some bananas and offers us Lao whisky. As a special memento of our trip, Khamsone presents all visitors with a bag of Mystic Mountain Coffee to take home.

Now every time I smell that rich aroma of the coffee my mind is transported back to the lush setting and warm welcome in Pakxong district.

Source: Patithin Phetmeuangphuan(Latest Update December 8, 2018)http://www.vientianetimes.org.la/sub-new/Travel/Trav Mystic 287.php

## Powering a community



The government and UNDP are working together to find solutions for provision of electricity to off-grid communities.

"If we had electricity, we could power a light bulb. Then my children could study when we arrive back from the field and it's dark already," says Ard Saimanyphong, mother of ten, villager of Kobong village in Nakai district of Khammouan province.

Kobong is too far away to be connected to the national power grid. The village lies across the Nam Theun reservoir, up a small river, without any road connection. Only one third of its 80 houses own home solar power systems. Most of these are only enough to power one lightbulb. Shop owners can afford higher capacity systems, but there is only one television set and one refrigerator in the village.

In support of the Lao government's national rural electrification targets, the United Nations Development Programme (UNDP) is looking into possible solutions for providing electricity to Kobong and its neighboring villages. The work is being done under the global NDC Support Programme, implemented by The Ministry of Energy and Mines' Institute of Renewable Energy Promotion and supported by Germany and its International Climate Initiative IKI, the European Union and the Spanish Agency for International Development Coordination.



UNDP is looking into the possibility of utilizing mini hydro plants to provide Kobong with electricity

On a recent mission to Kobong, it was determined that the communities would need more reliable and stable power sources than what solar power home systems can supply. The Ministry of Energy and Mines is now looking into whether it's possible to combine solar power with another solution. A mini hydro plant is in discussion, generating power from the natural precipitation of a small river behind the village. This way, power supply would be guaranteed regardless of the weather.

With the provision of electricity, the community health center could ensure better services for patients. "We will be able to do blood testing and properly refrigerate vaccines and medicines. Right now, since we have no means of refrigerated transportation, we can't send samples downstream. Patients have to make their way to the next city to get tested," says Peo, the village nurse. UNDP and the Ministry are working closely together to find a solution that is both suitable for the needs of the community, and sustainable in its maintenance. One viable path discussed is the creation of village development funds, seed-funded by the community's payments for electricity. This fund will help the villagers to find new income generating activities.

Improved access to electricity would have a significant impact on the lives of all villagers in Kobong

Source: UNDP; https://cutt.ly/jetlo2C

## Sipping from the cup of development



Why tea producers in Lao PDR are looking for help with their products

Vientiane, 9/April/2018 – As the country is set for graduating from Least Developed Country status, we are looking into how Lao PDR's own people are, one by one, contributing to developing their country. This time, we are focusing on tea, a field of production currently abuzz with activity.

"I recently realised that growing tea has a direct link to reducing global warming" – this rather surprising statement comes from Ms. Vansy Sengsouliya, Founder and President of Meung Mountains Wild Forest Tea. "Allow me to explain", she smiles at my dumbfounded expression. "Akha and Lahou ethnic groups in Bokeo Province in Northwestern Laos have been planting tea for generations. Recently, the pressure from investors has grown to convert these areas into banana plantations or cut the trees in order to grow rice. Since establishing my business in 2015, I have been working with 21 such families who want to stick with their tea-growing traditions, ensuring additional income for their families and the safeguarding of biodiversity in our country – which in turn has a direct impact on the environment. My tea production group now has its own factory for black and green tea, with 40 employees."

Vansy is not the only one feeling the pressure, struggling to ensure an old tradition makes its way into international markets. Ms. Khambolisout Sakda, the President of the Paksong Tea Producers' Group from Champasak Province in the South of Laos shares her two biggest

worries. "Our tea planting areas under pressure from investors, and we are finding it very hard to counter the hard cash they are bringing. I am trying to raise awareness among local tea growing families, to create an understanding that the potential for growing tea is only just rising, and a steady income will be possible if we don't give in to those alluring quick bucks. But with many of the young people taking off to work in Thailand, who will be left to do the work? I would love to expand the business, but how can I, under these circumstances?" Khambolisout works with ten families, catering mainly to French customers, both via local tourism and internet sales. She complains that even though her tea is popular in Italy, she cannot produce enough to meet the demand.

Both ladies recently spent some time in Vientiane, to attend a series of tea-infused events. The Lao National Chamber for Commerce and Industry, in partnership with UNDP in the Brand Lao project, ran a workshop and seminar to share insights about how European markets may be accessed by Lao tea producers.

"China is the big player in tea. Laos is unknown as a tea producing country," says Mr. Duncan McDonald, European Tea Sales Expert. "The fact that producers from Laos tend to be small by international standards can actually be an advantage, because the trend in European sales is towards good quality single origin teas. The consumer wants to feel they are buying directly from the producer, not from a global corporation, and is looking for a product that is truly authentic and has a connection with the place and community it is grown in."



Ms. Manichanh Phonekeo, owner of the Phayasee Tea Factory in Phongsaly Province knows the value of small. "Small is good. Small is organic. I have only five employees and a small factory. But it's not easy. I sell my green and red teas mainly to China, but because my tea comes from organic production, it is more expensive than Chinese types. Also, I have not

found a way yet to package my tea here in the country, so I am buying boxes from China. And the tea expert that I am employing is Chinese, too."

Many small producers can become one big fish when joining forces, knows Duncan: "The Chamber and UNDP are jointly proposing the creation of a tea association, to act just like a major producer would, to enter the foreign markets with impact, and reap the benefits of economies of scale." Rather than just exporting tea as a bulk commodity, Duncan continues to explain, the Lao way could be to target high-end customers willing to pay for the story behind their tea, and for quality, ethical and food safety standards.

The story is exactly what Manichanh is interested to tell. "I have just participated in the Made in Laos 2018 Fair here in Vientiane. Even local customers were asking questions about the people behind the tea box. Which inspired me to do more of this. As a next step, I'd like to learn how to tell these stories on social media, and then, inch our way into the international market."

The Brand Lao initiative – a joint effort by the Lao National Chamber of Commerce and Industry and UNDP aims exactly at this: to add value to traditional products and make sure that a part of the benefit reaches the producers. Through their own efforts, these tea producers are contributing to Lao PDR's path towards a bright and sustainable future. After all, development is everybody's cup of tea.



What's in your cup?

Tea connoisseurs know the difference between tea types. Black, green, white, red... but do you? If you are as confused by these terms as we are, read on. White tea is practically

**Rural Development in CIRDAP Member Countries** 

unprocessed tea, where only the leaf bud is picked. Green tea leaves are first wilted and then heated to retain their green colour. Black tea is picked young, dried, rolled and heated. Red tea means completely dried tea leaves. Oolong/Wulong tea requires a more complex process of production, with several steps involved. All of the above tea types are produced from the leaves of the Camellia sinensis tea bush.

In Laos, tea leaves are typically harvested from wild or semi-wild trees, grown from wild seeds.

Wild tea trees can grow up to a height of 20 metres, whereas tea plantations usually contain low bushes. Harvesting the leaves is a labourintensive process most usually done by women in Laos. In natural tea gardens, one person can pick about 10 kg of fresh leaves a day.

Tea culture is relatively young in Laos. In the 19th century, ethnic groups like the Akha and the Hmong broughttea drinking into Laos from China. Traditionally, tea is enjoyed hot and without condiments.

Lao cuisine appreciates bitter flavours for their medicinal effect, and - in areas where tea grows - tea leaves are sometimes eaten in traditional Laap salads or fermented in clay jars and then chewed as a mild stimulant or used as a condiment.

Source: http://www.la.undp.org, April 9, 2018, LAO PDR

## Steady flows: How a community in southern Laos takes disaster prevention into its own hands



The new water tower in Kamkok provides water year-round directly to the houses of 336 people from 46 families. Photo: UNDP Lao PDR/Jim Holmes

First come the rains. They make lakes and rivers rise, flooding villages and fields. "In my 20 years here in this village, I have never seen six consecutive days of relentless rain. But last year, that's what's happened", says Bounchang Jingkalieng, inhabitant of Kamkok Village in the southern province of Sekong in Lao PDR. The floods destroy harvests, sweep the fish out of ponds and erode riverbeds where women wash clothes and children play.

Then comes the drought. Bounchang bends down and picks up what looks like a small black stone. Holding it between his index and middle fingers, he lifts it up. "Villagers grow coffee trees between the houses, but they are suffering recently. There are hardly any trees left to provide them with shade, and even the slightest wind sweeps the unripe seeds off the branches like pebbles."

Kamkok was established in the late 1990s by a group of Katou, a small but distinct ethnic group in Southern Lao PDR. They migrated to the area from another district and have lived at the foot of Ta Yeune mountain since then. Villagers started cutting down trees in order to create arable land, and so the forest on the hillside gradually degraded over the past decades, leaving the mountain almost bare, with only shrubs, bamboo and a few trees covering its ridge.

**Rural Development in CIRDAP Member Countries** 

With the disappearance of its trees, Ta Yeune mountain has lost its ability to manage water. Forests act like sponges. They absorb water in times of heavy rain and provide a stable

amount of good-quality water in the dry season. For Kamkok, the loss of the forest has meant

a rising number of flash-floods and decreasing ground-water levels.

Climate change further contributes to these risks, as dry seasons are prolonged and storms are more frequent and severe during the monsoon. With falling groundwater levels, the hand-

pump-operated wells in the village dry out more frequently during the dry season, making it

challenging to find clean drinking water.

That's were community-led disaster risk management comes in. What sounds like a highly

technical intervention is actually as simple as the instalment of a well and water tower, and

the planting of trees.

With the help of a project, villagers dug a deep well, which they connected to a water-tower.

The tower provides water year-round directly to the houses of 336 people from 46 families.

"Depending on the amount of water they use, each family contributes around 2000 Kip (0.20

USD) per month," explains Village Head Kamthong Bounchan. "This includes all expenses

for maintenance and salaries for villagers responsible for the water supply system," he says.

To rebuild nature's ability to regulate water, the plan is to gradually replant forests 50 km

upstream from Kamkok. Upstream forests help the ground water recharge faster and regulate water flow, reducing the risk of floods and landslides and preventing rivers from drying out.

Bounchang is already game for planting trees. "I've been planting teak trees along the river

for over 15 years now. The village life requires wood for cooking and construction. Also,

trees keep the soil where it belongs. And sometimes I just like to enjoy their shade."

Not too little, not too much – this is the goal of Kamkok villagers for their water supplies.

Tree by tree, they are inching towards success.

Source: https://cutt.ly/cetlkVi

233

### Taming the waters in Xayaboury Province



Almost four years ago, UNDP had a project in Xayaboury Province of northern Lao PDR to help farmers in their struggles to cope with climate change. This February, we returned to one of the villages to see how they have managed with changing weather conditions ever since.

Vientiane, 12 March 2019 – The Sustainable Development Goals, adopted by the global community in 2015, compels us at UNDP Lao PDR to take even more responsibility to ensure that our projects do not only offer a temporary sigh of relief to struggling communities in Lao PDR, but that they serve as an enduring foundation on which they can begin to build a more sustainable future for themselves. That is why in February 2019, UNDP, along with members of the Green Climate Fund and representatives of the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry, took a trip to Nasom Village in Xayaboury Province to catch up with some old friends made during a project entitled "Improving the Resilience of the Agricultural Sector to Climate Change", which was implemented between 2011-2015.

In the early 2000s, the farming population of Nasom had difficulties in adjusting to a phenomenon most of them had probably never even heard of: climate change. Although the small village nestled in a modest valley between the lush hillsides of northern Laos had occasionally suffered from floods, the usual predictability of seasons had become a thing of the past.

While the rainy seasons seemed to gradually get more intense, the dry seasons were getting hotter and drier, barely offering a shower for the rice fields of the village, which resulted in bad harvests. As rice was the primary ingredient of the rather stoic daily diet of the villagers, a bad harvest often marked a serious menace of malnutrition. Even if the farmers could feed

themselves with stocks in case of a bad harvest, not being able to sell any surplus at the local market meant a significant dip in their yearly incomes.



The communities had done an excellent job in maintaining the reservoirs that the project had dug many years ago

Either too much or too little water for irrigating the paddy fields was the biggest challenge for the villagers. The project, implemented by UNDP and the Ministry of Agriculture and Forestry, and funded by the Global Environment Facility (GEF) wanted to devise a way in which they could manage and utilize the dramatically varying rates of rainfall as efficiently as possible.

The project laid out a plan to dig numerous reservoirs in the village in which the rain could be stored throughout the year. Irrigation canals were built through which the villagers could regulate the flow of the standing water to their paddy fields during different seasons. The ponds were filled with fish to give villagers an additional source of protein. As fish like to indulge in the mosquito larvae that breed particularly in standing waters, they would also protect the villagers from the deathly threat of malaria.

When the project ended in 2014, the results were fantastic. Villagers no longer went hungry and they could once again plan their harvests despite the changing weather patterns. However, it is not uncommon in development work that such achievements slowly fade away as years pass by and the community's lack of resources or expertise for maintenance take a toll them.

In this case, the concern proved unfounded. Even after four years, the ponds were filled with water, teeming with fish. Even the devastating floods of 2018 that ravaged each province of Lao PDR had not caused the reservoirs to overflow.

Source: UNDP, https://cutt.ly/1etlxpP

## The New Way of Working in practice in Lao PDR



**Vientiane 29 January 2019** - In disaster situations the needs of the victims are usually vast and varied. Time and resources dedicated to these needs, however, are limited. Under such circumstances, it is crucial that the assistance provided is targeted well and avoids duplication of effort. Communication is key, as the success of relief operations depends on all the involved actors constantly talking to each other. Optimally the interaction will continue for an extended period of time to ensure that the results of the work done are long-lasting.

This is why the concept of the New Way of Working was discussed at the World Humanitarian Summit in May 2016. To put it simply, the New Way of Working means that different development and humanitarian actors, such as national governments, international non-governmental organizations, civil society organizations and private sector representatives commit to coordination and cooperation to achieve the goals they have jointly set for themselves.

In disaster situations, for example, the New Way of Working could be applied by different stakeholders discussing how the situation would ideally look like after completion of relief efforts. After that they would collectively determine what measures have to be taken to realize this ideal, and they would meet regularly to evaluate the progress of the agreed interventions.



Flood victims escaping to safety in Attapeu Province of Lao PDR.

### From delivering aid to ending need in Lao PDR

Since the end of last year, the New Way of Working has been put into practice in Lao PDR. Three consecutive tropical storms – Son-Tinh, Bebinca and Bajirat – resulted in severe flooding in each of the country's 18 provinces between July and September 2018. 443,050 people around the country were affected and over 115,000 paddy fields, 670 kilometres of roads and 47 bridges were damaged by the historically devastating floods. Tens of thousands of people temporarily lost their jobs, the functioning of essential services was hampered and the possibility of widescale malnutrition haunted the entire country.

In the aftermath of the disaster, the New Way of Working was immediately employed, when the government and dozens of its development partners conducted a Post-Disaster Needs Assessment. The results of the Assessment showed that the focus of relief operations should not only be on meeting the immediate needs of the flood victims, but also on building the country's long-term resilience to climate change induced disasters. Otherwise, comparable disasters would cause similar countrywide crisis situations in the future.

To prevent this from happening and to ensure that collective outcomes are met, four UN agencies – FAO, UNDP, WFP, WHO – submitted a joint funding application to the United Nations Central Emergency Response Fund (CERF). Together with the Ministry of Labour and Social Welfare, the Ministry of Health and the Ministry of Agriculture and Forestry of Lao PDR, these four agencies are currently implementing a US\$3.5 million grant they received to help flood victims in Khammouane Province.

UNDP's ongoing interventions focus on securing livelihoods, repairing damaged infrastructure and raising awareness for the dangers of unexploded ordnance (UXO). This is currently being done through cash for work programmes in 21 villages in five districts of the province. Flood victims have been given an opportunity to repair roads, bridges and irrigation channels in their communities for cash compensation. This will not only improve the villagers' access to hospitals, schools, markets and other essential services, but it will also provide a source of income for around 5000 flood victims who temporarily lost their livelihoods as a result of the floods. Because floods may have shifted unexploded cluster munitions to areas of the province that were previously considered safe, villagers in high-risk communities will receive mine risk education.

In the spirit of the New Way of Working, all these actions are being taken after thorough consultations with the government and the other implementing agencies. As a result, the interventions do not only respond to the immediate needs of the victims, but also contribute to the aims of the other agencies and build the communities' long-term resilience to natural disasters.



Female beneficiaries of UNDP's cash for work program in Khammouane Province

The role of businesses in disaster risk reduction

Despite the exemplary ways in which the New Way of Working has been applied in Lao PDR, there is another set of partnerships that has to be strengthened to ensure the country's sustainable development: The role of the private sector in overcoming both local and global challenges should not be overlooked.

Climate change and natural disasters resulting from it are unquestionably fueled by uncoordinated and unsustainable use of natural resources. While it is the responsibility of governments to curb these unsustainable practices, we need to create incentives that will encourage private enterprises to contribute to solving development challenges.

Lao PDR has already taken some promising steps in this regard by partnering with local telecommunications operators in the aftermath of the floods. These companies are currently helping the government in installing early warning systems via text messaging in areas of the country that are particularly vulnerable to climate disasters. Such a strategy is innovative as it provides the private companies with new avenues for business, while simultaneously helping the most marginalized people in the country.

This is precisely the kind of creativity that the 2030 Agenda for Sustainable Development demands for its goals to be reached. Finding new ways of working does not necessarily mean revolutionizing the work you do, but who you do it with. As our world faces unusually difficult challenges, overcoming them will most likely also require the forming of unusual alliances, even between actors that have traditionally considered to have conflicting interests.

Gerson Brandão is the Disaster Risk Management Advisor with the UNDP in Lao PDR. He started his career at the United Nations in 2006. During his extensive career he has worked in disaster and conflict situations in countries around the world, including Bangladesh, Colombia, The Democratic Republic of Congo, Mali and Sri Lanka.

Source: http://www.la.undp.org ,January 29, 2019

## **MALAYSIA**

## Chemical free padi farming



Members from the co-operative (from right) Abu Hassan Saad, Basir Abd Rahman, Baharom Abd Rahman and Zulkifli Md Said processing rice after harvesting padi the traditional way in Kampung Permatang Nibong in Permatang Pauh. FARMERS from Kampung Permatang Nibong in Permatang Pauh on mainland Penang, have been chosen in a pilot programme to do chemical-free padi farming. Seberang Prai Municipal Council president Datuk Rozali Mohamud said farmers were encouraged to cultivate padi in an organic manner under the Sustainable Rice Farming (SRF) programme.

He said the pioneer project started with 30 farming communities from the village on Oct 14 last year. "The briefing was conducted here at Koperasi Kerjaya Permatang Nibong, followed by a workshop and training at SRI Lintang Organic Valley in Sik, Kedah," he said after launching the Padi Harvesting programme of Ecological Management Model at Kampung Permatang Nibong recently. Rozali said MPSP is working with Universiti Sains Malaysia, state Agriculture Department and the Integrated Agriculture Development Authority to implement this new method of padi harvesting. He said the main objective to use this new method is to introduce the latest management technology of producing organic rice, which is more environment-friendly, cleaner and safer.



Rozali (right) levelling the harvested padi at the drying unit after launching the padi harvesting programme.

"This new method will also increase the farmers' income and reduce health risks. "It will also be a healthier option for the community as the new method does not use any chemicals.

"The farmers also get to learn how to integrate SRF with the old way of farming by creating an environmentally friendly eco-system such as using organic fertilisation."



Koperasi Kerjaya Permatang Nibong secretary Juliana Hasbullah, 40, (pink scarf) and her colleague Rul Azwin Rodziyan, 28, showing the organic rice.

"We want to encourage farmers to practise organic farming and go back to the old ways of cultivating rice without using chemicals," he said, adding that the farmers were also given insights into rearing livestock and fish.

Rozali said SRF was in line with MPSP's target of becoming a zero-carbon city by 2050.

Source: https://www.thestar.com.my/metro/. 13 Sep 2019. Malaysia

# Corrugated plastic box manufacturer sees potential in new product



Machine work: Some of the simple processes at Corlite can be automated to reduce reliance on manual workers

When they say opportunities present themselves in challenging times, Toh Pe Kun has seen for himself that the adage is true. His big break came amidst the Asian Financial Crisis. It was a time when businesses struggled and companies were shuttered or sold off. But it was also a time when things were going for cheap.

"We found a cheap secondhand machine under receivership. A new one would have cost RM2mil. We got it for RM300,000," he shares, a wide smile on his face. The timing for this bargain couldn't have been better. His employer, a plastic products manufacturer, had just sold the business and the workers were given an option to either remain with the merged entity or leave to chart their own path.

Well, the time seemed about right for him to chart his own path. And if not now, then when, asks Toh.So along with a few colleagues, Toh took the opportunity to start Corlite Packaging Industries Sdn Bhd. They rented an old factory lot for RM5,000 a month and in 1999, operations to produce its corrugated plastic sheets took off. The sheets were then fabricated into corrugated plastic containers for industrial use.

In the early days, the company faced some problems with power supply. The infrastructure at the old factory could not connect its machinery with adequate power supply and they had to rely on generators.

"Sometimes, we forget to fill the generator with fuel and the machine stops. We had to refuel and run it up again," he chuckles. They also had to source their raw materials from overseas as there were no local producers who were manufacturing the required grade of resins at the time. Fortunately, they were able to get an exemption on import duties, which saved them quite a bit of money. By then, the local market was already well on the mend, giving Corlite the boost it needed to get off the ground and grow. In fact, the demand was so good that the company made its first profit in the second month of operations.

But sometime in 2002, Corlite suffered a slight setback. Its factory was razed to the ground by an unexpected nighttime blaze -- only the toilets were left standing. But Toh thanked his lucky stars that the misfortune did not happen earlier.

"Luckily, by that time, we were already running for three years so we could qualify for a loan," he says.

Within a week, Corlite was back on its feet again and plans for its move to the current 5acreodd plot was underway. Business continued to grow with the market and Corlite expanded its product offering to include injection plastic containers and plastic slip sheets.

As the years went by, plastics became ubiquitous and Toh saw more and more plastic product manufacturers coming onstream. However, he notes that there weren't many who played in the same space as the company — only about three to four other firms. "This market is niche and small so a lot of manufacturers don't like this business. It's very project-based so you don't get regular volume. They prefer to make stretch film and consumer products because there's volume and it's regular, so it's easier for them to forecast and plan their business.

"For us, we aim to make finished products like corrugated plastic containers and customised products for industrial customers. They are higher-value items. If we only sell the sheets, it will be hard because these are basic products that they can import from China at lower prices. But it's harder for them to import the finished products because they are bulky and are custom-made. You have to follow detailed orders and these are usually project-basis, "he says.

### New growth areas

Over the past 20 years, Corlite has grown on the strength of its core product. Its corrugated plastic products make up about 60% of sales. Most of its plastic containers went to the electrical and electronics (E&E) industry.

But as the economy slows and stalwarts in certain sectors start relocating to other countries with lower manufacturing cost, demand from the E&E industry has declined substantially. So

the company has started exploring wider opportunities in other industries like automotive, food packaging and advertising.

Corlite also recently invested in a new RM12mil machine from Europe to produce a different type of plastic sheet: the PP bubble guard sheet. The new product has better strength and is not as easily folded as the corrugated plastic sheet, says Toh, due to its honeycomb structure. Toh is excited about the prospect of this new sheet, which will be marketed under the Neycom brand. He notes that they can be used to make stationery, premium packaging and drawers, among other things.

"We can sell them in sheet form or as finished products as well. We are hoping to export more of the bubble guard sheet. I think there will be a big market for this in South-East Asia, particularly for the automotive industry because this plastic is more durable.

"And there are not a lot of other players who are producing this sheet. I think we are one of the first few. This is a high-value product. It will take a while before others try to catch up. No one seems to be investing in this machine so we can expand this market. This will be our new growth product, "he says.

Additionally, this is not a product that Chinese manufacturers can flood the market with.

The new machine can produce about 400 tonnes a month, bringing its total capacity to 1,200 tonnes a month. Export currently makes up about 20%-30% of its turnover but Toh is expecting exports to grow once Neycom is in full production. This would certainly add to its sales.

Currently, Corlite's revenue comes close to RM50mil a year.Perhaps in one to two years' time, the bubble guard sheet could even grow to become the company's main product, he adds.

Advocating reuseToh is aware of the general war against plastic. But while campaigns are roaring against single-use plastics, Toh says the use of plastic in the industrial sector is different as it encourages multiple-use.

For example, fresh produce suppliers pack their goods in carton boxes which are often thrown away after each use. If they switch to plastic boxes, these boxes can be washed and reused many times.

This not only saves resources, he says, it also saves cost.

"We have one customer who spends about RM2mil every year on carton boxes. But after each use, they are thrown away. Now they want to try to reuse the boxes so they are changing to plastic boxes. Even though the cost per box is higher, in the longer run, they can half their

cost for boxes by reusing them. If handled properly handled, plastic boxes can be used many times, "he says. However, he admits that there is a lot of education work that needs to be carried out to remind retailers to keep these plastic boxes as they are used to throwing them away casually.

Likewise, he believes that if product packaging can be well designed, their usage can be



prolonged such as reusing plastic sheets as writing boards.

Corlite is also exploring opportunities in this area. Toh hopes to produce premium packaging for the consumer market and educate the market about reusing their plastic products.It sounds like an uphill battle, but the 57-year-old seems up for it.

While he is optimistic of the company's future despite the soft market due to the trade war and the looming threat of recession, he acknowledges that it is not an easy road to walk alone.

Toh's partners who had started the race with him in the late-90s have mostly cashed out of the business. He currently holds about 94% of the company.He has received various offers to list the company but the process seems rather

tedious. But if all goes well with its bubble guard sheet, then, who knows? Listing could be a more interesting option.

But as Toh has learned from experience, getting the right timing is everything.

Other products: It also produces injection plastic boxes for industrial use.

Source: https://www.thestar.com.my 16 Sep 2019. Malaysia.

## Fadlan preps for future in farming

Pra Pelancaran Drama Festival Kuala Lumpur (DFKL 2018) Sam Tham/Star Publication

ACTOR Fadlan Hazim (*pic*) is already tilling the land for life after showbiz, reported *Sinar Harian*.

Fadlan, who is famous for his role in the serial drama *Papa Ricky*, said his farming business provided him with alternative investments and savings for the future.

"I wanted to help my mother. I found out that my family has a plot of land, but it was abandoned and overgrown with bushes.

Asked why he ventured into farming, Fadlan said he wanted to be ready for life after showbiz, as there were many other talented artistes vying for success. He is set to appear in the drama *Semerah Cinta Humairah* on TV3 at the end of the month. Berita Harian reported that visitors to the popular Teluk Kemang beach in Port Dickson were annoyed that they now had to fight for space with canopy operators. There are now 20 operators supplying almost 100 canopies along the beach.

The operators rent these canopies, which also come together with chairs and tables, for RM30 to RM50 for the entire day. However, visitors who wish to simply lay out their own mat on the beach cannot do so due to the space being taken up by the canopies, especially during the peak periods.

Civil servant Mohamad Suzaini Sidik, 36, said he often came to the beach with his wife and child.

"Why pay for the rental of up to RM50 just to put your bags? Most of us here only want to swim and even if you bring food, you can just put it on a mat," he said. He hoped the Port Dickson municipal council would provide more seating areas.

Harian Metro reported that singer Misha Omar's rendition of her song Sampai Bila while sitting down earned praise on social media for her vocals. Misha, 36, said she had sat and sung the song during the programme MeleTop because she did not want to stand in front of the hosts, Neelofa and Nabil.

"I wanted to stand and sing, but I realized they were sitting down, so it would not be appropriate if I stood in front of them.

"But I did not know it had become a topic of discussion online," she added. Compiled by ASHLEY TANG, R. ARAVINTHAN and YIMIE YANG.

Source: <a href="https://www.thestar.com.my">https://www.thestar.com.my</a> . 27 Jul 2018

## Filipino villagers swap trash for rice in fight against plastics



A Muntinlupa City resident happily swaps plastic trash for rice in a local government effort to tackle the plastic pollution problem in the country. Reuters.

MANILA: A village in the Philippines is trying to tackle the scourge of plastic waste by offering rice to residents in exchange for their trash.Residents of Bayanan outside the capital, Manila, can get 1kg of rice, the staple food for Filipinos, for every 2kg of plastic waste, which are handed over to the government for proper disposal or recycling.

The South-East Asian nation is among the world's top marine plastic polluters, studies show, with laws on solid waste poorly enforced and no regulations on packaging manufacturing."I weighed in at 14kg of residuals, so I got 7kg of rice grains. This is a big help for us to have 1kg of rice for the day, "Veronica Dolorico, a 49-year-old supporter of the programme, said. One kg of rice costs about 30-40 pesos (RM2.40-3.20), which is costly in a country with a fast-growing economy, but high rates of urban and rural poverty.

One-fifth of the population of 107 million people live below the national poverty line, with monthly consumption of less than US\$241 (RM1,000) per person. Bayanan collected more than 213kg of sachets, bottles and plastic bags in August, said village chief Andor San Pedro, adding the food-for-trash swap is teaching people how to properly dispose of their waste. — Reuters

Source: https://www.thestar.com.my. 13 Sep 2019. Malaysia

## For the love of teaching



Mohd Sirhajwan (standing) says he pursued teaching as his career to help others the way his teachers had helped him.

Every now and then, news of teachers doing wonders and sacrificing for their schools and students break the Internet.But not all of these stories have a happy ending. Some unite the nation in sorrow, like in the case of Sibu teacher Yap Hue Ling, who fainted while giving additional Mandarin lessons in school. She died soon after being admitted to the hospital.

Malaysians are fortunate to have many educators who are more than willing to go the extra mile for their charges. Though their stories may not have gone viral, their dedication is no less inspiring.

Special education teacher Dr Muhamad Khairul Anuar Hussin, 41, has been in the service for 22 years.

His goal is to serve our young talent and to be the best special education teacher in the country.

"I love teaching. For special needs students, I use approaches that depend on individual interests, abilities and tendencies.

"Each pupil has his or her own strengths which every teacher must know.

"Applying different teaching techniques and having individualised teaching and learning methods allow us to reach out to these students based on their individual needs. This paves the way for us to have a more personal connection with them," he said.

Muhamad Khairul was among 50 educators shortlisted for the Varkey Foundation Global Teacher Prize 2019. He knew special education was his calling after he saw how much the group wants to be part of society.

With big dreams for the education system, he began his journey by introducing several programmes for special needs students. He started with what was within his capacity. Some of his efforts include opening a preschool for visually impaired children while he was a teacher in SK Pendidikan Khas Princess Elizabeth, Johor Baru. He also proposed a home visit and an early intervention programme in the district's villages.

"The programme allowed me to channel important information, like education opportunities provided by the government, to parents of special needs children." The programme has opened many doors for special kids to go to school, and for their parents and communities to get help.

"Many parents who live in poverty are not aware of special education schools," he added. His love for teaching is evident. Muhamad Khairul has even created braille books, newspapers, magazines and reference books for visually impaired students. His initiative was met with high demand among teachers who educate the visually impaired and soon, he was sharing soft copies of his braille reference books across the country.

On why he goes out of his way for his students, he said he understands how difficult it is for them.

"I lost my hearing when I was only nine, so from a very young age, I've been exposed to the disabled community. Now, I want to give back.

Teaching is an altruistic profession, as many go the extra mile to ensure the success of their students, at the expense of their health. Harry Tan"I really like to teach. My free time is filled with plenty of additional classes as I live within the school area and most students live in dorms, so it's easy for me to go over and spend time with them."

Despite being constantly occupied with planning lessons and attending classes, he makes sure he's mentally and physically fit. "Being a teacher requires so much time, effort, energy, brainpower and emotion. It demands so much of you," said the father of four. To be effective in the classroom, teachers must first take good care of themselves.

"It's important for teachers to learn how to have a balanced lifestyle because of the demands and challenges of the job.

"The teaching profession provides a stable salary but our duties are challenging. So it's important to lead a balanced life.

"Time management is crucial. Work done with commitment, sincerity and effort will lead to greater opportunities."

In his current role as his school's special education department senior assistant, Muhammad Khairul is working with the department to prepare a module that focuses on bread making, farming and cooking.

"This is a specially designed teaching and learning module that provides students with learning disabilities the chance to equip themselves with basic skills," he said.

For Sabahan Mohd Sirhajwan Idek, who is an English Language teacher in Keningau Vocational College, teaching is a profession that allows a person to give back to society while encouraging them to be creative.

Mohd Sirhajwan has several awards under his belt, including the International Innovation and Entrepreneur-ship Excellence in Teaching Award. He, too, was among the Top 50 Varkey Foundation Global Teacher Prize finalists in 2017.

It's personal satisfaction that drives the 31-year-old to put his students first. "I find it very fulfilling to explore the many ways of educating the younger generation and society." My English was bad when I was a student. It was my third language since my mother tongue is Bajau and Bahasa Malaysia is our national language.

"Although I found it difficult to learn, I was so passionate about wanting to master the language that my English Language teacher in secondary school believed in me and gave me all the support I needed," he said.

The experience made him realise how powerful teachers can be and it motivated him to pursue teaching as his career to help others the way his teachers had helped him.

"Many of my students lack confidence in English as they don't have much exposure to the outside world.

"They have low self-esteem especially since we are from a rural area."

Special education teacher Dr Muhamad Khairul Anuar Hussin spends time with his students during a scouts camping trip to promote social inclusion among mainstream.students. Muhamad Khairul says the trip is a compulsory activity in his school."So I spend after-school hours to train and manage them for competitions to push them out of their comfort zones and gain experience in the real world.

"Initially they were reluctant to participate but with continuous support, their motivation grew."

He often spends his nights and weekends training his students for these competitions, frequently reminding them that they are not defined by where they come from or who they are, but by what they are capable of doing.

"And there is no limit in what they can do."

Mohd Sirhajwan connects classroom learning to the real world by conducting innovation competitions, entrepreneurship programmes, conference presentations and community events.But these initiatives require time and funding.

"Students must be pushed to grab the opportunities that are out there because it will help them reach their fullest potential and enable them to discover and develop their capabilities and talents."I want them to realise that nothing is impossible so long as they put their minds and hearts into it.

"I push myself extra hard, too, because I want them to see that the world is their stage," he said. Excellent teacher (Guru Cemerlang) Teh Kean Hoe feels the added weight when he gives his students additional lessons but he tries to balance his work with enough rest and recreation.

Providing additional guidance for his students is not obligatory but is necessary, said the Bahasa Melayu teacher from SMK Pendidikan Khas Persekutuan, Penang.Because there isn't enough time to cover every aspect of his subject during normal school hours, additional classes are important.



Muhamad Khairul watches over an autistic student during a one-on-one individual lesson in his school designed for autistic students.

"Deaf students need more time to understand the subject matter and these classes are important to help them prepare for exams."I often conduct additional classes on Saturday mornings for the Form Five students, which begin in January until they sit for their Bahasa Melayu paper.

"Most become more confident to face the exam after attending these lessons."I care about my students' achievements so I need to provide additional classes for them. "It brings me great joy and satisfaction to see these students succeed and pass their subjects, especially those who many consider 'hopeless'," he said.



Muhamad Khairul gives a talk to special needs students from SMPK Vokasional Indahpura, Johor Baru. He says special education was his calling because he saw the needs and desires of the group to be part of an inclusive society. Teh, 56, went through an arduous path before graduating as a full fledged teacher. The Penangite recalls how despite scoring excellent



results for his SPM and STPM, his application to enter public varsities was rejected.

"It wasn't until after Federation School for the Deaf former principal Datuk Saleena Yahaya Isa wrote an appeal for me to the then Universiti Sains Malaysia vice-chancellor that I was offered a spot there."But it came with a condition that I must pass my first semester in order to continue my tertiary education with them.

Teh (in pink) balances his work with enough rest and recreation.

"Saleena reminded me that because my entry into university was not easy, I should become a teacher to guide deaf students and become a role model to them," he shared. Teaching is an altruistic profession, said National Union of the Teaching Profession (NUTP) secretary-general Harry Tan. Often, he said, teachers become emotionally attached to those under their care.

"Once there is attachment, we will do whatever necessary to ensure the success of our students, even at the expense of our health." We give extra classes, spend more time on the field to train athletes, train choral speakers after school hours in the hall, walk the streets to get funds to repair the school, and make many other sacrifices. "We even have teachers who offer their homes as temporary shelters to children who come from broken families, and pay for students' books and stationery from their pockets. "A teacher's deeds are just too many because we are emotionally invested in our students," he said.

Soure: https://www.thestar.com.my . Malaysia. 30 Jun 2019

## Group puts prize money to good use



A Friends Of Bukit Gasing member placing trail markers in the Bukit Gasing Educational Forest. — Photos: IZZRAFIQ ALIAS/The Star

FOR the first time, the hiking trails in Bukit Gasing Educational Forest are being marked with proper signage.

The effort is being undertaken by Friends Of Bukit Gasing (FOBG), supported by Petaling Jaya City Council (MBPJ), to keep hikers from losing their way in the forest. The Petaling Jaya-based non-governmental organisation hopes the trail markers will help reduce the formation of new hiking routes. New routes were leading to the destruction of the flora and fauna ecosystem in the forest, said FOBG committee member Rajesh Mansukhlal.

"MBPJ has been supportive of the idea but we faced challenges when it came to funding and the paperwork process.

"We were thrilled when our environment conservation work was noticed by Star Media Group chairman Datuk Fu Ah Kiow.

"We were nominated for the Star Golden Hearts Award last year and eventually, we won.

"With the RM5,000 prize money supplemented with FOBG funds, we managed to embark on this trail marker project," said Rajesh, who has been visiting the forest since he was 11 years old with school friends. The forest attracts new hikers daily.

Rajesh said he met hikers from various states at the forest. Occasionally, he met expatriates from Asia, Europe and the US who come for a hike after learning about the forest from their local peers.

"Each time I am in the forest hiking, without fail, at least two or three people would approach me to ask how to exit. All our FOBG members have encountered the same situation."Let's bear in mind that people of all ages come here. When they take the wrong route, especially the senior citizens, they become exhausted, "he said, adding that it was such a pitiful sight to see them lost.

"They may have taken the challenging route unknowingly and cannot find the exit."Our markings will be of great help to everyone here, "he said.Rajesh cited a recent case of a woman who got lost in the forest.

She managed to contact someone with her mobile phone for help, he said. Rajesh said she described her surroundings and was rescued with the help of FOBG members and the Fire and Rescue Department.

"This forest has cellular reception almost throughout the two main trails." If anyone is lost they can call for help and cite the trail markers. "This will speed up the rescue process," he said. Two of the four trails were marked by FOBG recently.

The markers are made of pallet wood wrapped in coloured canvas and contain details such as the sequence of a particular trail, the total distance of the route and approximate time it would take to complete the route.

The yellow and blue canvas trail markers show two different routes. The markers are attached to a pole so that they are visible to hikers. The first route, which is the shorter route, covers about 2.5km and can be completed within an hour.

The second route covers about 3.65km of the hill and can be completed within 80 minutes.

The remaining two routes would be marked at a later date. Hikers are also urged to use the free Komoot app as it provides users with a map of the trails. Users can snap photos with this app which tags the GPS location.

Rajesh, on behalf of FOBG, hoped a forest preservation committee would be formed.

The committee could consist of forest experts, university researchers, DBKL, MBPJ and non-governmental bodies.

It would discuss and create plans to improve the health of the forest. "At the moment, the forest is managed by MBPJ and it may have its own experts." However, it is best if we have a dedicated committee with more experts from different segments of society for this forest.

"We have good support from our Bukit Gasing assemblyman Rajiv Rishyakaran and our councillor Derek Fernandez," he said. However, he added, a strong pool of talent was needed to protect the leftover green lung for the future.

"We hope Lembah Pantai MP Fahmi Fadzil will also come on board to help protect this forest," he said.

"The Kuala Lumpur part of the forest needs attention too." Volunteers plant trees

There are signs of both flora and fauna becoming extinct in the forest, compared to the diversity that existed 50 years ago.

This could be because of the heavy recreational foot traffic or the development that was taking place on the Kuala Lumpur side of the forest. To improve the forest habitat, volunteer youths from Team Selangor, Malaysian Institute of Certified Public Accountants as well as FOBG members and MBPJ representatives planted 60 trees. The effects of global warming as well as human intervention has taken a toll on the forest, said FOBG chairman Ivan Pal Grewal. "Trees in the forest are falling because of soil erosion. We used to have large ants that would eat the fallen wood but they no longer exist.

"Some bee hives no longer exist too. Likewise, various types of ferns and mushrooms are no longer around.

"The forest had more species of birds. The monkeys are always out in the neighbourhoods because there are no fruit trees in the forest for them to source for food," he said. The volunteers planted fruit trees such as sentul, binjai and kundang to help the animals survive in the forest. Forest trees such as merbau and meranti were also planted.

A MBPJ spokesman said all trees that were planted were based on the recommendation by Selangor Forestry Department.

"We have one of the world's most expensive trees, which we call pokok berlian, surviving in this forest.

"We notice forest trees survive well here when we plant them."It is important that the public do not litter inside the forest and refrain from taking home any plants from here," he added.

Source: https://www.thestar.com.my 16 Sep 2019. Malaysia

# How Malaysia's golden goose of ecotourism, Sabah, keeps the visitors coming

The East Malaysian state has fostered an economy that's as robust as its many natural wonders, from Lake Toba to Mount Kinabalu



Mount Kinabalu, Southeast Asia's highest peak, is becoming a popular tourist draw in Sabah, Malaysia. Photo:

AFP

Jhennis Mintjelungan is a 30-year-old Minahasan working as a hotel receptionist in Sorong, the gateway to the Raja Ampat islands – dubbed the "world's most beautiful" by Conde Nast Traveller. He hopes that the current trickle of visitors to the islands will increase dramatically and spur the local economy in this, the far western tip of Papua. On the shores of Lake Toba in North Sumatra (3,649km away), Bona Pana Parlindungan a 54-year-old tour guide prays for more foreign visitors.

With a newly upgraded airport in nearby Silangit and direct flights to Jakarta, there's a distinct possibility that the world's largest caldera lake will become busier. Tourism in Southeast Asia is growing rapidly. In 2014, travel and tourism contributed US\$117.9 billion (4.8 per cent) of the region's combined gross domestic product. By 2025, this is expected to grow to US\$209.4 billion (or 4.9 per cent). This makes Southeast Asia the second-fastest growing region for tourism in the world, after South Asia.

Global trends emphasising adventure have sparked greater interest in the less well-known parts of the region. But what should local leaders be doing to nurture this potentially fickle industry? What are the ingredients required to attract visitors and keep them coming?



Lake Toba, or Danau Toba, is a growing tourist hub in North Sumatra. Photo: Karim Raslan

Policymakers would be wise to study what the East Malaysian state of Sabah has done right. With 3.4 million visitors in 2016 – more than a million from China alone – Sabah has become one of Asia's most successful eco- and adventure-tourism destinations.

Of course, a combination of Mount Kinabalu (Southeast Asia's tallest mountain), countless diving spots as well as pristine forests have helped boost the state.Budget carrier AirAsia has also played a vital role, driving down fares and expanding capacity. However, Sabah wasn't always a success story. Twenty-five years ago, the state was facing a major economic dilemma.

For decades, local businessmen had focused on extractive industries, logging the state's extraordinarily rich forests. But by the early 1990s, it was clear that was unsustainable. Datuk Masidi Manjun, the state's Minister of Tourism, Culture and Environment, is sanguine: "Back then, it wasn't difficult persuading ordinary Sabahans that conservation was the way forward. Sabahans have always had a close affinity with the forests.



Sorong is the gateway to the Raja Ampat islands which are known for pristine beaches and rich marine life.

Photo: Karim Raslan

"It helps that tourism, culture and the environment are all under the same ministry. This means we are able to craft and coordinate the right policies, thereby ensuring that everyone, including the private sector, is moving in the same direction," he said.

"Sabahans are proud of their cultural heritage. This is taught and nurtured in schools. We are a multicultural and multireligious people. The state government is working hard to ensure that our native cultures thrive."

Jackie Jimin, a 29-year-old native Murut marketing professional is extremely upbeat. Having studied and worked for many years in Kuala Lumpur she was able to return to Sabah in 2010 and find similarly well-paid work: "I came back to look after my mother who's been ill. The local economy's a lot more diverse now. The tourism boom has opened up lots of opportunities. Things are 'amplified and advanced'."

Others are more cautious. Asgari Stephens, a Kuala Lumpur-based but Sabah-born private equity investor talks about the need to upgrade local skills: "We need to raise standards, improve training and work to compete with Bali and Phuket. Mass tourism from China isn't necessarily very profitable."

Datuk Masidi reinforces this: "You can't just look at visitor numbers. That can be deceptive. You need to ensure that ordinary people are benefiting as well: local restaurants, home-stays, handicraft makers and even the fellows selling home-made ice cream."

"It's also critical to encourage the community to maintain and take care of the natural beauty all around us, to ensure everything remains pristine so that we can leverage off the attractions. Moreover, given that ecotourism is so important, conservation has to be an integral part of the government's development agenda."

According to Datuk Masidi: "Every year, we add more to our permanent forest reserve. The International Union of Conservation of Nature requires that 10 per cent of land should be totally protected forest (TPF). To date, Sabah has gazetted 23 per cent as TPF with plans to reach 30 per cent by 2025."



Climbers traverse a bridge atop Mount Kinabalu in Sabah, Malaysia. Photo: Health Post.

This is not to say that it's smooth sailing. The controversy over the 223 million Malaysian ringgit (HK\$390 million) Sukau Bridge in Kinabatangan, which critics claim will damage wildlife, highlights the ongoing dilemma between conservation and economic development.

The security problems in Eastern Sabah have also dampened visitor numbers in Sandakan, a key ecotourism hub. As the Sabah experience clearly shows, a tourism industry isn't something that can be legislated into existence. Rather, it's a long-term process: building trust, training service providers and maintaining standards. It requires enormous patience as a broad range of stakeholders are brought on board. But the good news is that even obscure destinations can hit the big time; look at how the Filipino island of Palawan with its gorgeous seas has become an online sensation.

So as local leaders seek to grow their tourism portfolio, they would be wise to check out the "Land Below the Winds" for tips as to how to grow a multibillion-dollar industry.

Source: By Karim Raslan . 17 Mar, 2017. https://www.scmp.com. (South China Morning Post)

## **Journey of Musang King**



The Musang King durian stands out for its smooth texture, plump flesh and bright yellow hue.

BENTONG: His search for a flavoursome durian ended 28 years ago in Tanah Merah, Kelantan, when he found the "king" of the King of Fruits. It was love at first bite for Frankie Tong Thien Seng, thanks to a man named Wee, who introduced the fruit which locals in Kelantan referred to as Raja Kunyit.

Back then, Frankie was a 32-year-old fruit sapling seller from Karak, Pahang, who was on a search for the best variety of durian. Today, Raja Kunyit is known as Musang King.

"I renamed the fruit Musang King, having borrowed the word 'musang' from the town," recalled the 60-year-old Frankie when StarMetro visited his orchard in Karak, about 21km from here.

He continues to refer to Musang King as his "superstar of tomorrow". "From the day I first tasted Raja Kunyit, I somehow knew deep in my heart that it has the cut to make it big one day," he said.

He said he nurtured the specie from the day he brought the sapling from its Tanah Merah hometown to Karak.

"It has the 10 required criteria to be the 'King of the King of Fruits'.

"It appeals to 60% to 70% of durian lovers. Its smooth and dense bright yellow pulp has a sweet and bitter taste, "he said adding that the saplings were very saleable. Musang King, he added, also has good commercial value.

"A well-maintained Musang King tree has good disease resistance and high yield," he said.

But Frankie said it was Datuk Seri Liow Tiong Lai who gave Musang King the much needed boost to penetrate the China market.

The former MCA president and four-term Bentong MP (1999-May 2018) was instrumental in the aggressive promotion of the fruit which thrives well in Bentong, Karak and Raub.

"This effort also managed to attract many tourists from China, Hong Kong, Singapore, as well local tourists to visit the orchards," said Frankie. He said the future of Musang King as well as other popular species like Red Prawn, Tekka, Black Thorn and XO was bright.

"To date, only 1% of the 1.4 bil population in China eat durians. The number is growing. Just imagine when 10% of them eat durians," he said. Above all, Frankie said one must have passion for durians if there was intention to venture into the business. "Good farming practices is a must for high quality fruits and bumper harvest," he added.

Apart from that, he said farmers must meet the criteria set by importers in order to have a competitive edge.

"Durians, like any other commodities, will face competition. "Having access to the overseas market is a good start," he said.

Frankie said it was passion for durian that resulted in four generations in his family to persevere in the business - from his grandfather who arrived from China to his son. Frankie and his wife Wong Siew Leng run the Tong Seng Nursery in Karak, which was registered in 1983.

They have three children, and their son is also in the durian trade. He said his father Tong Sin Long, in his 80s now, still visits durian orchards and acts as an adviser for farms as far as Sabah and Sarawak.

Frankie recalls as a child following his father on trips to sell saplings. "Selling durian was not enough to make a living or raise a family." We had to sell fruit saplings and do other farm jobs to make ends meet, "he said, adding that durian farmers were very poor in the old days.

Frankie said that a durian fruit was priced at 10sen about 50 years ago, and the price later went up to between RM1 and RM3 three decades ago. "Durians are now sold by weight. One Musang King weighing about two kg can fetch about RM100," he said. While new species of durians continue making their way to the market, Frankie said he was confident Musang King is here to stay.

Source: https://www.thestar.com.my. 16 Sep 2019. Malaysia

## Laying the Foundation for Sustainable Landscape Management of Malaysia's Biodiversity Central Forest Spine



trefoil horseshoe bat

Just like the human backbone that gives our body form and function, the Central Forest Spine (CFS) forms the backbone of Peninsular Malaysia by linking forest complexes with a network of ecological corridors creating a connected conservation area.

The CFS is an important water source for at least 90% of the population. It also harbours the remaining populations of Malayan tigers amongst other wildlife in its forests and is home to a majority of the indigenous communities – Orang Asli.

The *Improving Connectivity of the Central Forest Spine Landscape* (IC-CFS) project supported by UNDP with GEF grant financing focuses on three priority landscapes in the states of Perak, Pahang and Johor which have a combined ecological corridor area of approximately 208,358 ha.

Currently, the Central Forest Spine is fragmented due to rapid development for residential and agricultural purposes that are not only detrimental to wildlife survival but are also impacting its rich fauna, flora and ecosystems. Efforts are being made to link these disjointed forests through various means, such as reforestation, land gazettement and building of wildlife crossings.

The intent of the project is to ensure sustainable landscape management is adopted in the 3 forest complexes namely Belum-Temenggor, Taman Negara and Endau-Rompin that are to be replicated by the other states later. There are 3 elements in sustainable landscape

management i.e. securing wildlife habitats, conserving biodiversity and carbon stocks and lastly, maintaining the continuous flow of multiple ecosystem services.

Sustainable landscape management also includes the Orang Asli communities living in or adjacent to the forest complexes. The project is in the process of engaging them to find suitable solutions in elevating their household income and empowering their womenfolk for sustainable livelihood; the latter being in line with the UN's Sustainable Development Goal No.5 on gender equality.

At the same time, work has started on the ground at the survey sites to assess the biodiversity intactness in the 3 landscapes as well as the wildlife species roaming the forest complexes.

Camera traps have been fixed at selected areas in the prioritised forest complexes. The pictures of the animals caught by the camera traps will be analysed for understanding the travel patterns of the animals and gauging the types of species roaming the areas. Information retrieved from here will be used to determine the need for animal crossings (either culverts, hanging ropes or similar to our highways; green bridges known as viaducts) to enable the animals to travel from one fragmented forest complex to the next for their survival and to also lessen human wildlife conflicts.

Other than the camera traps, fieldwork at the site in Johor has started where the findings will help in determining the richness and intactness of the biodiversity in the Johor Elephant Sanctuary area.

Some of the small mammals that makeup the diversity in the study site are the trefoil horseshoe bat and three striped ground squirrel.

These are preliminary work that will intensify as the project progresses where the information gathered from here is crucial in the development of a site-specific sustainable landscape management plan that will finally expand to the whole Central Forest Spine landscape. Photos from IC-CFS Project.

Source: <a href="http://www.my.undp.org/content/malaysia">http://www.my.undp.org/content/malaysia</a>. Jun 7, 2017.

### No overnight success for instant noodles producer

The resolve to escape poverty has prompted an undergraduate majoring in accounting to drop out of Universiti Teknologi Mara (UiTM) and plunge into business.

Hailed from Sungai Dua, Penang, Mohammad Ilias @ Ilyas Zulkiffli, 22, returned to his hometown to start an online business selling cosmetics and motorcycle engine oil.

With the profits made from the business, he set up Zerotobeheroes Resources, which produces instant noodles known as Mymee Minda, with a capital of RM20,000 in Alor Setar early this year.

The company produces four different flavours of instant noodles, namely tomyam, curry, soup, and mi Bandung. They are priced at RM10 for a box of five packets of noodles. "And most importantly, these products are the only instant noodles which come with dates and raisins, good for energising and strengthening the mind," says the eldest of six siblings in an interview with Bernama recently.

Ilyas says he decided to quit his studies and eke a living to help his single mother and five younger siblings.

But why instant noodles?"Since I was a kid, I used to eat instant noodles (due to the hardship) and I was often told that it was not good for health because of their content. However, it is no longer an issue now for most of the households. Some students even stock up instant noodles in their hostels, "he says.

Although dates and raisins seem more attuned to the Malays, Mymee Minda is also promoted and marketed among non-Malay customers. Zerotobeheroes Resources now sells about 100,000 boxes of instant noodles a month compared with 20,000 boxes a month when it first started. They are marketed through distribution agents in each state.

"We are targeting to increase our production to 500,000 boxes a month by year-end and eventually, one million boxes a month next year. We will expand our empire to neighbouring countries such as Singapore, Thailand and Indonesia," he says.

The average sales for Mymee Mind is between RM100,000 and RM300,000 a month and Ilyas expects sales to reach RM1mil in the next six months. To Ilyas, business has freed him from poverty, hence independence (Merdeka) to him means to free oneself from the comfort zone, poverty, hardship and insecurity. He calls on young people, who aspire to go into business, to have a strong discipline and a good mentor.

"It's not easy to succeed. Maybe you don't know how to get started in business, it's okay. Find the people who can guide you and be with people with positive mindset because they will foster positive thinking.

"My advice to newcomers is to seek knowledge and a mentor. With knowledge, you'll take positive action. And don't be afraid to fail. Failure will make us begin to find a way to succeed. Salam kemerdekaan from me, "he says. — Bernama

Source: https://www.thestar.com.my. Malaysia. 02 Sep 2019

## No pain no gain for animal rescuer



Francis Poh with the stork he rescued and later handed over to Zoo Negara.

IT IS always a life or death situation for animal rescuer Francis Poh, as one wrong move may just kill him. However, these close calls have not stopped Poh, 37, from doing the one thing he loves most – rescuing animals, be it reptiles, birds or other exotic creatures. "Every time I receive a call to rescue something, there is always a chance that I could end up in hospital or go home with a bite," said Poh, who was hospitalised twice.

In one incident, a monitor lizard bit his fingers, leaving a very deep cut that could have left two of his fingers permanently numb. "That was a traumatising moment for me because the pain was just too much to bear and I was hospitalised for seven days.

"I was also bitten by a python when I released it into the wild. It jumped out of the container and struck my hand," said Poh, adding that the same python also bit him when it was first captured. What keeps Poh going is his love for animals and passion to save them. "I love the feeling I get just as I am about to rescue an animal. I cannot really describe it, but it is a powerful and silent moment where all my worries fade away," he said.

Poh's love for animals started at a young age when he found himself drawn to programmes like National Geographic and doing research on animals. He fondly recalled his childhood days when he would lie to his grandmother about needing to be at school as early as 6am, as he wanted to catch fish in the drain and other insects like grasshoppers in the field.

Poh's rescue work started by him feeding and saving stray animals in his neighbourhood, before moving on to also rescuing reptiles and birds. His first rescue was a wolf snake in Subang Jaya in 2011 after a tip-off from his friend.

"I was an amateur then and unprepared. I just went in and caught it with my bare hands and released it into the wild," said Poh, who did not disclose where he released the rescued animals, merely saying it was some 70km away from the city. There are some animals that he is allowed to keep as domestic pets at home, including turtles or snakes. Once, he took care of 50 animals in his home. Now, he is well-equipped with two snake hooks in his car, gloves and even a helmet with a torchlight attached to it.

Word soon spread and he was inundated with calls to rescue exotic animals such as bats, owls, pangolin, red ear slider (kura-kura hijau), soft shell turtle and even a stork. "I did not know what to do when I had to rescue an injured stork, but I went anyway and took it home and went about finding it a new home.

"I finally got in touch in with Zoo Negara officers who told me that the stork was from Sri Lanka and that they did get migrating storks that stop at the zoo's pond for a rest."I immediately passed the stork over to them, "he said. He was once called to pick up a dozen monitor lizard eggs which he kept at home until they hatched after six months.

"I received two calls to rescue eggs, twice in the same day. But at the second venue the eggs were found submerged in a drain and could not be saved." Poh has so far saved more than 150 creatures, which were either released into the wild or put up for adoption. His most memorable rescue was a dog which was left for dead on a two-feet wide ledge on the seventh floor of a building. "I grabbed my rock climbing gear and went with my friends. "It was scary because none of my friends knew how to operate the harness and gear, but I was more concerned about rescuing the dog," said Poh, who works in the entertainment industry.

He said he was thankful for the support on social media, which also helped raise funds to sustain his rescue efforts. In order to find a home for stray cats and dogs, Poh stands on the street with a sign hung around his neck which reads "Rescued puppy/kitten for adoption". "I do this despite the hot weather because it gets more attention than me putting it on Facebook, "he said.

The longest Poh has spent standing on the street to find a stray a new home was eight days, for eight hours each day. "I'm quite picky with those who show interest in adopting. I will interview them and listen to my instincts before handing the cat or dog over," he said. To protect the animals from the sun and keep them comfortable, Poh would bring along an umbrella, ice packs and fans.

Source: https://www.thestar.com.my . Malaysia.



## Organic way to develop life skills

Yeap (left) handing over a mock cheque for RM120,000 to Nasom Malaysia chairman Feilina Feisol at Kitchen Shop, Kuala Lumpur.

National Autism Society of Malaysia (Nasom) will engage consultancy firm and supplier Kebun Kota Sdn Bhd to set up an organic farm in Kuantan, Pahang, to help autistic children gain valuable life skills.

Under a collaborative project launched last year, La Gourmet and its sole distributor Katrin BJ Sdn Bhd as well as its key retailers collected RM120,000 which was handed over to Nasom to develop a sustainable organic farm.

Katrin BJ managing director Jean Yeap said the setting up of the Nasom organic farm would be done through the sale of the La Gourmet Owl Collection (featuring thermalware, lunchboxes and water bottles) this year.

"The plan is to make this (project to develop an organic farm) a sustainable success so that autistic children growing up will have skills to man and expand the farm.

"The output will be sold through Kebun Kota or those in the distribution of organic vegetables to end-users or wholesalers," she said at a cheque presentation event at the Kitchen Shop, Kuala Lumpur.

Yeap shared that Katrin BJ and La Gourmet International LLC were eager for the project's success so that the Nasom Kuantan model could be adopted by others and more farms could be developed in other states.

"Other centres can adopt this successful model to benefit autistic children with skills and gainful employment," she added.

Yeap is expecting demand for organic produce to grow in the country.

"If these projects are well managed, we should put in more commitment to encourage these organic farming projects to grow into a phenomenal success," she emphasised.

She said Katrin BJ would continue to support programmes for autistic children.

"Autistic children, when they become adults, will be able to take care of their basic needs and the money can later be used to develop their latent talent further so that they can get employment elsewhere or venture into small business managed by these centres.

"We truly hope retailers here will continue to support us in the projects and we hope to work with Nasom to expand the programme," she said also suggesting that Nasom create branding for the organic produce for marketing purposes.

Retailers participating in the fundraising project by distributing the Owl's Collection are Aeon, Isetan, Parkson, Robinson, Sogo, Ben's Independence Grocer, Village Grocer and speciality shops House of Presentation, Kitchen Shop and La Gourmet Boutique Shop.

Under the first collaboration project in 2014, RM133,859 was collected to initiate Nasom's Skill Develop-ment Fund where the money was used to pay teachers to train autistic children to print batik, bake, and organise sewing classes.

Under the second collaboration in 2016, RM200,000 was collected for the construction of a building to house a laundry hub and for batik printing.

Yeap said the progress in the Skill Development Programme could be seen as it was helping autistic children attain useful skills so that they could be self-supporting.

"The batik printing, craft and fashion products made from the fabric are very saleable."

"Those involved in the tie and dye batik printing are as young as six years old."With the increase in demand for the merchandise, the students are earning pocket money. They are now able to produce their batik independently and sell them to friends and corporates, "she added.

Source: https://www.thestar.com.my 31 Aug 2019. Malaysia.

# Poverty alleviation through rural tourism development



Japan International Cooperation Agency (Jica) volunteer Yuichiro Watanabe briefing visitors from Japan on the mangrove forest located in the KK Wetlands in Kota Kinabalu.

KOTA KINABALU: Over the years, Sabah has seen a growing number of homestays and camping grounds cropping up, overlooking scenic views of rivers, nature and mountains in the rural areas.

Districts such as Kadamaian, Kiulu, Ranau, and Tambunan among others have become quaint destinations of choice for vacationers in search of the experience of living closer to nature.

Nature-based activities such as hiking, trekking, water rafting, and even extreme sporting events have also increased following its popularity among travel adventure enthusiasts.

Such eco-tourism potential has moved many rural villagers into taking the opportunity to generate income and create quality tourism products in line with the state government's effort to develop rural tourism and elevate the people's economic status.

Prior to 2014, rural tourism development was not fully implemented throughout Sabah until Sabah Tourism Board (STB) chairman Datuk Joniston Bangkuai, in realising its potential, called on STB to look into the matter.

A Rural Tourism Product Unit was setup immediately to identify potential rural tourism products and to encourage involvement of village community as well as local authority. This followed by activating the Tourism Action Council in all districts throughout the state.

Small districts namely Kiulu in the Tuaran parliamentary constituency and Kadamaian in the Kota Belud parliamentary constituency were then chosen by STB management as two pioneer districts for rural tourism development.



Japan International Cooperation Agency (Jica) volunteer Yuichiro Watanabe briefing visitors from Japan on the mangrove forest located in the KK Wetlands in Kota Kinabalu.

"The effort taken to introduce and develop rural tourism for two years has resulted in the implementation of Visit Kiulu Month (April 2017) and Visit Kadamaian Month (May 2017).

"This 2017 visit month programme has significantly impacted the locals as the programme is able to promote the two districts locally and overseas. For example, the influx of tourist into Kiulu has provided direct profits to the villagers.

"In both Kadamaian and Kiulu, the 'lung washing' activities such as hiking and trekking have successfully attracted local tourists and those from China, South Korea, and Europe," said Joniston. This success has motivated villagers from other districts such as Tambunan, Kota Marudu, Tenom, Keningau, Kudat, and Ranau to follow the footsteps of implementing and developing rural tourism in their respective areas.

During the 2017 visit month, Kadamaian recorded 90,000 tourist arrivals with RM900,000 in tourism revenue while Kiulu received 53,000 tourists with RM4.3 million in tourism income. Joniston hoped the target of 400,000 visitors and RM20 million tourism receipts could be generated through Sabah rural tourism, which comprises 25 districts, this year.

"For STB, we will continue to promote and market rural tourism products and implement a strategic plan. STB will also continue to work with district tourism action council (in 25 districts) to bring Sabah's rural tourism to the international level by 2025," he stressed.

As at January 2018, almost 98 per cent of District Tourism Action Council have been activated to bring tourism progress in rural districts throughout the state.

Source: <a href="https://www.nst.com.my/news">https://www.nst.com.my/news</a> . April 30, 2018. Malaysia.

# Sabah Rural Development Ministry plans rural tourism initiatives through Mini Estet Sejahtera



Minister Ewon Benedick (left) who is Kadamaian assemblyman, said Kampung Sayap would be pioneering the pilot programme, starting with SK Sayap through its edu-tourism programme in welcoming visitors including international tourists. (NSTP/COURTESY KPLB)

KOTA KINABALU: The state Rural Development Ministry plans to further develop rural tourism through the Mini Estet Sejahtera (Mesej) project, starting with Kadamaian, located in the Kota Belud district. Minister Ewon Benedick who is Kadamaian assemblyman, said Kampung Sayap would be pioneering the pilot programme, starting with SK Sayap through its edu-tourism programme in welcoming visitors including international tourists.

"The school initiative would enhance the knowledge of students in tourism industry and generates fund for the school.

"I had launched the edu-tourism programme at SK Sayap in 2016 before becoming an assemblyman.

"The school has an upside-down hut as an attraction in its edu-tourism park. I hope more schools would emulate such ideas and find activities to generate economic returns for the school fund.

"Today, Kampung Sayap being identified as the pilot group for the rural tourism Mesej is another example of my commitment to continue supporting them," he said after receiving a courtesy call from the SK Sayap Edu-Tourism main committee and the village tourism main committee at his ministry's office here.

He said the new programme would be conducted in collaboration with Sabah Tourism, Culture and Environment Ministry through Sabah Tourism Board.

Meanwhile the school's edu-tourism coordinator Boniface Jiran said they welcomed such efforts to incorporate the new Mesej concept in the village, which would in turn bring positive impacts to Kampung Sayap, such as improvement of road links there.

"The edu-tourism approach also helped improved the students' academic performances, where they all have achieved the basic ability for reading, writing, counting and reasoning.

"At the same time, it also increased their confidence as they could communicate in English with foreign tourists as we had visitors from Japan and England coming to the school," he added.

Source: By <u>Mohd Izham Unnip Abdullah</u>. <u>https://www.nst.com.my/news/natio</u>. June 20, 2018. Malaysia

# Woman in Malang makes Christmas-themed sock dolls, empowers stay-at-home mothers.



Christmas-themed sock dolls are hand-made by Sri Kurnia Mahiruni in Malang, East Java. (JP/Aman Rochman)

The birth of her second child in 2015 inspired Sri Kurnia "Nia" Mahiruni, 35, to make dolls from socks in between tending to her new-born baby. After three months, Nia had numerous sock dolls and friends who visited her showed interest in them.

"In the beginning, I made the sock dolls from scraps of fabrics and cotton from unused mattresses. I made it for myself but other people like the dolls too," Nia told The Jakarta Post in Malang, East Java.

Almost four years since making her first sock doll, Nia has loyal buyers. Every month, Nia makes approximately 250 15-centimeter dolls and 50 33-cm dolls.



Sri Kurnia Mahiruni makes sock dolls based on orders in Malang, East Java. (JP/Aman Rochman)

But during the holiday season, bigger Christmas-themed dolls are in high demand. Nia now stuffs her dolls with dacron and said the main challenge is to find new socks with typical Christmas motifs, such as Santa Claus, strawberries, reindeer and red and white colors. The making of a doll starts with finding different colored socks. A doll requires three to five different socks; Nia makes the legs from one sock, sews the edges and then fills them with dacron. To make the body and head of the doll, different socks are used. The nose and eyes of each doll have to be hand-stitched, and finally, each doll is packed. Experienced sock doll makers only need an hour to complete one piece.



Sock dolls created under the brand Dafayu are stuffed with dacron. (JP/Aman Rochman)

"When I first started taking orders for Christmas-themed dolls, my firstborn who was in the fifth grade, was criticized because we are Muslims. I explained it in a way that children could

understand – about our [country's] diversity in religions, tribes and languages. We have to respect and tolerate our brothers and sisters of different faiths," said Nia.

The home-industry sock dolls are marketed through online media and are already Indonesia National Standard (SNI) certified under the brand <u>Dafayu</u>. They are displayed in a number of hotels in Malang and cost between Rp 80,000 (US\$ 5.49) and Rp 140,000 per piece.

Now, apart from making dolls based on orders, Nia also gives workshops for housewives. She empowers stay-at-home mothers with skills that can help them earn an income. (mut)

Source:

### Young and bold



Going nationwide: The startup hopes to expand its delivery services to other states by the end of the year.

ENTREPRENEURSHIP among those in their early 20s is nothing unusual these days. But opting to start a business in the mattress line may come across as rather odd for a couple of 23-year-olds, particularly so when they knew nothing about mattresses.

However, Winson Chong and Joey Tan, founders of Joey Mattress, thought they couldn't step away from a problem they encountered while shopping for a mattress. "Basically, the mattress shopping experience sucked. Salesmen are pushy and the prices are very high and there are so many confusing options," says Chong.

Surely, others felt the same. And the time seemed right for some shake-up in the industry, they note. "This is a traditional industry and not a lot of young people would go in. I feel like there should be some innovation in this industry but no one is actually doing it. That's why we see an opportunity, "says Tan. The duo set out to introduce the e-commerce model to the sector – because, why can't mattresses be sold online? – and change the shopping experience for consumers. They allowed customers to try the mattress at home for 99 days and offered an easy return and refund policy.

Apart from just changing the business model, they also decided to develop their own product.

Chong laments that there was no suitable mattress out in the market. The one he ended up with gave him back pains that led to visits to the chiropractor.

"You buy a mattress after trying it out for five minutes at the showroom. That's not enough. And if you find that you don't like it after one month, there's not much that you can do about it. You can't return it.



Pleasantly surprised: Although new, Tan (left) and Chong were surprised by the support they got from the market.

"We wanted to develop our own mattress (instead of sell other people's mattress online) so that we have more control over the product. And a mattress is quite a heavy investment. I feel like I need to be confident in what I am selling, " shares Tan. But going into production required capital and expertise, both of which they lacked.

In early 2018, they came up with a business proposal and started knocking on manufacturers' doors to see if there were any takers willing to back their ideas. No one took them seriously. But through a stroke of luck, they found an established manufacturer who was open to the idea of trying something new. The manufacturer invested in their start-up and gave them access to their network of expertise, enabling them to carry out research and development (R&D) work to produce their own proprietary mattress.

They focused on producing only one type of mattress. "We want to make the experience easy and enjoyable for customers. We don't want to give them a ton of confusing options. We prefer to just give them the best option," says Chong. Naturally, R&D work involved a lot of sleeping. They tried out different mattresses and studied various materials used in making these mattresses. They also followed friends and family on mattress shopping trips to get behind what it is that people are really looking for in their mattress.

Well, it boils down to comfort and support, he says.

They finally came up with the J-foam and leveraged on their investor's operations to produce the new mattress for them.

The fact that they have direct access to a manufacturer is an advantage for Joey Mattress as they are able to keep costs low. Once the mattresses are produced, Chong and Tan manage the online sales and delivery.

By March this year, they were ready to push their product out to the market. "I expected the market to take longer to accept this idea. But turns out, quite a lot of them are receptive of the idea (of buying mattresses online). Once we had the exposure, we started gaining trust. What surprised me was that many Malaysians actually want to support local startups," says Tan.

By the end of July, they had sold over 30 mattresses – exceeding their expectations. And customer feedback has been positive so far. "That was a real confidence booster for us," notes Chong.

Currently, Joey Mattress caters to the Klang Valley region but they hope to expand to other states by year-end when they can expand their lorry fleet. Chong says they are also looking into further improving their product and to expand their range. For example, he hopes to add in removable covers for their mattress. They have also received requests to develop baby-sized mattresses. He also foresees opportunities in other products such as pillows and other sleep-related items.

But those are far off plans. "The R&D work for one product takes a long time. There's such a huge knowledge gap between what we know and what is right (for a product). It's such a traditional industry and I think a lot of the existing manufacturers have been doing things the same way, like they know where certain things are supposed to go. But they may not have actually tried those products," adds Tan.

Tan notes that the local mattress industry is very competitive and many of them are trying to innovate. However, she believes Joey Mattress has a first-mover advantage. "It's hard for others to imitate our business model because branding online is hard and it takes time. We are still a pioneer in the industry. And going online requires you to be transparent in your pricing, which a lot of established players may not want to do, " she says. She also thinks there is a sizeable young adults market – their main target demographic – to help buoy the company's growth.

Although new to the market, Chong and Tan are aware that selling mattresses is a long-term game. After all, the product has a 10-year warranty. "We are here to stay. And we are excited about what's ahead. Hopefully, after becoming Malaysia's favourite mattress brand, we can look at the region," mulls Chong.

Source: https://www.thestar.com.my Malaysia. 09 Sep 2019

# **MYANMAR**

### **Accelerating Rural Electrification in Myanmar**



Photo by Julien de Salaberry on Unsplash

An early-morning fresh market in the middle of Salingyi town in Central Myanmar is bustling with farmers, traders, and entrepreneurs coming from surrounding villages to sell assorted agricultural produce and handicrafts. Piercing noises and acrid fumes from a welding shop, a rice milling machine, and oil pressing equipment fill the air when the diesel generators are switched on.

Villages in Salingyi are among 31,000 villages in Myanmar that are not connected to the main national utility grid but are powered instead by diesel generators, solar home systems, car batteries or other sources of electricity. We must ask: What other businesses could open their doors here and how many more jobs could be created if this village were given access to reliable, productive electricity?

Myanmar has one of the lowest electrification rates in Asia, with more than 60% of the population without access to a modern form of electricity, denying people the ability to work, weakening health and safety, education, and limiting the opportunity to rise out of poverty. Energy poverty constrains socio-economic development. Electricity is not only critical to human well-being, it is the undercurrent of a thriving economy.

In partnership with the World Bank, the Government of Myanmar developed a National Electrification Plan that aims to achieve universal energy access by 2030 through grid

extension and decentralized rural electrification via mini-grids and solar home systems. According to World Bank, the government will connect 2 million households from 2015 to 2020 and an additional 5.2 million households from 2021 to 2030. To achieve this goal, the World Bank launched a USD \$400 million initiative to provide technical assistance and finance grid extension and off-grid electrification in 2015. Through this initiative, energy service companies are incentivized to participate in building and operating decentralized mini-grids in rural areas.

Despite the fact that a number energy service companies (ESCOs) are building mini-grids with support from the Department for Rural Development (DRD), World Bank, GIZ or privately led efforts, ESCOs encounter several issues in scaling their business. These include: 1) generating demand in villages, 2) finding micro-loans to assist rural customers to procure new electrical appliances and buy power from mini-grids, 3) selecting viable sites for setting up mini-grid systems, 4) accessing different financing options, 5) collecting data and using it to improve performance. ESCOs are also concerned with the arrival of the main grid in villages where their mini-grids are constructed because there is no policy or mechanism to sell power to the main grid or buy power from the grid and distribute it to communities.

To address these challenges and accelerate electrification in Myanmar, The Rockefeller Foundation has selected Pact, the largest international non-governmental organization in Myanmar, to establish the Smart Power Myanmar facility in May 2018. The facility aims to advance public-private partnerships that significantly accelerate universal rural electrification and improve the lives of all people, including women and ethnic nationalities, by enabling access to productive power that will spur economic development.

The founding Members of the facility—The Rockefeller Foundation, World Bank, USAID, and Yoma Strategic Holdings—will seek to align and coordinate existing and potential future investments in decentralized renewable energy mini-grid systems with the services provided by the Smart Power Myanmar facility. Specifically, the facility will focus on three priorities:project development support and demand (household and productive loads) facilitation for energy service companies (ESCOs) and developers

investment facilitation and business modeling for last-mile electrification models; andpolicy support and industry coordination.

Underpinning the three priorities will be a powerful data analytics and knowledge function designed to build policy evidence, strengthen the investment case, and better equip developers with world-class capabilities.

Our work will focus on geographical areas where the private sector, government, and communities have a shared interest in establishing mini-grid projects. It will seek, wherever possible, to advance rural electrification based on integrated plans that identify a clear roadmap for mini-grids and other distribution systems to be rolled out, and in line with the country's National Electrification Plan.

We decided to undertake this work based on the success we've experienced in our <u>Smart Power India</u> effort. In India, we've incubated several models with private energy service companies to extend electrification through mini-grids that now power more than 120 villages in some of India's most energy-starved states. Fueled by a network of partners, Smart Power India has energized 5,000 enterprises and is transforming the lives of more than 60,000 Indians. And it taught us a valuable lesson in India: People are willing to pay for access to productive, reliable power and their ability to pay is often very reliable. With these lessons and a commitment to bring access to reliable power to millions of poor and vulnerable people, we've expanded Smart Power not only to Myanmar but to parts of Sub-Saharan Africa as well.

In addition to launching the Smart Power initiative in Myanmar, The Rockefeller Foundation's support for the people of Myanmar is focused on strengthening civil society organizations and governance and facilitating dialogues to promote inclusive development planning and cultural diversity and awareness.

Source: https://www.rockefellerfoundation.org . 18 April, 2018. Myanmar.

# Bringing hopes to farmers: FAO provides agricultural assistances with CERF funds



In 2018, heavy monsoon rains in July brought floods to many states and regions in central and south-eastern parts of Myanmar. According to the official statements, at least 22 people died and more than 155 000 people were displaced by this natural disaster at present year.

Ministry of Agriculture estimated that about 855 000 acres of agricultural land in total were damaged by flood and over 73 000 acres of farmland were flooded in Mon State which is the region regularly encounters the flooding.U Hla Kyin is a 71 year-old farmer who lives in Shwe Hlay Village, Mon State. On his only three-acre land, he grows rice and seasonal crops together with his 71 year-old wife."My two sons helped me in the fields before, but they are now working at the other side (Thailand) to earn more money for their future," he said. "I can't afford to hire anyone to help me. I grow the crops by myself," he added.

Shwe Hlay is one of the villages in Mon State that was severely affected by the floods last July. Farmers finished growing the paddy fields in early of the month and the flood damaged the fields. After the first time flooding, they again continued to grow one more time – hoping to catch up with the monsoon paddy planting season, but unfortunately the floods hit the area again and farms are further destroyed.

"More than 75% of our village's farmland had already been cultivated at that time. Our paddy fields were under the water for nearly one month. All we had grown were ruined." U Hla Kyin said. "I was left with nothing to grow," the old farmer said. Realizing the emergency level of this situation, Central Emergency Response Fund (CERF) has allocated the funding of about USD 850 000 to the Food and Agriculture Organization of the United Nations (FAO) in order to provide the essential agricultural assistance in Mon State, Kayin State and Bago Region.

"To support farmers to recover rapidly after the floods, agricultural assistance for the

restoration of farmlands represents a critical opportunity for flood-affected regions in Myanmar," said Mr Andrea Berloffa, Senior Resilience Officer of the FAO. "The major need after the floods is the assistance both in cash or in kind that can help restoring their agriculture livelihood activities," he said. Through the distribution of agricultural inputs such as: fertilizers, green and black grams, vegetable seeds, etc., this humanitarian assistance will reach to more than 14 000 households – supporting them to re-establish their agricultural livelihood activities on their farmland once again when winter crop season comes.

"After hearing that we will receive the seeds and fertilizer from the FAO, I plot my land to be ready to grow right after getting them. My land won't be empty in coming season," the 71 year-old farmer said while putting the fertilizer bag onto his small hand-pull cart.

Source: http://www.fao.org/myanmar

## Getting back to basics at Thagyi Thamee restaurant



Kay Thi Myint, founder of Thagyi Thamee, shows htan gau hpa take-away boxes. Thiri Lu/The Myanmar Times

It constantly rained cats and dogs in Yangon at the beginning of August. Despite the nasty weather, Thagyi Thamee restaurant (which means daughter of the village headman) opened and became popular among Yangon residents in a short time offering a limited set menu and unique take-away policy.

When customers order take-away, they receive a 5 percent discount if they provide their own bags. If they do not have their own bag or carrier, they can buy recyclable, biodegradable and eco-friendly take-away boxes at the restaurant, which will help support rural people and a clean environment, said Kay Thi Myint, founder of Thagyi Thamee restaurant in Yankin township, Yangon.

She said the policy is aimed at reducing the use of plastic bags at her restaurant. At first, she thought about using leaves for packaging, but the suppliers were not ready to meet the demand, and the product was hard to maintain and easily damaged. At her cousin's advice, she went to upper Myanmar to find htan gau hpa, a four-cornered basket with removable cover woven from palm fronds. Going village to village, she finally found a supplier but also found that the items were hard to maintain. "One of my friends, who runs a chopsticks warehouse, suggested that I use steam to prevent the items from being ruined by fungus. However, this method was only good for two months. Finally, I found the solution was to keep them out of the wind. It really works for long-term keeping," Kay Thi Myint said.

Instead of monosodium glutamate (MSG), her restaurant will soon introduce sweet potato powder as an alternative flavour enhancer. Authentic desserts are best sellers at the

restaurant. It was not easy going to get close enough taste as regional style. She visited Mandalay, where she paid residents to teach her how to cook milk cuisine. Now more people are interested in using htan gau hpa to buy take-away, and she is happy with her success in raising awareness among customers of eco-friendly packaging. Ma Win Min Than, a beauty blogger, helps her as a business consultant, brainstorming digital marketing campaigns for her restaurant, which helped Thagyi Thamee become popular among Yangonites in a short time.

"I practice this motto: think global, act local. It is not new for us. We used to recycle and upcycle things when we were young. We have tried to reactivate the old school ways," Ma Win Min Than said.

Kay Thi Myint said she owes her current success to her previous experience in successful businesses. When she worked as an employee, she didn't have the confidence to run her own business. If you have the desire, you will work hard, she said, but it is not good to focus only on making money. She worked in the food and beverage field for four years, starting with a franchise, Astons Specialities, a famous steakhouse from Singapore. She and her husband run the franchise, which now has two outlets in Yangon and served as her "school" in restaurant marketing and strategy. Actually, she graduated in Singapore, but she returned home because of her father's health. Although she had no background or knowledge in the food and beverage field, all of her co-workers and friends liked to eat good food. That's why she set up the restaurants.

"Most Asians don't like western food, but Astons' taste is very similar to Asians' taste, so I bought a franchise. After having success running this, I thought the next step would be a restaurant serving good local food. At that time, my three-year-old boy loved to eat fried chicken, but we weren't satisfied with most fried items due to their use of MSG. My husband is good at cooking, especially fried chicken, and his food is delicious, so I had an idea to offer authentic chicken with premium quality," she said.

Most fried foods are not healthy, but if the oil is clean and there is no MSG, they are safe, she said. Therefore, she decided to open a restaurant with a limited set menu of rice and fried chicken, fried eggs and sausages using only pure oil. Also, she created desserts such as milk cuisine, butter cream and traditional spaghetti from upper Myanmar.Quality control is very important in the restaurant business, so she constantly keeps an eye on quality, she said.

"We have a standard procedure to check ingredients. If they do not meet our standards, we do not hesitate to reject them from our suppliers. We check quality from beginning to end, and we train our staff in hygiene, knowledge and background information. My husband and I are involved in the whole process to ensure consistency," Kay Thi Myint said. Thagyi Thamee restaurant is in Yankin township near ILBC international school. It is open daily until 7pm.

Source: AYE THU SAN. 19 AUG 2019. https://www.mmtimes.com Myanmar.

## Lighting Myanmar's remote villages



Geert-Jan ten Hoonte, president and chief operations officer of SolarHome: "We as a company have only one task – to fulfil the needs of our customers." Thiri Lu/The Myanmar Times

Geert-Jan ten Hoonte, president and chief operations officer of SolarHome, a Singapore-based start-up that offers pay-as-you-go solar energy for off-grid households, believes his firm has developed a solution to Myanmar's shortage of electricity.

According to the World Bank, only 69.8 percent of Myanmar's people had access to electricity in 2017, compared to 57pc in 2016. The international financial institution is working with Myanmar's Department of Rural Development (DRD) on achieving universal access to power in the country by 2030.

The National Electrification Project (NEP) aims to supply electricity to nearly 700,000 households in more than 8000 villages by 2021. There are 10.9 million households in Myanmar, according to the Ministry of Electricity and Energy (MOEE), of which only 4.71 million households are on the national grid. Households and businesses outside the grid have to buy electricity from private firms at higher rates.

These people, especially in rural areas, need power for daily usage such as charging their phones or just having a light in their house.

Meanwhile, the price of electricity for those who are on the national grid is rising. The ministry announced a hike in rates beginning in July for both residential and business users – the first such increase in five years. The ministry raised the rates because it lost K507 billion in fiscal year 2017-18 and K630 billion in fiscal year 2018-19, according to the Ministry of Planning and Finance.

For people at the bottom of the pyramid, the national grid could prove to be too expensive. Another group who could benefit from solar energy are those who want a back-up system as the grid is not yet 100pc reliable. SolarHome offers an affordable alternative to fill this gap, Hoonte said.



Geert-Jan ten Hoonte speaks to The Myanmar Times on August 7 at Solar Home's head office in Yangon. Photo: Thiri Lu/The Myanmar Times

#### Expansion potential

There is good potential for growth in this field. In fact, SolarHome expects to triple its customer base to 100,000 by the end of the 2020, from 33,000 currently.

The firm has 23 hubs and a presence in more than 300 townships in Tanintharyi, Ayeyarwady, Bago, and Magwe regions.

SolarHome was launched in 2017, seeded and developed by Forum Capital Pte Ltd of Singapore. The start-up's rent-to-own subscription packages start at K6000 per month for 24 months, which includes a 4-watt solar panel, two light bulbs and a portable light. It also has a plan for K13,000 monthly for 24 months that offers a 40W solar panel with three bulbs lasting 8 hours and the capacity to charge four phones daily. This plan requires a K10,000 service fee in the first month. There is also a K27,000 monthly plan that includes a 24-inch TV, a 40W panel, battery, antenna, and cables.

There are two instalment periods – six months and 24 months – and the products come with a two-year warranty. The panels – issued by Lighting Global, managed by the International Finance Corporation – are manufactured in China of international quality.



Ma Wit Yi Aung, Solar Home's head of communications for sales, displays Solar Home's portable light. Photo: Thiri Lu/The Myanmar Times

"[K5000-K6000] is our entry price where we basically reach the bottom of the pyramid of customers in rural areas. Even now in the monsoon, they are not able to afford the K6000 price tag, so we are introducing a system where the customer can pay less. This means it will take longer for them to own the system, but they can have light during this period," Hoonte said.

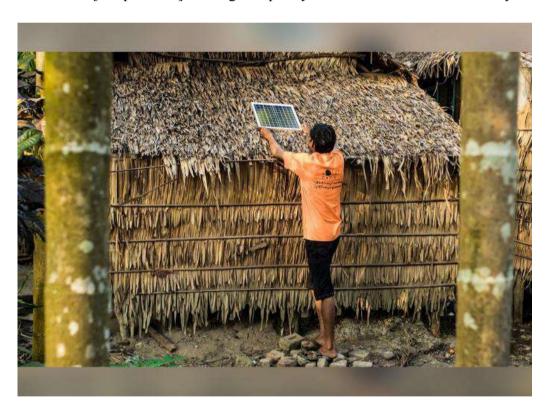
The products need to be topped-up monthly in order to continue using them. Customers can make payments to an agent, mobile money, or the team sends out someone to collect the payment.

#### Working with the government

The first challenge the firm has to overcome is to educate people that solar can really work, as they are used to cheaper and inferior products. "We cooperated with government officials to educate villagers about solar and the environment. It was very positive and we would like to continue this cooperation." A request will come to SolarHome from either a village head or a distributor for the products, and the company will dispatch a small team with the products to explain them to the villagers at a meeting.

"It's really important to know the best place to install the solar panels," he said. The products last three or four years with no problems. After that, the main problem is the battery, not the panels.

"We tell them that [our products] are of good quality and will even work in the rainy season."



Solar Home employee positions the solar panel on the roof of a village hut. Photo: Supplied

SolarHome employs 390 people, with 340 in the field, and the rest at the head office in Yangon and the call centre. "For repairs or other problems, locals can phone the call centre. Our regional executives, who are regularly in the area, can also provide assistance. Most requests go through the call centre and then to our hub," he said.

We replace everything, no questions asked, unless our device is damaged with an axe, he joked.

The instruction manuals and the phone numbers have been localised so customers can get the service they need.

#### Investors needed

SolarHome is looking for locations for expansion in 2020. Its plans include Shan State, western Myanmar, and more outlets in existing areas.

"We are prepared to go anywhere. If you look at southern Rakhine, it's very accessible and peaceful. We are having an internal discussion about whether we should go there. It's a political question and, as a guest in the country, we do not want to interfere in the political situation, so we are constantly monitoring it," he said.

The firm also wants to answer the need for its products in Chin State, Myanmar's poorest region.



Geert-Jan ten Hoonte on a boat to check the ground situation in Bago. Photo: Supplied

The company has a combination of debt and equity regarding investment. Although no local companies have invested yet, equity from angel investors, venture capital, and international investors totals US\$6 million. It also has a \$10-million debt facility at hand, said Hoonte.

"In the second quarter of next year, there could be local companies interested in investing, but we're still talking about it."

"We as a company have only one task – to fulfil the needs of our customers," he said.

"For me, it's very important that I see the field. The other day I was in Bago. We went there by boat and in the morning there was a briefing in the hub, where I got their direct feedback. Then we went to a customer's home and interacted with them," he said.

"It's nice to have a project like this in a country like Myanmar. When we bring lights into a house, the villagers are really happy, and that's something really nice," he added.



Solar Home brings light into rural homes. Photo: Supplied

Source: https://cutt.ly/XetxItZ

### Myanmar's farmers go hi-tech



This file photo shows women farm workers tending to a rice plantation outside Naypyidaw on 1 May, 2018 during Labour Day in Myanmar. (Thet Aung / AFP Photo)

According to the World Bank, Asia supports the food demands of 60 percent of the global population by using just 23 percent of the world's agricultural land. Due to an increasing population and decreasing land mass, the role of technology in agriculture is key.

This is where the booming start-up scene in Southeast Asia could come in handy for farmers. Some developers have seen the potential of using mobile app technology as a means to revolutionise the agricultural sector by creating apps specifically for it. These apps have the potential to help farmers utilise and <u>maximise their limited resources for a better yield of crops</u>.

#### Myanmar's farmers

In Myanmar, the agricultural sector accounts for some 28 percent of the country's gross domestic product (GDP), but yields are low due to farmers being cut-off from modern technology under the previous regime for decades. Farmers in Myanmar are still among the country's poorest. A 2017 World Bank study found that farmers in some areas of the country still earn as little as US\$2 per day. Compared to other rice-yielding nations in the region, rice paddy generation is also low in Myanmar at 23 kilograms (kg) a day as opposed to Cambodia (62kg), Vietnam (429kg), and Thailand (547kg) respectively, a 2016 World Bank report stated.

Most people in Myanmar, including farmers, have smartphones. The country today has a smartphone penetration rate of 80 percent and app developers have been quick to create apps for everything ranging from healthcare to Myanmar's parliament.

One game-changer among agricultural apps in Myanmar is the 'Green Way' app which was launched in 2016. The app provides farmers with up-to-date information on everything from weather and climate change to crop prices and advice on pesticides and fertilisers. There is also a chat feature on the app that allows farmers to connect with each other, allowing for exchange of information. There are also tips, as well as the availability of experts on hand to answer additional queries.

The 'Green Way' app was created by two former agricultural students; Yin Yin Phyu and Thein Soe Min. "Green Way is my dream to link farmers and experts. The farmers can get help whenever they need," Yin said. It took the two young entrepreneurs five years to develop the farmer-friendly app. In order to maximise its potential, the farmer's needs, behaviours as well as farming conditions were studied closely. The application's main goal is to make it user-friendly to farmers, as they are "...a community that is afraid to use this type of technology for fear of it being too complicated," she added. More than 100,000 of Myanmar's farmers have downloaded the app, and speaking to Thai media recently, Yin said she hopes to double their user base by the end of this year and serve two million farmers over the next three years. Reaching farming communities in 329 townships across Myanmar, more than 95 percent of registered users on the platform are farmers while the rest are experts, agronomists and observers.

#### The future of agricultural apps

Another app that is helping farmers in Myanmar to be more productive is Impact Terra's Golden Paddy. The Golden Paddy platform has three channels to connect and engage with farmers across Myanmar – a mobile application, a web application and a Facebook page. This app benefits farmers by providing advice on early identification of pests and diseases and flood and drought warnings. Apart from that, the app connects farmers to potential buyers and provides them with information about market prices, indirectly increasing the bargaining power of the farmers.

"We realised that we were focusing too much on mass market, offering services (general advice and information) for a wide range of crops. As of this year, we have secured significant funding to focus on specific crops and to provide high level services for focus crops – mungbean, maize and paddy," a representative of Impact Terra told The ASEAN Post. With budding technological advances, these platforms have the potential to bring about rapid development to the region's agricultural sector. The challenge now remains in increasing the user-base for these specialised apps. This can only come about by constantly developing the technology applied and listening to the farmers that use these apps.

Source: https://theaseanpost.com. By Jason Thomas. 12 May 2019

# **Quilling comes to Myanmar**



Daw Aye Aye Swe of Quilling Card Myanmar: "Quilling is a creative art, so one needs to be artistic." Shin Moe
Myint/The Myanmar Times

## Daw Aye Aye Swe has found a new way to enjoy retirement and is following it enthusiastically.

She earned a history degree and worked from home for 20 years, then worked as a general manager at a company after her children grew up. Then she retired and reached a turning point.

So when her sister introduced quilling as a way to help the country by creating jobs for teenagers and young adults, Daw Aye Swe decided to take a chance and try to help her sister in the nascent business. Now she enjoys the job and is the owner and general manager of Quilling Card Myanmar.

Quilling is an art form that involves the use of thin strips of coloured paper that are rolled, shaped and glued together to create decorative designs. Advanced techniques and different-sized papers are used to create three-dimensional miniatures, abstract art, flowers and portraits, among many other things. It is not too popular in Myanmar yet but is very trendy in other Asian countries such as Vietnam, Singapore, and Japan.

#### Filling the skills gap

"To create a card, first we draw a sketch and then mould it by using quilling tools. After carrying out many steps, the cards become 3D," Daw Aye Aye Swe said.

Fortunately, she has the support of Ms. Huong Nguyen Wolf of Vietnam, who has set up three quilling factories in that country since 2011.

To spread the skills needed in quilling and create more jobs for women, Daw Aye Aye Swe recently got the idea to set up a vocational training school, for which Ms. Huong supplies raw materials and technical assistance.

"Our country is weak in vocational education, so I wanted to fill the gap by providing jobs for young people who did not complete their educations. If we start this as a social enterprise, we can create a lot of jobs similar to the garment industry. Quilling is not only paper but also a creative art, so one needs to be artistic," Daw Aye Aye Swe said.

Both men and women take the training, but she has a couple of criteria they must meet first. They need to be interested in making handicrafts, and be between 18 and 30 years old. She worries about the concentration of trainees who are over 30, and Myanmar labour law prohibits people under 18 in the workplace. However, if the trainee shows obvious talent, she will waive the upper age limit. The training is free, and she gives trainees a daily allowance.

She trains newcomers in the art of quilling, and they will in turn train those who follow, which will spread the skills throughout Myanmar, Daw Aye Aye Swe said.

"I plan to grow this market. Now I am preparing skilled labourers for when the market booms. On the other hand, we want to point the way for our trainees to have jobs and make money," she said.

There are four tools for quilling: forceps, a mini motor to shape paper, scissors, and a little stick. It is delicate work, and care must be taken not touch the piece with your hands. Huong supplies the raw materials, tools, and everything else that's needed from Vietnam. Everything is imported from other countries, such as Japan, Singapore and Vietnam, so the production cost is high.

However, she is confident that, with persistence, the market will boom and she will be able to set up a factory with Ms. Huong.

"Setting up a quilling workshop is difficult because the production cost is very high, so we need foreign investors and partners," she said.

#### Handmade creations

The handicraft market is beginning to gain momentum, with people appreciating and buying such items more, Daw Aye Aye Swe said.

She currently has over 30 trainees, and she wants to open a factory with 500 workers in Myanmar employing the cut, make, pack (CMP) contract manufacturing system commonly used by garment factories.

"Now I am running the business as a social enterprise, but I have a lot of cards and the quality is very good," she said.

The most important thing about quilling is colour separation, and now she has a team of workers that is skilled at this and ready to run a factory. Paper quality is important, so she uses imported raw materials.

Besides being art, quilling cards can be used as gifts, souvenirs, or in company promotions.

"Quilling provides peace of mind, and improves concentration. If someone is good at it, he or she has less stress and fewer problems, and it helps keeps teenagers out of trouble.

"My partner and I do not expect to make a quick profit, but we need to be persistent and take a long-term view. We invite young people to join our training as the next step in their futures," she said.

Source: AYE THU SAN. 28 AUG 2019. https://www.mmtimes.com Myanmar

# Royal Jaggery offers a sweet 'Made in Myanmar' product



Ko Kaung Set Naing, founder of Royal Jaggery: "We've been making more efforts to introduce people to jaggery in powder form since early this year." Theint Mon Soe (J)/The Myanmar Times

## Kaung Set Naing, founder of 555 Shwe Hintha, thinks Royal Jaggery is just the "Made in Myanmar" product the world has been looking for.

Jaggery, a healthier alternative to refined white sugar, is made from toddy palm trees or sugar cane, and its production has long been a cottage industry in Southeast Asia, including Myanmar. With concern about the harmful effects of white sugar growing across the developed world and people paying more attention to what they eat, Ko Kaung Set Naing is convinced that Royal Jaggery offers an affordable alternative.

The brand could also help raise awareness among Myanmar people of the diseases caused by eating too much white sugar. If his bid to bring Royal Jaggery to the world succeeds, it would add to the few "Made in Myanmar" products available on the world market, such as coffee, raising interest in the country and helping local farmers.

Traditionally sold in small blocks for use in desserts, candy or as a sweetener, jaggery is considered by nutritionists to be a more complex sugar than refined white sugar.

In Myanmar, jaggery is produced from toddy palm trees grown in the central and northern areas of the country. The source of 555 Shwe Hintha's products is Yesagyo township in Magwe Region, which is famous for its jaggery.

'Japan is familiar with jaggery from Myanmar, but we need to explain to Europeans our production standards and jaggery's advantages.'

Ko Kaung Set Naing plans to expand sales of Royal Jaggery not only to major cities but also overseas. He first thought of selling jaggery overseas after a trip to Thailand in 2016, where jaggery production and consumption has been commercialised.

"I've been in the traditional jaggery business for years but needed to add value. When I saw how jaggery is booming in Thailand, I decided to change the way we make it," he said.

Moving away from producing jaggery in blocks, Ko Kaung Set Naing entered into a partnership with a Japanese firm, where he learned how to make it in powder form. However, he found that the local market was not ready for this new kind of jaggery, which was more expensive, although the powder is easier to use.

"We've been making more efforts to introduce people to jaggery powder since early this year," he said.

He now has orders not just from the local market but also from overseas. However, he found that costs are higher when selling overseas because of the need for special packaging and reliable delivery.



Royal Jaggery products on display at a trade fair. Photo - Royal Jaggery Facebook page

The company, which has financial and technical backing from the Netherlands and Denmark for the production of jiggery, has trained the climbers who collect the sap of the palm toddy in villages in Yesagyo to uphold strict hygiene standards. The climbers collect the sap from March to October.

This new business for 555 Shwe Hintha has resulted in higher incomes for farmers who grow the toddy palm trees. The largest export markets for jaggery are China, Japan and South Korea. In Southeast Asia, Thailand, Vietnam and Indonesia also export jaggery. The company has set its sights on selling to the European market, for which he must ensure that the product meets international standards. "Japan is familiar with jaggery from Myanmar, but we need to explain to Europeans our production standards and jaggery's advantages," he added. He said Myanmar jaggery faces a challenge breaking in to foreign markets because it is not supported by government-to-government export agreements. He said that on average, Japan imports 30 tonnes of jaggery powder, and 20 tonnes are consumed domestically a month. The company plans to export to South Korea, China and the Netherlands. It plans to open a factory in Yesagyo that can produce 700 tonnes of jaggery a year.

Source: ZEYAR HEIN. 05 AUG 2019. https://www.mmtimes.com Myanmar



Story by Nang Phyu Phyu Lwin

Phyu Phyu Lwin lives in Htamhsam village in Southern Shan State. The village is centered in the Pa-O Self-Administered Zone, which is a region of three townships in Taunggyi District. In Htamhsam agriculture is the main source of livelihood, and here the villagers are growing rice, corn, ginger, turmeric, garlic, and soybean. But the output is low. The farmers use traditional agricultural techniques and haven't had any extension support. As a result, the farmer's economic situation isn't stable; "Farmers do not have extra income or saving. They are stuck in the cycle of using the income from the harvest for the next season," tell Phyu Phyu Lwin. Moreover, the farmers in Htamhsam use the pesticides they can find at the market and throw the containers away after they have used them. They do not know what kind of damage chemical pesticides may cause on the crops or on the people. Sometimes the children find the cans and plays with them or even worse, they put water in them and use them as drinking bottles;

"We just thought that the colored labels on the chemical pesticide containers were decoration. But after I received training, I found out that the labels show how hazardous chemical pesticides are. For instance, red labels indicate a high level of toxicity and blue labels indicate lesser toxicity. I learned that not only liquid chemical pesticide but even its container can badly affect us." Phyu Phyu Lwin received training at MIID's Farmer Field School. Before there were no supporting organizations or agricultural training. The focus of the Farmer Field Schools is teaching the farmers about agricultural practices in both theoretical and practical terms, and enable them to apply their new knowledge at their own farms. "I learned that we need to dispose those empty containers properly and we need to keep pesticides and fungicides out of reach of children. That is why, the training is very good and helpful for our farmers," she concludes.

Source: https://www.mmiid.org. (Myanmar Institute for Integrated Development (MIID)

### YKKO: From small shop to major brand



Daw Aye Myat Maw, director of YKKO: "In the local food and beverage industry, YKKO has the biggest supply chain, so there was no one to show us the way." Nyan Zay Htet/The Myanmar Times.

From a small neighbourhood shop selling vermicelli and meatball soup about three decades ago, Yan Kin Kyay Oh (YKKO) has grown into a prominent Myanmar brand with 38 outlets across the nation.

"We have branches in five cities – Yangon, Mandalay, Nay Pyi Taw, Mawlamyine and Bago. By the end of this year, we expect to open four more shops, and we expect the total number of shops to reach 50 by 2020," said Daw Aye Myat Maw, director of YKKO.

But it has not always been smooth sailing for YKKO. The company was incorporated in 2012. By 2014, the business had grown from 16 to 33 outlets, at which point, many operational requirements became obvious, such as the need to strengthen cash flow. As a result, YKKO had to shut a few outlets in order to control costs.

"We decided to temporarily stop our rapid expansion and focus instead on improving our management and the functioning of the head office," Daw Aye Myat Maw said.

Fortunately, help came earlier this year when Singapore -listed Yoma Strategic acquired a 65 percent stake in YKKO, in a deal worth US\$12.6 million. Yoma said the Myanmar restaurant complements the foreign brands in its food and beverage

portfolio, which includes KFC, Little Sheep, and Auntie Anne's. The remaining 35pc of YKKO is owned by its four original stakeholders.

Daw Aye Myat Maw, whose parents were among the founders of YKKO, discusses the restaurant's journey from a neighbourhood shop to a national brand:

#### How did YKKO start?

Yan Kin Kyay Oh was established by the late U Nyan Lin, his wife, Daw Yu Yu Lwin (the current chair), and my parents in 1988. When the second branch in Saya San street opened in Yangon in 1993, we started using the abbreviation YKKO. In 2003, outside partners joined our family business and a shop was opened in Hledan street downtown. Later, as more and more shops opened with different shareholding structures for each one, accounting became tiresome so we decided to form a holding company in 2011 for more efficient management.

#### What difficulties have you faced in opening new branches?

In the beginning, it was difficult to get our accounts accurate. We then managed to improve our accounting system with the help of one of our partners. As we have added more chains, the challenge shifted towards offering consistent quality. We've provided many training programmes to staff. Another challenge was the supply chain. We buy a lot of pork, so you'd expect economies of scale. But in fact, it was quite difficult to get the quality and quantity we wanted, so we had to pay more. Getting chicken used to be a problem too before CP entered.

Even now, it is still difficult to get good quality mustard leaves in the quantity we need.

As we continued to improve our brand, everything was by trial and error. In Myanmar's food and beverage industry, YKKO has the biggest supply chain, so there was no one to show us the way. We tend to be one of the first in the field to make changes and improvements. Whenever our late chair U Nyan Lin went abroad, he'd learn from successful international chains such as Starbucks. He read many books and implemented what he learned.

In analysing new locations, we used to choose according to our gut feeling, but we made bad decisions and had to close about 5-6 shops. Some were closed because there was not enough disposable income in the area to sustain us. We review underperforming stores for 2-3 years before we decide to close them.

#### Which towns and cities is YKKO targetting for new branches?

For the four shops that are opening this year, we have chosen Taunggyi in Shan State and Taungoo in Bago Region. After opening our 30th shop in 2015, we had to slow our expansion, particularly in Yangon, where we have many branches. We have to make a thorough assessment of costs. In the past, all our shops were stand-alone, but as we faced traffic congestion and insufficient parking in recent years, we began to open more in shopping centres.

#### What is the estimated cost of opening a branch?

It depends on the location and whether it's a stand-alone or in a shopping mall. Each has its weakness and strength. A stand-alone shop has more space and lower rent but the renovation cost is higher. We also need to invest in a generator. Renting space in a shopping mall costs much more but the initial set-up cost is lower. With higher rents in malls, the new generation of our shops are smaller. If it cost K300 million to set up a larger stand-alone shop, a smaller shop in a shopping mall would cost K150 to 200 million.

#### Is YKKO the market leader in kyah oh?

We were lucky. As we expanded fast at one point, our large network added to our advantage. We always try our best to ensure quality service. We need to thank our customers. They bear with us through some problems – they complain but they continue to love us. So it is with their support that we are lucky to have the leading position in kyah oh. Our normal kyah oh costs K4700, but it can be complemented with fried chicken or hotpot.

#### Do you think the country has made economic progress?

YKKO's fastest expansion was from 2010 to 2014. During this period, it felt as though the country was developing fast. There was a lot of hope. But the economic progress now comes mostly from speculation in the property market. As speculative spending or growth is not sustainable or all-inclusive, the economy became sluggish from 2015 to 2017 as the real estate market cooled. After the new administration took power, they analysed government spending and did their best for the economy. They have started to be stricter in tax collection.

Although business expenses are higher due to increasing electricity charges, they were lower before because the government was subsidising electricity at a loss. A strong infrastructure is essential for development, so everyone should cooperate. Higher electricity charges are good because they would bring more investment and allow more people to be connected to the grid in other parts of the country. The government is implementing better policies for the people, but some might think the changes are

states.

too slow. I think it will pick up soon. Faster changes have been seen in 2019 than in 2018.

What are businesses expecting of the government?

Everyone wants to see better changes in the shortest possible time. What I expect most from the government is to appoint the right persons to the right positions. Changes will happen faster if departments have the authority to make changes on their own, rather than waiting for the central government to decide. The current government has given chief ministers more power to carry out necessary tasks in their regions or

It's important for the government to continue improving infrastructure and economic

development. It's going a little slow but in the right direction. –

Source: CHAN MYA HTWE 12 AUG 2019. https://www.mmtimes.com

306

## Story By Nang Phyu Phyu Lwin

But the output is low. The farmers use traditional agricultural techniques and haven't had any extension support. As a result, the farmer's economic situation isn't stable;

"Farmers do not have extra income or saving. They are stuck in the cycle of using the income from the harvest for the next season," tell Phyu Phyu Lwin.

Moreover, the farmers in Htamhsam use the pesticides they can find at the market and throw the containers away after they have used them. They do not know what kind of damage chemical pesticides may cause on the crops or on the people. Sometimes the children find the cans and plays with them or even worse, they put water in them and use them as drinking bottles;

"We just thought that the colored labels on the chemical pesticide containers were decoration. But after I received training, I found out that the labels show how hazardous chemical pesticides are. For instance, red labels indicate a high level of toxicity and blue labels indicate lesser toxicity. I learned that not only liquid chemical pesticide but even its container can badly affect us."

Phyu Phyu Lwin received training at MIID's Farmer Field School. Before there were no supporting organizations or agricultural training. The focus of the Farmer Field Schools is teaching the farmers about agricultural practices in both theoretical and practical terms, and enable them to apply their new knowledge at their own farms.

"I learned that we need to dispose those empty containers properly and we need to keep pesticides and fungicides out of reach of children. That is why, the training is very good and helpful for our farmers," she concludes.

This project is implemented by Myanmar Institute for Integrated Development and funded by UK Aid through the DaNa Facility. The project is a three-year grant agreement called: "Improving Market Opportunities for Small Holder Farmers, Especially Women, in the Pa-O Self-Administered Zone".

Source: https://www.mmiid.org/success-story/success-story-shan-state/



## Reinforcing resilience

In Dolakha District, a young boy has been actively disseminating his learnings from trainings in disaster risk reduction with friends and family to help build his community's resilience



Dolakha, Nepal - Abiraj Shiwakoti pulls a cloth bag hanging off of a hook outside his home in Kalinchowk in Dolakha Distict and lays out the contents on the floor one by one. First comes a sheaf of important documents encased in a plastic file, followed by a bottle of water, a pen and a torch, among other items.

This is a 'jhatpat jhola' or a go-bag, packed ready with some essential things the family might need in case of a disaster. "This way we won't have to scramble to find things if we have to run," says the 14-year-old. "It will all be in one place."

These are the sort of preemptive measures and general vigilance against disasters that Abiraj has been practicing since being involved with the UNICEF-supported Child-Friendly Disaster Risk Reduction (CCDRR) Programme. Dolakha had been the epicentre of a major earthquake in 2015 – an aftershock of the Gorkha quake. Besides earthquakes, Kalinchowk's steep, hilly terrain means it is among the areas most vulnerable to landslides in the district, particularly during the monsoon season.

Indeed, even in June, before the rains have begun in proper, small rivulets are already crisscrossing the narrow path down a thickly-wooded hillside to Abiraj's house. "It's not just landslides that are a risk here," he explains. "Just recently, there was a fire in these woods. Thankfully, it didn't spread much, but it's becoming more common." He adds that attacks by wild monkeys are another major threat in the area.

It was with such persistent hazards in mind that the CCDRR had started working with the local government in Dolakha to ensure that children and their families were better prepared for disasters.

Among the programme's initiatives was close engagement with child clubs in the area, training the members so as to raise their understanding of and capacity to respond to disasters. And this included the child club that Abiraj currently leads as president – the Nectar Child Club at the Shree Kalika Secondary School.



"And secondly, that children are not just helpless bystanders in a disaster, but can actually do something, like spread awareness and even respond to an emergency situation."

Testament to Abiraj's eagerness to share his newfound knowledge is the fact that he never misses a chance to tell his parents or others in the village about ways to prepare for and stay safe in a disaster. "He'll come home and share with us whatever he's done at a training, what he's learned," says mother Shanta. "Before this, all I knew was that you were supposed to run if there was an earthquake, but he has taught us so much more."

"Every time he leaves for school, he'll point to the jhatpat jhola and remind me to take it if anything happens," she adds with a smile. "It's like we are being trained too."

For Abiraj, he feels it is his duty to pass on the information to as many people as possible. "This is something everyone should know," he says. "The whole community needs to be aware and work together to reduce the effects of disaster." Abiraj sings a song he wrote about the disasters affecting his community year round and the need to always stay alert

Source: Preena Shrestha. https://www.unicef.org/nepal.05 September 2019. Nepal

## Nepal goes green with a genial grin

A typical day for 29-year-old Sukhai Mala begins with a visit to the local government office, where large posters promoting solar panels, organic farming and proper sanitation adorn the walls. From the office, Sukhai sets out on his bicycle, pedaling across road and field from house to house. With his youthful charm and friendly smile, he's a persuasive spokesperson. And before the sun has set, he has spread his message to as many residents as he has been able to pedal to.

His message is environmental. Along with hundreds of other social mobilizers employed by the Government of Nepal, Mala explains the government's new environmental incentives and schemes, and encourages citizens to adopt environmentally friendly behaviours. This cadre of well-trained youth are familiar faces within their communities, well known for their accessible demeanor, their resourceful knowledge and their ability to advocate for the needs of the villagers with local government officials.

In 2013, Nepal adopted a national policy known as the Environmentally Friendly Local Governance Framework with the support of UN Environment, UNDP and other development partners. The ambitious policy was an attempt to green Nepal – from household doorsteps to the corridors of power. Across Nepal, citizens were incentivized to install solar panels, manage water and sanitation, practice organic farming, prepare for disasters, among other environmentally friendly initiatives. UN Environment and partners have continued to support the Ministry of Federal Affairs and Local Development in turning this policy into actions with the social mobilizer programme. "When I first came here, there were approximately 1,700 households, but now it has increased to 2,200," Mala says. Strides in Sanitation



#### Aspiring Stories from Rural Communities

Mala considers hygiene and sanitation one of his treasured wins. Discouraging open defecation among families can often be a sensitive discussion. In Central Terai, where Mala is employed, open defecation is still prevalent among 58% of the population. Resistance to change is high.

"Out of 1,700 households, only 80 or 85 had toilets. We went to each ward and village, gathered people and informed them about the usage and benefits of toilets in a way they would understand. We told them: if you spend 10,000 Nepali rupees to construct the toilet, if you have any disease you have to go to the hospital and spend 50,000. Building the toilet will help you save 40,000 rupees," Mala recounts. "Listening to us, many built their own toilets. For those who were too poor to afford it, we arranged for rings, seats and pipes through the village development committee. For a month, every day, we used to wake up at 4 a.m. and work until 10 p.m. to investigate if people were indeed building and using them. I think we've had a real impact now with nearly all households having toilets built."

Promoting participation for the environmentMala has drummed up community support and participation for climate change mitigation. The villages of Barsauli and Mangalpur, which he frequents, lie on the banks of the flood-prone Tinau river. Each year during the monsoon, villagers lose agricultural lands and abandon their homes and livestock for weeks on end until the water retreats.



To tackle this, Mala and local authorities worked together to construct a dam with a row of trees that now shields the homes and farmlands of the villagers. With training from the government, UN agencies and other partners, Mala is able to spread the word and help train villagers on environmentally friendly technology like cookstoves and trickle-drip irrigation systems. He encourages them to segregate their waste and ensures authorities provide waste management amenities.

Through the work of Mala and other social mobilizers, over 37,034 households and 18 wards have been declared "Environmentally Friendly" under the national policy. The Government of Nepal has allocated USD 2 million to try and replicate this success across the country. As Nepal shifts toward a more federal governance structure, social mobilizers and community leaders like Mala can provide crucial support in advocating for the needs and priorities of poor and vulnerable communities. Social mobilizers cease to merely be envoys of the government, but become envoys of the community, inspiring people to raise their voices, claim their rights and demand services. "For the past 7 years I have been working as a social mobilizer. I used to earn more. I feel money is important, but getting respect from people is more important. As a social mobilizer, it has helped me widen my network and build relationships. People respect me. I feel proud of that."

Source: https://www.unenvironment.org 18 July 2018. Nepal.

#### It's A Rocky Road To Power For Rural Women



Sarita Chaudry is a first-grade teacher but she does not lead a fully independent life. Patrick Drown/IWMI

From Hollywood and Bollywood to the media, NGO and corporate worlds, stories about harassment and discrimination against women in the workplace have captured global attention for months. And rightly so.

But what about the millions of rural women facing these injustices, who almost never make the headlines? Development agencies have struggled to find ways to help rural women overcome obstacles in male-dominated societies and to gain an education, to own land, to take out loans, to earn a living and to gain equal rights in all arenas.

But what we've seen while conducting research in Western Nepal is that sometimes the best projects don't lead to the best results – that a woman's right to make decisions doesn't always follow from the conventional measures of success like education or income. We also saw that some women gain power through unexpected pathways.

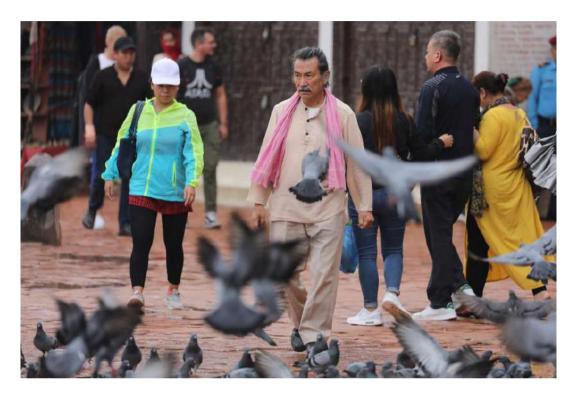
#### The surprising stories of 3 women

With respect to education, 26-year-old Sarita Chaudry, whom we interviewed a few weeks ago, would get high marks. She finished 12th grade and is now a first-grade teacher in Kuti village. The more advanced math skills she learned at school also enable her to handle the accounting for a women's savings group on a volunteer basis. She is married and is a mom.

Source: <a href="https://www.npr.org">https://www.npr.org</a> March 8, 2018. Nepal

# Postcards from Nepal: Meet the man who showcased the country to the world

Mani Lama has spent more than 60 years of his life taking photos, and to this day, remains enchanted with photography.



Mani Lama started photography when he was 12 and shows no sign of stopping at 73. Elite Joshi/TKP

Mani Lama may be 73, but he looks no older than someone in his 50s. It's not just his face that belies his age. When he walks—which he does a lot—he does so briskly. Tell him he looks young for his age and Lama will thank you with a coy smile. He credits his physical fitness to years of daily yoga and his love for walking.

"I feel very fortunate to have lived my whole life so close to the stupa," says Lama, whose favourite place to walk around is Boudha, also his home.

His family's connection with the iconic site is more than a century old. Lama's great-grandfather was Taipo Shing, also known as the first Chiniya Lama, who was the Prime Minister-assigned caretaker of Boudhanath and Swayambhunath stupas and Lumbini.

Lama might be known for his lineage in the neighbourhood, but outside the area, he is known for his photography. He is best known for his postcards of Nepal, and has published a coffeetable book called *Nepal: The Himalayan Kingdom*. He is currently working on another book, on Boudha's restoration and reconstruction.

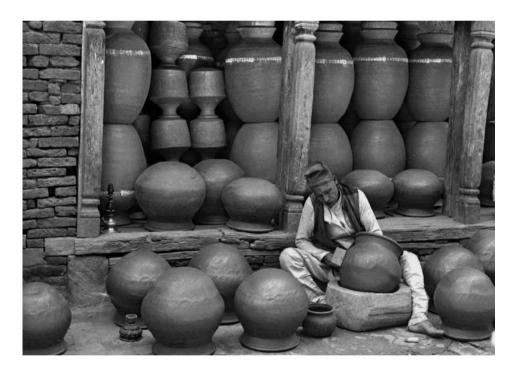
#### Aspiring Stories from Rural Communities

Lama has been passionate about photography since he was 12, when he received his first camera—a Kodak box camera. To buy camera rolls and develop films, Lama used to walk a little over an hour to the other side of town, to New Road.

"It was the 60s, and there was no option but to walk across town from Boudha," says Lama. While his first camera sparked his obsession, what left Lama deeply impressed was his Exakta, also a gift from his father. The camera had a telephoto lens attached to it, which Lama says blew his mind when he first began using it.

While photography has been Lama's lifelong passion, he has ventured into other avenues—he's run a few businesses, including a darkroom studio and gallery. Oddly enough, he even has a tick named after him. While working as a lab assistant for two American researchers in 1969, Lama discovered a new genus of tick in Upper Mustang, which was later dubbed the Anomalaya Lama Tick.

But if things had gone according to plan, Lama might have ended up as an agriculture officer with the Nepal government. In 1970, he went to the US to study agriculture.



A potter giving final touches to his work near Bhaktapur in 1989 Photo courtesy: Mani Lama

In 1975, he returned to Nepal with an agricultural degree and started applying for work. "There were jobs I was qualified for, but nobody was willing to hire a guy with Lama for a surname," he says. "Cronyism was rampant."

After two years of failed applications, he drifted towards photography. By the early 80s, Lama was running a successful postcard business.

"Postcards in the country then were mostly vertical photos of mountains and monuments. The paper quality of postcards was also bad. I saw an opportunity, so I started taking photos and had them printed in Singapore, with much better print and paper quality," says Lama. The postcards sold like hotcakes, and he eventually printed them in the hundreds of thousands in Singapore and imported them home. However, India's 1989 blockade and the 1990 People's Movement had an especially negative impact on his business.

"Tourists, who were my main customers, stopped visiting Nepal, and the business died a slow death," says Lama. "The key is to learn to let go and not hold onto things."

In 1991, Lama printed his last batch of postcards. By then, his work had become well-known among Kathmandu's expat community. With his business no longer running, he started applying for freelance projects with international NGOs in the country. Soon, Lama was travelling all over the country, and abroad, as a freelance photographer.

In his nearly 60 years of photography, Lama has dabbled in different genres of photography—landscape, portrait, festival, street. But is there a genre of photography he won't sink his teeth into? Lama says without second thought: "Weddings. I have done it a few times, but the way wedding attendees disrespect photographers was something I found deeply repulsive."

Like many photographers of his time, Lama grew up using cameras with rolls and developing in dark rooms. Three decades later, most of his work is digital.Lama admits that relearning how to use DSLR cameras wasn't easy. But he reached out to his friends who were more familiar with digital photography, some of whom were his juniors.

"I keep telling younger photographers they should never hesitate to ask what you don't know," says Lama. "I remember being nervous when I first started using DSLR cameras for my assignments and I was worried that I wouldn't do a good job." When it comes to the extent photographers can now modify photos in post-production, Lama's face lights up with a child-like sense of wonderment.

"Isn't it amazing what Photoshop and other photography apps allow photographers to do with their photos? I keep tinkering around with different photography apps on my phone, and I am often left amazed," he says before he takes out his phone and plays an ad hoc clip he made earlier, of Chinese opera dancers dancing near the stupa. "It's amazing," he says, visibly baffled by technology.

With cameras becoming increasingly affordable and phone-based camera technology improving, professionals no longer have exclusive reign. The number of people using cameras is more than ever, and people now have access to more photos than ever. Lama says the steep rise in the number of amateur photographers hasn't made life harder for professionals though. Quality work, he says, will always be appreciated. "The only major difference I feel between then and now is that there are just too many photographers," says

#### Aspiring Stories from Rural Communities

Lama. "When I was growing up, there were only a handful of outstanding photographers. But now, with so many photographers, it's hard to know who's doing what."



An early morning Boudha in 1990. Photo courtesy: Mani Lama

Lama's current book took him 18 months to pull together, and it surrounds Boudhanath Stupa's reconstruction following 2015's earthquakes. The book is nearing completion and, according to Lama, will be published in November. It will feature several photographers, who have donated their photos to the project, and the proceeds from the book will go to the maintenance of the stupa. "It's our way of giving back to the community," he says. Lama has travelled every district in Nepal, except Mugu, and his work has taken him all around the world. Despite spending most of his adult life lugging cameras around, Lama, to this day, remains curious and willing to learn new tricks and techniques. He is hungry, he says, and wants to capture pictures and spread his knowledge of photography to those willing to listen. "I don't think it's just my skills that got me where I am in this field," he says. "You may have the best skills, but if you have a terrible personality, it won't get you very far."

Source: https://kathmandupost.com September 19, 2019. Nepal

## Lahathis—a gift from Muslims to Hindu women



Lac bangles are more than just ornaments. In Janakpur, they connect people and give them a sense of belonging.

Afsana General Store has been catering to Hindu women with lac bangles for generations. Sweksha Karna/TKP

Lalita Agrawal loves adorning her wrists with bangles, especially the ones made out of lac. These bangles are not just associated with beauty but also hold a strong cultural and religious significance in her Hindu community.

The lac bangles, made out of a resinous secretion of the tiny lac insect, moulded around a metal circle, are said to bring good luck, and are mostly preferred by married and pregnant women in the southern part of the country. Known as *lahathi* in the native tongue, the bangles are traditionally made by laharis, a Muslim community.

In Janakpur, Afsana General Store is one store that has been catering to Hindu women like Agrawal, 53, with such lac bangles for generations. Bhaiji Ali, the owner of the shop, has a variety of such bangles—from ones in monochrome colours to ones adorned with shiny metals.

"On most days, we sell about three to four sets; however, around the time of festivals, sales can go up to 50 sets or more," says Bhaiji.

#### **Aspiring Stories from Rural Communities**

Bhaiji lives in Lahariya tole where most laharis in Janakpur live and trade. Many households in this community make their own bangles in their backyards, although the number of families that still follow the tradition has significantly decreased over the years.

In a city where the majority of the population is Hindu, the lac bangles are something that has bonded the Hindu and Muslim community together. Due to the conservative outlook on caste, religion and gender in both the communities, there isn't much intersectional communication in Janakpur. But the cultural significance of lac bangles for Hindu women and its economic importance for Muslims have brought together these two communities.

"I've come across people who wouldn't rent me a room because of my religion, but then they buy bangles from me for pujas and weddings," says Mansur Ali, a street vendor who usually parks his cart of *lahathis* in front of Janaki Mandir. "Nevertheless, it's nice to hear people appreciate the bangles. I look at it as a matter of respect. No matter what, in the end, they need us and we need them."

"Lahari is more of occupation rather than an ethnicity, and we take pride in the craft that has been handed over to us from generations," he says. "We have accepted lahari as our title and identity."



Sweksha Karna/TKP

The bangle-making process takes at least four people, and three to six hours per set. First, lac is coloured with dye and then heated over coal using a wooden rod. Usually, shades of red, green and yellow are used, as they are considered auspicious. The base of the bangle is then prepared, either with brass or steel. Then the brass and lac are coiled together, to achieve the desired shape. To complete the process, pearls, stones, mirrors and beads are heated over a tin plate, and placed over the bangle, giving them different patterns. All the bangles are moulded, shaped and embellished manually.But in recent years, due to lack of raw materials and rigorous labour that goes into making these bangles, sellers like Bhaiji are also importing these bangles from Rajasthan and Bihar.

These bangle sellers earn anywhere from Rs200-2,000 a day, depending upon the type of bangles and the number of customers. However, in recent times, the sales of bangles have dropped drastically. Bhaiji recalls how he used to sell *lahathis* in Saptari, Sarlahi, Siraha, Mahottari, Jhapa and Kathmandu. But in the last decade, the demand for lac bangles in districts outside of Dhanusha has been constantly decreasing, which is why there are almost no *lahathi* suppliers in the rest of the country.

Even in Dhanusa and the rest of Tarai, lac bangles have now become occasional accessories, only used during weddings and pujas, when in the past, they were worn throughout the year as a must-have ornament.

"Women now prefer bracelets and watches as they are less of a hassle. But *lahathis* hold cultural value. I even go door-to-door to sell bangles," said Ali.Shubha Sharma, 73, a native of Kuwa in Janakpur, agrees with Ali that even through their differences, *laharis* from the Muslim community have been helping them uphold their cultural needs through their bangle-making.

"Since ancient times, Muslims are said to have exceptional talent when it came to designing and making ornaments. That's why they were the ideal bangle makers," she says. The laharis say that they feel good to be part of Hindu women's celebration. "Because of our job, we get to make sisters throughout the city prettier and happier," Ali says.

By Sweksha Karna. https://kathmandupost.com : September 18, 2019. Nepal

## Local goat-farming investments surge

Sindhupalchok district is witnessing a new wave of investments in goat farming, as locals are keenly capitalising on the growing demand for goat meat, which reaps excellent returns. The district's locals have been switching to investing in goat farming disregarding jobs in other sectors, such as farming and foreign employment.



Sindhupalchok district is witnessing a new wave of investments in goat farming, as locals are keenly capitalising on the growing demand for goat meat, which reaps excellent returns. The district's locals have been switching to investing in goat farming disregarding jobs in other sectors, such as farming and foreign employment.

Bisnu Prasad Adhikari, of Jugal rural municipality Baramchi, has been doing goat farming for a year now. Adhikari, who spent more than half a decade in Saudi Arabia and Dubai, left his job there to start goat farming in the district. He runs his goat farm in coordination with other youths of the village.

Within a year, the enterprise run by Adhikari's group of 20 youths, is earning a good sum of money by selling goats reared in his farm. "I started goat farming because I thought of doing something in my own country instead of struggling in a foreign land," said Adhikari. "I am happy that I took that decision."

He started goat farming by bringing in selective breeds of goat from farms in Kavre and Kathmandu. "Our monthly sales revenue is around Rs1.5 million," said Adhikari.

According to Sanat Adhikari, ward chairperson of Baramchi, several other youths of the district are being encouraged to undertake goat farming after seeing the benefits of the business. To further encourage youth, the ward also launched a self-employment campaign.

"We are providing subsidies as well as coordinating with insurance companies to insure goats. We hope this will aid locals to become self-sufficient entrepreneurs," he said.

Jhanak Parajuli, a local of Belfi rural municipality, is another success story. Parajuli, who started rearing goats a couple of years ago—with just 12 goats, is earning a handsome income from his venture. "I used to think that one can't make it in life without working in foreign lands. But goat farming has helped me lead a dignified life with good income," said Parajuli.

Currently, there are around 100 goats in Parajuli's farm. According to Durga Dutta Panthi, an officer at the District Agriculture Office, a majority of the farmers work together in groups and establish cooperatives, which has been a very successful model.

By Anish Regmihttps://kathmandupost.com September 11, 2018

## Nuwakot farmers happy growing strawberries

Okharpauwa resident Kanchha Man Tamang, a member of the Japanese Agricultural Inservice Training Institute (Jaiti) Nepal, started growing strawberries on his farm in Kakani with six plants.



Okharpauwa resident Kanchha Man Tamang, a member of the Japanese Agricultural In-service Training Institute (Jaiti) Nepal, started growing strawberries on his farm in Kakani with six plants.

Now strawberry farming has spread to over 1,300 hectares in Nuwakot, mostly in Kakani and nearby Okharpauwa. Inspired by Tamang's success as a strawberry farmer, his neighbours started growing the fruit too.

Strawberry farmers in Kakani and Okharpauwa in Nuwakot district are earning more than Rs100,000 a year. These places have a favourable climate and soil conditions for strawberry farming.

Kakani and Okharpauwa produce 400 tonnes of strawberry annually, according to the District Agricultural Office. Yearly sales are worth more than Rs60 million.

The introduction of two high-yield varieties, Ankhime and Eyeberry, and use of tunnel farming to grow strawberries have led to increased cultivation of strawberry. Four years ago, farmers had to bring their strawberries to Kathmandu to sell them. Now they have set up the Strawberry Farming and

Entrepreneurship Association that collects strawberries and markets them. Strawberries are graded into A, B and C categories. Grade C sells for Rs100 per kg, Grade B costs about Rs200 per kg, while the best quality, Grade A, sells for about Rs300 per kg.

There are about 40 farmers growing strawberries inside polythene tunnels using a technique called tunnel farming. Tilak Lama, chairman of Nawa Bihani Cooperative, said, "A decade or two ago, we grew maize and millet which did not provide much income. Now the whole village grows strawberries." Lama, also the chairman of the Strawberry Farming and Entrepreneurship Association, said that farmers were thinking of designating wards 2 and 5 in Kakani Rural Municipality as Strawberry Pocket Region. The strawberries produced here are shipped to supermarkets in Kathmandu.

Lama said that the government should encourage farmers to plant strawberries. He said the association aimed to promote entrepreneurship through membership. More than 100 farmers are members of the association. Likewise, Okharpauwa local Hira Krishna Lama feeds his family of four with the money he makes from growing strawberries. She has planted both Ankhime and Eyeberry varieties of strawberries.

Previously, the common variety planted in the village was the Nyoho variety of strawberry. Ankhime is smaller but has a higher yield. Eyeberry is relatively. large but low-yield. Instead of planting strawberries on slopes, she now plants them inside tunnels. Most farmers sell strawberries in the market through the cooperative. After testing soil conditions, tunnels were built with Japanese support to plant Ankhime and Eyeberry strawberries. Bir Maya Thing, a resident of Kakani, experimented with strawberry farming 13 years ago by planting plants discarded by her neighbour. She now earns more than Rs100,000 annual growing strawberries.

Kamal Raj Gaire, chief of the district agriculture office, said that the office had been providing grants of Rs50,000 to farmers producing strawberries using the tissue culture method. The office is also providing insurance to 11 farmers to protect their farms against risks related to production and income. Gaire added that insurance had encouraged other farmers to plant strawberries.

By Krishna Thapa. https://kathmandupost.com February 3, 2018

## Govt begins pilot of agro tourism village

Heritage buildings, jungle safaris, adventure trekking and mountaineering are major tourist attractions in Nepal, but now, the government has piloted an agro tourism village offering vacations in farms to attract more tourists.



Heritage buildings, jungle safaris, adventure trekking and mountaineering are major tourist attractions in Nepal, but now, the government has piloted an agro tourism village offering vacations in farms to attract more tourists.

Few private firms like Banana Resort in Tikapur, Ostrich Nepal in Rupandehi and some tea farms in Ilam have been successful in establishing the agro tourism concept.

However, this is the first time the government has been promoting agro tourism. Agro tourism is a vacation in which hospitality is offered on farms where activities may include helping out and learning about farming, picking fruits and vegetables, fishing, testing local foods and enjoying traditional and local cultures. It gives tourists the opportunity to buy local produces. This activity helps to lift the socio economic condition of the rural areas by creating employment opportunities and additional markets for the rural products.

The Agriculture Ministry said that five community-based agro tourism villages would be developed this fiscal year in Machhamara in Sunsari, Ghodaghadi in Kailali, Patle in Solukhumbu, Rautamai in Udaypur and Kakani in Nuwakot.

The location of the agro tourism operation should ideally feature easy transportation facilities and have a good natural background. Normally, urban tourists are interested in enjoying nature and the rural life.

The agro tourism villages in the five selected areas involves 75 households. The government has launched the community-based agro tourism village for the first time targeting tourists who like greenery, quiet and calm natural environment, said Shankar Sapkota, deputy spokesperson of the ministry.

"It has been piloted in five areas and the number will be increased gradually if it becomes successful." The project has been implemented by Vegetable Development Directorate under the Agriculture Ministry.

The government will promote the agro tourism as "Modern Green Tour Village" and under the programme, each selected firms will receive grant of Rs2.5 million to develop basic infrastructure like sanitation, roads and upgrading the quality of accommodation in the areas where the programme will be implemented.

The selected five firms have been given a deadline to complete the infrastructure by this fiscal year, ending mid-July. However, some firms said that it was difficult to complete the project within the given deadline due to monsoon. "We have selected more than 80 houses to run homestay under the project but we are facing difficulties to complete them on time," said Jibnath Subedi, propritor of Friday Homestay and Oragnic in Nuwakot that is promoting kiwi fruits. Subedi said that the project has partnered with a number of houses that were damaged during the 2015 earthquake for homestay and they have been receiving the housing reconstruction grants.

"Apart from the houses, due to monsoon, it is difficult to transport goods and develop other infrastructure"

Subedi, however, said that if the government extended the deadline until September, he could complete the project. Tourist movement also begins after September. The firms that have received the grant are monitored by the Agriculture and Finance ministries.

Source: <a href="https://kathmandupost.com">https://kathmandupost.com</a> July 1, 2018. Nepal

## Rising demand gives boost to fish farming

Fish farming is expanding rapidly in Bara district due to increased demand in both rural and urban markets.



Fish farming is expanding rapidly in Bara district due to increased demand in both rural and urban markets. Chhadi fish is the most popular variety among consumers because it is comparatively cheaper, and most fish farmers in the district are raising this species.

According to a survey conducted by the Central Bureau of Statistics in 2015, two types of Chhadi fish—Rahu and Naini—are produced in Nepal. The average price of the fish during the survey was Rs175 per kg for Rahu and Rs187 per kg for Naini.

"The taste of the fish is also one reason why many consumers prefer Chhadi," said Shyam Babu Yadav, a resident of Kalaiya. "I always buy Chhadi due to its unique taste."

Chhadi fish is worth Rs250-300 per kg in the market. Janga Bahadur Sah, president of the Fisheries Entrepreneurs Association, Bara, said that more and more farmers were raising Chhadi fish because of the high returns.

"Producing big fish takes time, and the cost of production is also high," he said, adding that Chhadi fish could be produced in little time and at less cost. "We used to focus on producing big fishes in past years, but now we have shifted towards producing medium sized Chhadi fish as it yields higher profits," Sah said.

As a result of growing demand for fish, the number of farmers and fish ponds in the district has increased. According to farmers, traders nowadays come to the farmers' doors to buy

fish. Simraungadh, Madhuban, Bodhban and Kalaiya are centres of commercial fish farming in Bara.

"Due to the ideal water temperature and soil in Bara, fish can be harvested thrice in a year. As a result, fisheries have become a major income generating activity for farmers here," said Nejamuddin Miya, a fish farmer in Simraungadh Municipality. "We have not been able to supply fish as per demand."

Farmers said that they were worried by the increasing price of fish feed. As Nepal does not produce enough feed, farmers have to turn to expensive imported feed from India, Miya said. "As a result of the high cost of feed, fish prices have also gone up."

The government has launched a special programme in Bara under the 10-year Prime Minister Agriculture Modernisation Project declaring the district as a fisheries super zone. Fish farms in Bara cover 1,765 hectares.

There are 4,340 fish ponds in the district. According to government statistics, the average productivity in pocket areas like Simraungadh and Pachrauta is 7-7.5 tonnes of fish per hectare. However, productivity outside the pocket areas is 6.2 tonnes per hectare. Bara produces fish worth Rs3 billion annually.

Source: By <u>Pawan Yadavhttps://kathmandupost.com</u> September 6, 2018

## Apple farmers delighted as road reaches village

Farmer Mani Chandra Pandey of Phoi Mahadev village in Kalikot district used to sell his potatoes for Rs5 per kg. After a road was built connecting the remote village in western Nepal this week, his potatoes fetched Rs12 per kg as they could be easily shipped to market by motor vehicle.



Farmer Mani Chandra Pandey of Phoi Mahadev village in Kalikot district used to sell his potatoes for Rs5 per kg. After a road was built connecting the remote village in western Nepal this week, his potatoes fetched Rs12 per kg as they could be easily shipped to market by motor vehicle.

"It used to be difficult and costly to carry goods by porter to Karnali Highway," said Pandey. "It's not difficult anymore." Phoi Mahadev village is now connected with the Surkhet-Jumla road which is part of Karnali Highway.

"After the road was built, it has become easy for farmers to ship their agricultural goods, fruits and herbs to market," said Surya Bahadur Shahi, a ward chairman of Tilgupha Municipality.

Vehicles now ply the 4-km road connecting Rachuli, Tilgupha to Phoi Mahadev. Tilgupha Municipality spent Rs450 million to build the rural road.

Apple farmer Begam Shahi said that they were delighted as they now have market access to sell their products. Before the road was built, porters had to **Rural Development in CIRDAP Member Countries** 

carry the apples on their backs and walk a long distance, which resulted in the fruits being damaged. "Now the products will be transported by motor vehicle

and they won't get damaged." Apple growers said that they could now ship their

product to key markets in the Tarai like Nepalguni, Dhangadhi and Butwal.

The road has benefitted vegetable farmers too besides apple growers. Tilgupha

Municipality is popular for beans and potatoes. "We have invested on the road in order to create market access for farmers so they can get fair prices for their

crops," said Mayor Ratan Bahadur Shahi.

After the government began work for the construction of Karnali Highway,

farmers in remote Kalikot launched a campaign to plant fruit saplings and

vegetables. However, the entire highway was built along the banks of the Tila

River, and the farmers suffered as it did not connect their villages.

"We launched the apple planting campaign when the highway project was

started," said Dadi Singh Karki, a farmer in Phoi Mahadev village. "After many

years, the road has finally reached our village."

Farmers said the road network would also reduce the involvement of middlemen

in the apple business. Farmers were forced to sell their products at a lower rate

earlier due to lack of road connectivity.

Soure: Link: <a href="https://kathmandupost.com">https://kathmandupost.com</a> April 28, 2018. Nepal

330

## **Hand-made happiness**



Sushma Shrestha's story exemplifies how micro-entrepreneurs promoted by UNDP's MEDEP—especially women—have been able to strengthen and sustain their business prospects through linkages facilitated by the project with such entities as the Chaudhary Foundation.

Sushma Shrestha considers herself one of the "lucky ones". The micro-entrepreneur from Dolakha, who was helped by UNDP's Micro-Enterprise Development Programme (MEDEP) to acquire the skills necessary to start a successful lokta or handmade Nepali paper business in her village, says the opportunity helped her to turn her life around. "It was just the push I needed," she says.

At one point, Sushma says she had felt bereft of hope. "It was a struggle just to get by, and I didn't have any guidance or support," she recalls. That support came through in 2012, when she enrolled in a skill-development training offered by MEDEP in the area. "I chose to focus on lokta paper, because it was something that could be made locally.... There were others in the community who were already engaged in producing the paper, so I thought it would be easy to tie up with them when starting my business," Sushma says. And to further her skills, she took up a few more trainings, reflected in the high quality of her products.

Over the last few years, Sushma Handicrafts has seen steady growth in popularity. It offers a range of lokta products today, including general items like stationary and lamps, but also more innovative pieces, such as jewelry—which has proved a hit with customers for their lightweight, waterproof qualities and affordable price.

What's more, with MEDEP's continued support, Sushma has lately been able to scale up her business—specifically via a partnership with the Chaudhary Foundation, to whom she now sells products in bulk as a wholesaler. This has further allowed her to expand the market for

her products; these days, her clientele consists of organizations and corporate houses who generally source lokta paper files and folders from her.

And a big part of her motivation for expanding and diversifying her business is so she can offer employment opportunities to others who are desperate to find a way to make a living like she had once been, particularly women. Sushma presently has 15 employees under her and has trained a number of women besides.

The journey to get where she is today, Sushma says, has made stark for her the true value of local job creation. "So many of young Nepalis are leaving the country thinking there are no opportunities to be found here, but my own experience shows that with the right effort and assistance—such as that provided by MEDEP—things are not quite so hopeless," she explains.

**About lokta paper in Nepal**The Cottage Industry Department of Nepal reports 377 registered handmade paper production industries, out of approximately 600 units operating in the country. Of these, 175 manufacture about 30,000 metric tons of paper products each year. Yet, despite this major increase in handmade paper production in recent years, large scale lokta resources remain untapped. Handmade lokta-based craft paper products continue to offer considerable economic sustainability for poor rural Nepalese women due to their high-quality niche market potential.

http://www.np.undp.org. Jan 9, 2018. Nepal.

## **Breaking age-old barriers**

Starting an enterprise has not only given Muna Odh a lifeline out of poverty, but also hardened her resolve to help others from the Dalit community in her area break free of the rigid hold of the caste system



Muna Odh was determined to not let the longstanding barriers of caste and discrimination cast a shadow on her dreams. A resident of the Dashrathchand municipality in Baitadi, she had spent most of her life working for others, starting with a stint as a household helper, a profession that many generations of her family—belonging to the marginalized Dalit community—had been confined to. "The work was hard and the pay meagre, and people didn't treat us very well," she says. "I wanted to break out of this cycle and do something else."

Muna went on to try her hand at different jobs. "I tried everything—I even transported goods for people for three years, but it didn't pay enough for me to sustain my family," she says. Fortunately, it wasn't long before she came upon a training opportunity—UNDP's Micro-Enterprise Development Programme (MEDEP) was conducting a week-long Start and

Improve Your Business (SIYB) workshop in the area, and as soon as she heard about it, Muna enlisted. "I had a good feeling about it."

Seeing potential for vegetable farming as an enterprise, Muna decided that was what she would focus on at the workshop. She worked hard on learning the ropes and acquiring the necessary skills, and once the training was complete, MEDEP provided her the financial and technical support needed to establish the Manakamana Vegetable Production Group. "I felt hopeful after such a long time," she says. "And I was ready to do whatever it took to make it work."

The Manakamana Group produces a range of seasonal and off-season vegetables that are sold in local markets. And business has been booming: the group now has fixed assets worth Rs. 150,000 and current assets amounting to Rs. 60,000. Each member makes a profit of Rs. 32,000 a month. But Muna doesn't want to stop there. "I want to expand the business so that we can produce ten quintals of vegetables," she says.

Now that her circumstances have improved, Muna is able to support her family and send her kids to school—as well as employ members of her family in the enterprise. But apart from a change in her financial state, Muna says the experience has also had a considerable impact on her self-worth and her sense of ambition.

This was one of the reasons she had made up her mind to contest in the recently-held local elections as a candidate for the Dalit quota in the municipality. Although she did not get the seat, she says she's happy to try again. "It's only if people like me are able to enter these kinds of decision-making positions that we can finally break free of the hold of the caste system and reach our true potential," she says.

Source: http://www.np.undp.org. January 26, 2018. Nepal

## Weaves of change



A carpet-making enterprise started by 25 women in Darchula supported by UNDP has proven their ticket to improved livelihoods, strengthened confidence and the preservation of an age-old craft.

Darchula in Nepal's far west boasts a rich tradition in woolen handicrafts, particularly carpets and knitwear, known for their intricate designs and soft texture. And keeping that tradition alive is the Koseli House in Khalanga, where one can find a variety of locally-made woolen products.

It was in 2011 that 25 women came together to establish Koseli House. These women, all hailing from marginalized ethnic communities living in the area, had been encouraged to start an enterprise after participating in an entrepreneurship development training being offered by UNDP's Micro-Enterprise Development Programme.

Most of the entrepreneurs already had some experience in weaving. One of them, Puja Tankari, for instance, had been in the third grade when she first started making carpets. "Within two years or so, I was already selling my wares for around Rs. 2,500 a piece," she says.

But without information about and access to proper markets, and given the amount of effort that went into the work, it was simply not a sustainable means of earning a living for most. And so, like many other traditional crafts, carpet-making in Darchula was seeing fewer and fewer takers over the years, threatened even more by the general trend of young, able-bodied

people migrating to other places in the country or overseas in pursuit of more lucrative employment opportunities.

MEDEP's training, however, turned things around. Not only did it serve to reinforce the women's existing skills, but also helped them incorporate new technologies in their craft, as well as offering them much-needed direction in terms of marketing—culminating in the impetus to open their own enterprise. Today, Koseli House makes carpets worth Rs. 15 lakhs in just over six months' time, significantly boosting the women's livelihoods.

"I made a profit of around Rs. 100,000 over the past winter selling my woolen sweaters through Koseli House," Puja says. "It's far more than I would've earned on my own." The improvement in earnings has eased her financial circumstances considerably, she says, and enabled her to give her children a good education, something she is very proud of.

Over the years, MEDEP has continued to support Koseli House in other ways. The project contributed a steel hand loom to the enterprise, which the women say have simplified their work a great deal. "It's so much easier to make different patterns now," says Rupa Atwal, a single mother and another of the micro-entrepreneurs at Koseli House. "I'm earning around Rs. 25,000 monthly from selling the carpets, and I also buy woolen products from other weavers and sell them for a profit."

And in a bid to help them acquire some new skills and improve the quality of their carpets, MEDEP also brought the women to Kathmandu to take part in a training where they learned to mix colors and make more detailed designs. The trip also helped the group gain valuable exposure. While Urti Bohara got her photo published in a calendar featuring microentrepreneurs, Sudha Bohara was interviewed and given the opportunity to visit Bangladesh. Rukma Atwal, meanwhile, has taken part in a number of exhibitions and fairs all over Nepal. "We're so much more confident than we used to be in the past," she says. "We feel like our horizons have widened beyond anything we could expect when we first started out."

http://www.np.undp.org January 25, 2018. Nepal

## Bridge is a Blessing

Case story on Balde Bafaune Bridge over the Budhi Ganga river

Trail Bridge Support Unit (TBSU), a SDC project which is implemented by Helvetas advises on technical issues in trail bridge building since its' initiation phase. This case depict a life change story after completion of Trail Bridge in Balde Bafaune bridge over the Budhi ganga river. Life has changed for the better, because earlier it was difficult for us to make both ends meet. Now we have a regular income and have managed to save some money". She adds that "with the savings, my husband bought a motorcycle and 7 goats." They are also now hopeful for the future of their daughter, who will soon be starting school.

Sarita Thapa, a resident of Budiganga Nagar Palika, Bajura, who is overjoyed to have the Balde Bafaune bridge over the Budhi ganga river. This bridge is considered as a "Mela bridge" as it connects pilgrims to the Badimalika temple, which is considered as a major religious site, especially for the far-western part of the country. Through its construction, approximately 2 hours of detour time has now been reduced. Furthermore, the bridge was constructed to benefit locals approximately 3,500 people, out of whom 25% belong to Dalit and 75% are Brahman/Chhetri/Thakuri. Its importance dramatically increases during the month of Bhadra (August/Bhadra) when pilgrims throughout Nepal and even as far as India come to offer prayers especially during Janai Purnima. According to Sarita Thapa, during this festive period, traffic flow increases to around 1000 people crossing the bridge daily.

If this bridge was not built then my husband would have to go to India to earn a living and I would have to live alone with my daughter at home»Sarita Thapa, a resident of Budiganga Nagar Palika, BajuraFor Sarita Thapa, the increase in pilgrims is a welcome sign. As she has a grocery & ready-made food shop near the bridge site. "Our business flourishes on those days and our income goes up to around Rs. 5,000/- a day" says Sarita. On other normal days, she confides that her income totals to on average NRs 36,000/- per month. This is a dramatic change from the pig farming which she and her husband were involved in prior to the setting up of the shop. According to Sarita, pig framing was not lucrative and so when they saw the prospect of a shop after the Balde Bafaune bridge became functional, they decided to quit pig farming, relocate to Brahmatola palika, and set up the shop. Business was good, but, they later realized that passersby wanted more than dry snacks. She notes, "demand for tea and hot snacks was high, so we capitalized on the opportunity and opened a restaurant to cater for their needs as well".

The only drawback of the bridge is that sometimes people steal her vegetables, which she grows near her shop. But, these are few and far between and the benefits far outweigh the loss of a few cabbages, which is why she considers the bridge a boon not only for the pilgrims who come to pray, but for her superficially as it has answered her prayers.

Source: https://www.helvetas.org/en/nepal

## **PAKISTAN**

## Behind every successful start-up, there are failures. This is one Pakistani entrepreneur's story

#### Bilal Karim Mughal

Pakistani firms rejected Khan's idea, but the same idea won support from famed international techies. Sameer Ahmed Khan, the founder of locally developed website Social Champ, had three failures under his belt before lady luck smiled at him and his current successful enterprise.

Although his current venture — a homegrown startup which provides comprehensive tools to automate and manage your social media presence — is gaining traction, the success was preceded by a series of ideas and products that failed.

#### Three failures before victory

His first misadventure was a gaming engine 'GameOChat' which could work across platforms to develop video games and give people a chance to chat and play games simultaneously. Despite three years of hard work the project did not launch, and with the release of the Unity gaming engine, it stood no chance.



Sameer Ahmed Khan, Zohaib Ahmed Shakir and Shakir Ghani

Next was Educating Dreams, an app with a noble mission which aimed to connect street children with organisations running charitable schools. The idea was simple: anyone wanting

#### Aspiring Stories from Rural Communities

to help a child in need would snap a photo, and the app would automatically mark its location and report it to a charitable school.



Sameer Ahmed Khan

Although the app was created with good intentions, it failed to pick up despite winning many competitions. NGOs excused themselves from working with this app if other NGOs were involved and street children routinely change their location, making it difficult to trace them after first contact.

But Khan was stubborn and moved onto a third venture — RemindZapp, a tool for managing reminders. This app, too, was decommissioned due to multiple problems that plagued its growth, despite being accepted into the Google for Entrepreneurs backed The Nest I/O incubator.

**Enter Social Champ** 

Khan did not let the repeated failures discourage his dream. Why? In his words, "People only need an excuse to hold them back from doing amazing things."

At the age of 26, today he is the CEO and co-founder of Social Champ, a successful platform which automates an individual's social media presence.

Ironically, the journey of Social Champ began to take shape when Khan felt the need for better management of his social media accounts while trying to promote his previous startup.

Tired of having to manually repeat each social media share or post at different times throughout the day, Khan asked a friend, Zohaib Ahmed Shakir, to help design a tool which could re-post the same thing at predetermined intervals in order to maximise reach.



Sameer and Guy Kawasaki

Khan then showed the idea to Pakistani tech website, TechJuice, which liked the idea and told the budding entrepreneurs that their company would make use of their tool.

#### Foreign techies take notice

Motivated by the positive feedback and workability of this project, Khan took a leap of faith and emailed Guy Kawasaki, a US-based social media evangelist, who had been a close friend of Apple's Steve Jobs.Kawasaki's book, 'The Art of Repeating', had inspired Khan in the first place to explore and tackle the need for a comprehensive social media management tool.

To his surprise, Kawasaki responded positively.

Although at this point, the tool itself had limited features, Khan recalls that Kawasaki's comments, feature requests and critical evaluation helped them grow to a fully functional social media management tool that could compete against global market giants like HootSuite and Buffer.

Kawasaki's response had proven the unconventional marketing strategy to be successful and gave Khan the confidence to contact more social media marketing gurus, including the likes of Ian Anderson Gray, Peg Fitzpatrick, Neal Schaffer, and Lyndsay Phillips. Khan received positive responses from each of them.



Sameer Ahmed Khan and Jehan Ara

#### Pakistani investors are sceptical

Khan recalls reaching out to several famous Pakistani companies with the hope of getting the breakthrough he had been seeking.

But to his dismay, Pakistani firms were sceptical of the very idea of a social media management platform, and showed little or no interest in the idea or his abilities.

The trend of investing in start-ups has not picked up in Pakistan — something Khan learnt the hard way.

Despite the lack of interest from local investors, continued mentor-ship and support from The Nest I/O allowed Khan to continue developing the tool with a focus on a wider reach.

So what did they do for money?

**Rural Development in CIRDAP Member Countries** 

Khan and his friends financed Social Champ through personal savings and freelance projects until the product was complete.

"If we had investment from this market [Pakistan], maybe we would now be a year ahead. But we're still in the bootstrapping phase. One should find ways on their own and not give up simply because others aren't giving a break."

"If you don't have a payment mechanism, then make one of your own. We have an example of Elon Musk who invented PayPal. Why can't others be like him?" says Khan.

Khan is not bitter about the lack of support in Pakistan. He acknowledges that working here teaches an individual things that cannot be learnt in other countries.

"You face so many problems and obstacles here, that you develop polished problem-solving skills," says Khan.

"You learn how to tackle the most difficult of situations; it gives a major boost to your ability to endure and is helpful in making your nerves stronger."

Although Khan and his co-founders have opportunities to set up camp in the US, they remain committed to working for Pakistan.

"Although I believe that my life would be really comfortable in foreign countries, I think I can do more for people here," Khan says.

Photos courtesy Social Champ

Do you want your product/service reviewed? Email us atfeatures@dawn.com

https://www.dawn.com/news/1323594, Apr 05, 2017

## **Building support for women in Pakistan**



Ujala, a Global UGRAD-Pakistan alumna who studied at Montana State University in spring 2018, helped families in crisis at HAVEN, a center for survivors of domestic violence in Bozeman. Using her experience and following HAVEN as a model, Ujala is building a crisis center in her home community in Pakistan—the first of its kind.

"Women in the U.S. and in Pakistan face the same issues, such as domestic violence and sexual abuse. But in the U.S., women have awareness about their rights and the availability of resources," Ujala said. "In Pakistan, women have rights, protection, and resources provided by law, but they are often unaware of these resources."

#### Strengthening empathy through community service

During her exchange program, Ujala volunteered over 140 hours, working as a member of HAVEN's crisis hotline while balancing a full academic course load. Contacting a crisis center's 24-hour support line is often the first step for survivors seeking help for domestic violence. In addition to providing safety information and information on where to find the nearest emergency shelter, helplines provide survivors with information and referrals to other community resources.

Remembering her time at HAVEN, Ujala noted, "My greatest accomplishment was when a survivor I had coached on the phone contacted HAVEN to tell me that I had saved her life."

Ujala's previous community service had been aimed at supporting women and girls, particularly the underserved. As a biology major, she explored ways to make a positive difference in her community through science. But when she found HAVEN, she also found a new way to help women in crisis, a cause close to her heart.

"HAVEN taught me how to be happy and how to keep others happy in the most difficult and distressing situations. It helped me develop more empathy and understand that being a leader demands trust and empathy more than anything else."

Utilizing leadership skills to support community members

Ujala learned about HAVEN when she was researching opportunities to fulfill the community service component of the Global UGRAD-Pakistan program. "It was so new and refreshing to discover a whole organization completely dedicated to this cause [domestic and sexual abuse and violence.]" She was immediately attracted to its mission to empower survivors of abuse, rather than "rescue" them.

Ujala was hesitant to apply as a volunteer client advocate. Her background was in the biological sciences, rather than in psychology or social work, and she felt she might struggle to build trust in the local community as an international student. She credits her success to the leadership skills she was building in the United States.

Global UGRAD-Pakistan program activities strengthened Ujala's public speaking skills, which built her confidence and gave her greater ease when talking to new people. During her training, Ujala was commended for her empathetic and supportive tone and shortly began answering calls for the 24/7 hotline as a client advocate. She also volunteered at the Bozeman shelter and assisted in managing a Kids' Group.

Ujala says a challenge she faced was learning how to be an "active listener" as she wrestled with understanding new terminology and translating between English and her native Urdu. But her drive and dedication paid off.

Leading positive change in her community

Ujala left the United States having realized her potential to lead positive change in the lives of women around her. Now her primary goal is to create that change in her home country of Pakistan. Because of her transformative experience in the United States and with HAVEN, Ujala decided to create her own social services organization to provide support and raise awareness among women in her home community about their right to resources and protection.

Ujala has set out to assess her community's needs and determine how to best tailor support services to local needs. When she returned to Pakistan, her first step was to familiarize herself with the resources that were already in place to help survivors of domestic and sexual abuse. "The U.S. and Pakistan are very different. We have different laws and different requirements," she said.

Ujala reached out to local organizations focused on social services and women's initiatives to learn more about their work. She interviewed professionals engaged in civil rights protection. She also plans to conduct an assessment survey to better understand her community

members' awareness of existing resources and to gauge their receptiveness to a helpline providing counseling for survivors of domestic abuse.

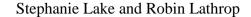
In addition to assessing her community's unique needs, Ujala is busy building a team of experienced legal and social advocates to support survivors as soon as her organization launches. Legal consultants, family lawyers, and psychologists will help her organization support abuse survivors and raise community awareness about the rights and protections that are afforded to women under Pakistani law. Ujala anticipates presenting the registration of her organization for approval by local government bodies this spring.

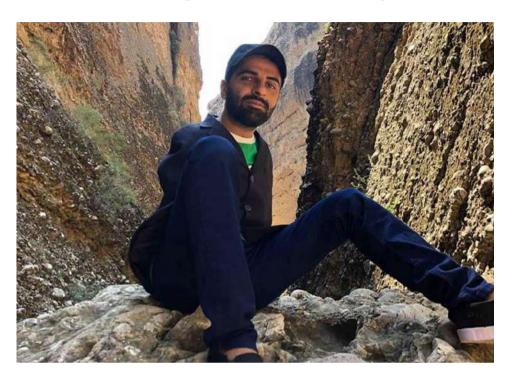
"I was involved in community service work in my home country before going to the United States, but not with that much passion or intensity. It was in the U.S. that I learned the difference that one person can make."

The Global Undergraduate Exchange Program in Pakistan is sponsored by the U.S. Department of State with funding provided by the U.S. Government and administered by IREX.

Source: https://www.irex.org/success-story/building-support-women-pakistan

## Creating opportunities for social inclusion in Pakistan





Global UGRAD-Pakistan alumnus Abdul is an advocate for social inclusion in Pakistan. Starting as a role model for people with disabilities while studying at Snow College in Ephraim, Utah, Abdul is using the communication and project management skills he learned in the program to speak up for girl's education.

Fall 2018 Global UGRAD-Pakistan alumnus Abdul lost his arms during a childhood accident and had to learn to complete daily tasks using only his feet. Searching for a way to connect with others, and work out feelings of anger following the accident, he turned to soccer. He saw that, despite his physical challenges, his dedication and skill served as an inspiration to others.

Becoming a leader and role model for people with disabilities. During his program in the U.S., Abdul volunteered as an assistant coach for the Ephraim City Recreation Youth Soccer Team. Not only did he want to share his love of soccer with youth in his new community, but he wanted to show others that a person with disabilities can still actively and openly participate in society: "I wanted the kids that I coach and my host community to see that, although someone may be differently abled, they can still pursue their goals."

#### He succeeded.

"[Abdul] is an inspiration to the young athletes," a team member's parent said. "The team has learned that just because you've lost your arms it doesn't mean you can't be a great soccer player with your feet." The team's assistant coach agreed. "He's an inspiration to all of the

local teams. Soccer is a global game, and it helps to have a global coach from Pakistan here."Mentoring American youth on the soccer field increased Abdul's confidence, strengthened his communication skills, and developed other essential leadership traits. "In the program, I also learned how to work within a community to decrease discrimination and learned useful tools such as project management and time management," said Abdul. He was able to put these newly found skills to practice immediately in his U.S. host community with his soccer team and also once he returned home.

#### Advocating for social inclusion at home

Abdul returned home to Pakistan determined to leverage his U.S. experience to become an advocate for positive change, not only for people with disabilities, but for others that are experiencing challenges participating fully in society. He identified another pressing social inclusion issue that was occurring all around him—he noticed that a very low percentage of women in his local community went on to pursue postsecondary degrees, like he was. "I wanted to work for women's education because there is still the thought that education is only necessary for boys," Abdul explained.

Abdul used his collaborative problem-solving and negotiation skills to work with community members to educate them on the importance of girls' education. Speaking first to his family, then to his wider community, Abdul successfully convinced those around him of the importance of girls' inclusion in higher education. "I achieved a smaller goal of convincing several families in my community that education is equally important for boys and girls. Now we are organizing a conference for students from Jamshoro, Badin, and Hyderabad to discuss this issue."

Encouraged by the positive response he received from his local community members, Abdul is scaling his social advocacy efforts to three more communities and to university students themselves. Together with fellow classmates, he is organizing a social dialogue conference to be held this summer in Hyderabad. Abdul and his collaborators expect more than 100 students from Jamshoro, Badin, and Hyderabad to attend to discuss issues of importance to their communities, such as women's empowerment and gender equality—both writ large and in higher education.

He hopes to build a model of social dialogue in higher education that can be shared across the South Asia region. "We will be highlighting how these issues are affecting South Asia," said Abdul. "We hope that by working on these issues in our own communities, we can be a model for the region as a whole."

The Global Undergraduate Exchange Program in Pakistan is sponsored by the U.S. Department of State with funding provided by the U.S. Government and administered by IREX.

Source: www.irex.org, July 18, 2019

# How a self-sustaining nonprofit is increasing access to education for youth in **Pakistan**



Seven years ago, Global UGRAD-Pakistan alumnus Mujtaba received a small alumni grant to host an arts competition for underserved children in Lahore. That small grant and years of hard work brought him to Buckingham Palace, face-to-face with Queen Elizabeth II, where he was honored with the prestigious Queen's Young Leader Award. The award recognizes young leaders from around the world for improving the lives of others.

The Global Undergraduate Exchange Program in Pakistan, sponsored by the U.S. Department of State with funding provided by the U.S. Government and administered by IREX, empowers youth leaders from across Pakistan to make a difference in their communities.

After his exchange experience, Mujtaba founded Discovering New Artists, an organization that provides opportunities for underserved youth in Pakistan to participate in nationwide arts competitions that support their education and individual growth as artists. Discovering New Artists started as an initiative sponsored by a Global UGRAD-Pakistan small alumni grant. Since then, Mujtaba has developed his organization into a sustainable nonprofit that has reached more than 15,000 children in Pakistan.

#### Learning to lead and give back to communities

With a longstanding commitment to his community, Mujtaba was drawn to the Global UGRAD-Pakistan program because of its emphasis on leadership development and community service. Once he arrived in the U.S., he was profoundly influenced by the American ethos of community service.

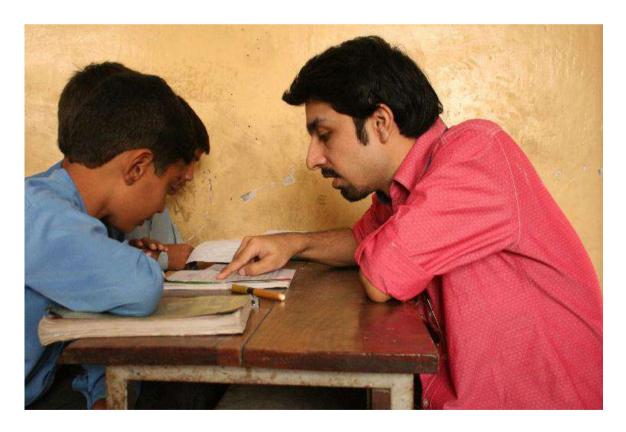
Volunteer opportunities during his semester-long exchange at Humboldt State University helped shape his future goals. In his northern California host community, Mujtaba developed arts activities and games for children's after-school programs. This experience reminded him of the needs of underserved youth in Pakistan.

#### Sustaining a commitment to service

"I realized that Americans care a lot about giving back to their communities," Mujtaba said. "I wanted other Pakistanis to care in the same way."

Mujtaba returned to Pakistan in 2011, inspired by his experiences as a Global UGRAD-Pakistan participant. He began building a small team of like-minded Pakistani students who wanted to give back to their communities. With the support of the competitive small alumni grant, Mujtaba and his team held an art competition for underserved youth at a local shelter for orphaned children. He arranged an exhibition to sell the art and used the proceeds to provide scholarships for ten orphans from the shelter.

Mujtaba's success highlights the ability of the Global UGRAD-Pakistan program to sustain a commitment to service among its alumni. Following program completion, more than 85 percent of alumni indicated they planned to be active in their communities for the rest of their lives.



**Expanding impact on youth education** 

After leading other initiatives—a book drive, writing camp, and a web platform for underserved children to voice their educational wants and needs—Mujtaba and his team realized that they now had the know-how to grow their operations.

"We wanted to expand our impact," Mujtaba said, "and each initiative gave us more insight into the problems underprivileged children [in Pakistan] face."

Mujtaba registered Discovering New Artists as an official Pakistani nonprofit organization in 2013. Its flagship initiative—Art for Change—is a nationwide children's art competition.

"We returned to the model that we used in our very first project," Mujtaba said, "and Art for Change uses the application fees of students from private institutions to pay for the participation of students from underprivileged backgrounds."

Art for Change sustains itself by showcasing and selling the artwork during competitions. Proceeds are reinvested into education for underserved children by purchasing textbooks and other educational resources as well as providing scholarships.

#### Achieving results through growth and sustainability

Discovering New Artists is a shining example of how a small initiative can lead to big results. Starting with a small grant and a team of seven volunteers, the group blossomed into a sustainable nonprofit organization with three full-time staff and fifteen volunteers. It has hosted four Art for Change competitions that have supported over 7,000 underserved children and has held exhibitions of their artwork in Pakistan, the United States, and the United Kingdom.

Mujtaba is proud of his accomplishments, and he is grateful for the opportunities afforded to him by the U.S. Department of State's undergraduate exchange program. "Global UGRAD-Pakistan gave me the opportunity to launch Discovering New Artists," Mujtaba says, "and that's where it all started."

Source: https://www.irex.org/success-story/how-self-sustaining-nonprofit-increasing-access-education-youth-pakistan, 18 oct 2018

## **Importing success?**

JUST before Prime Minister Imran Khan concluded his much-publicised trip to Malaysia, his words of praise for the Southeast Asian country's economic success quickly exposed an oft-repeated mistake made by a succession of Pakistani rulers.

"My party wants to learn from your experience and how you transformed the economy," said Khan, complimenting Mahathir Mohamad, the nonagenarian Malaysian leader. Khan has sought investments from Malaysian entrepreneurs in areas like tourism and energy to charge up Pakistan's beleaguered economy.

But beyond seeking investments, the idea of emulating the Malaysian model, following the footsteps of Mahathir's economic journey, yet again smacks of a failure to learn from Pakistan's agonising past. Previous rulers have also bandied about a range of foreign success stories as a mirror image of where they want to take Pakistan.

Rulers have ignored the mistakes committed in the nation's history.

But the fundamental gap in throwing up such images as a reflection of the future of Pakistan is just one. In turning to foreign success stories, Pakistan's rulers have often ignored the key mistakes committed in the nation's 71-year history that have driven down prospects for progressive change and saddled the country with multiple challenges. In brief, the idea of importing success is essentially a non-starter.

#### ARTICLE CONTINUES AFTER AD

A litany of woes surrounding key challenges — notably corruption, fixing the economy and ensuring rule of law — have all emerged from the crisis of governance surrounding Pakistan. And years of failure to ensure transparency in the functioning of successive governments has only added to Pakistan's sorry state of affairs.

The ongoing controversy surrounding the contract for the proposed Mohmand dam being given to a company owned by the de facto commerce minister, Razzak Dawood, has caught the eye of many in Pakistan. Yet, the Khan government's apparent determination to shove the issue under the carpet should not be surprising.

Many past governments have chosen to rush into projects without thinking through their ultimate consequences. In a country where a crisis of governance has given way to a crisis of government, repeating past mistakes will only aggravate already adverse conditions.

And the sorry episode with Minister for Water Resources Faisal Vawda pouncing on the media when asked about the 'single bid' award for Mohmand dam says much about the state of affairs in Islamabad. (Vawda's bravado was widely witnessed during the attack on Kara-

chi's Chinese consulate. Dressed in a bullet-proof vest and showing off a fancy pistol, Vawda's appearance was no less than John Wayne's.)

Notwithstanding the search for a foreign success story to mimic Pakistan's future, recent controversies surrounding Khan have vividly pointed towards the problem fundamentally lying at home. Just as the multifaceted challenges are rooted in Pakistan's own peculiar history, solutions must also be found on the home turf.

Only months after landing in office, the PTI appears to be groping in the dark as it seeks to set a long overdue new course for Pakistan. Nowhere is this more evident than in the clear challenge of fixing a largely moribund economy. The success in receiving a variety of financial bailouts from friends of Pakistan still leaves the zillion-dollar puzzle — the economy is not moving in the intended direction.

After a series of devaluations over the past year that have together sunk the rupee against the dollar by a hefty 30 per cent or so, exports remain sluggish and imports stubbornly refuse to come down. Obviously, there are policy gaps which continue to fuel Pakistan's all too dangerous trade and current account deficits. In seeking to make the transition for tackling a host of challenges, Khan needs to look back at the team he is carrying for the job. As a good captain, he either needs to crack the whip or change the team — or both. Ultimately, the captain's own reputation is on the line.

Going forward as the government adopts popularly painful measures to back the all-too-inevitable IMF loan, Khan will find his already fading popularity drying up. Lessons from the history of previous rulers in Islamabad will serve well to illustrate exactly how underperforming regimes have travelled quickly from riding high on popularity waves to the political wilderness.

And for the moment, putting Mohmand dam on hold till a new round of contractors are chosen will help to clear the air in Islamabad. Ultimately, a transparent process will only reinforce Khan's widely touted promise to stamp out corruption.

Otherwise, Prime Minister Khan and the PTI can bet on being haunted by this sorry saga for years to come, as the first financial controversy during their rule. Notwithstanding Malaysia's own controversies, even aging prime minister Mahathir Mohamad will hardly approve of the way business is being done in Islamabad.

The writer is an Islamabad-based journalist farhanbokhari@gmail.com

Published in Dawn, January 8th, 2019

## How a young entrepreneur is saving lives in Pakistan



After participating in the Global UGRAD-Pakistan program, Usama used his newfound leadership and project management skills to develop a range of water filtration products to help save lives.

Before coming to the United States through the Global Undergraduate Exchange Program in Pakistan (Global UGRAD-Pakistan), Usama volunteered with Afghan refugees in a UN Refugee Agency camp where he witnessed people suffering from waterborne diseases. After participating in the program, Usama used his newfound leadership and project management skills to develop a range of water filtration products to help save lives.

"When I found out that seven children had died in the camp because of waterborne diseases, I was struck by the loss," says Usama. "If the children are not healthy, then how can they go to school or seek education?"

Usama knew that a simple water filtration device could stop the spread of diseases and give refugee children, and others without access to clean water, a future.

Collaborating with American students to make a global impact

In Pakistan, 62% of urban populations and 84% of rural populations do not treat their water, resulting in 100 million cases of diarrheal disease and up to 250,000 child deaths each year. Usama decided to take action. Inspired by the ground-breaking LifeStraw, a portable water filtration device in the shape of a drinking straw, Usama began to work on a more cost-

effective version for refugees and those living in rural communities. The "PakStraw" was born.



In Pakistan, 62% of urban populations and 84% of rural populations do not treat their water.

For the next two years, Usama worked on a PakStraw prototype but struggled to find the technology he needed to make it cost-effective. Then, as a participant in the Global UGRAD-Pakistan program at Florida State University(FSU), Usama took a chemical engineering class and learned how hollow fiber membrane technology (HFMT) is used in US sanitation systems. Water passes through hundreds of tightly packed hollow tubes or "membranes" filled with microscopic pores, which filter out microbial cells and remove impurities, making the water potable.

"We learned how HFMT can save millions of lives around the world by providing costeffective and simple water purification solutions," says Usama.

Usama collaborated with three American classmates and found a way to successfully incorporate HFMT into his PakStraw prototype.

"My Global UGRAD-Pakistan experience is where it all started," says Usama about his final design for PakStraw. "This program is exceptional in the way it has provided me with an opportunity to connect with and learn leadership skills from some of the world's best mentors in the business."

Developing sustainable solutions to support underprivileged communities

Following his experience in the Global UGRAD-Pakistan program, Usama's new project management skills earned him a slot to compete in the annual Social Innovation Challenge hosted by the Fred J. Hansen Summer Institute on Leadership & International Cooperation. He led a team of participants from Brazil, Bulgaria, and Georgia to create a business model for a startup called PakVitae, which would develop a range of water filtration products, including PakStraw.

My Global UGRAD-Pakistan experience is where it all started... Now I am more determined and feel more responsible for giving back to my community, and to work for social entrepreneurship for the welfare of my society. Usama, a Global UGRAD-Pakistan alumnus

Usama and his team won the Challenge and received \$4,500 to pilot their startup in Pakistan. "PakVitae is a social enterprise which will provide off-the-grid, cost-effective water purification solutions for underprivileged communities," says Usama.

In March 2018, the team traveled to Dubai and pitched PakVitae in a regional competition for the prestigious Hult Prize, which awards seed funding to a team of young social entrepreneurs that designs the most competitive and sustainable idea for a startup that solves one of the world's most critical social challenges. This year, PakVitae won the regional Hult Prize for Pakistan.

In summer 2018, Usama and his team will head to the United Kingdom to participate in the Hult Prize Startup Accelerator along with 50 other global teams. The program will prepare them for the Hult Prize Final in September 2018 and a shot at a \$1 million prize. They are the first team to represent Pakistan in the finals of the competition.

If PakVitae is successful in Pakistan, the team plans to move into the Brazilian market to meet a growing need for clean water in underserved areas of Brazil, along with other regions in the world. "We would like PakVitae to go global," says Usama.

"Now I am more determined and feel more responsible for giving back to my community, and to work for social entrepreneurship for the welfare of my society," says Usama.

Source: https://www.irex.org/success-story/how-young-entrepreneur-saving-lives-pakistan

## Meet the 26-year-old Pakistani who founded a multimillion dollar company

'Wifigen' gives free Wi-Fi to customers in exchange for their information.

What does it take for a man to reach his full potential? Good advice – more than anything else. And this was exactly what Bilal Ather got during his journey in creating <u>Wifigen</u> – a tool that gives free Wi-Fi to customers in exchange for their information. It is a software that operates on a subscription based model, costing around \$20 per month only per access point, and uses permission-based Facebook API to give user access.

So where did it all begin?

#### **Good mentorship**



Mr Bilal was just an ordinary guy who like many other A-Levels students was not sure about his future. He figured out very early that he did not want to go to a university. He then planned to get an ACCA degree and decided to become an auditor. But this did not work out.

Thinking that a career as a rock guitarist might be the thing for him because he had participated in several school gigs before, he decided to try his luck in singing. But Mr Bilal was counselled by his father who being a good mentor told him he would not be able to have a stable career in singing, rather he should utilize his other talent, in computers.

He first used a computer when he was only 5 years old. This was where his passion for the world of computing began.

Then, a friend from England told him to take a certification in Cisco and work in networking technology. He went on to complete two CCIE certifications.

Still 21 years of age, he was used to getting many job offers. He even turned down the offer of a big telecommunication company in Saudi Arabia and rather chose to do a job in Beaconhouse. But thankfully within six months of his work there, he realised that his talent was being wasted and his job role was not utilising his Cisco expertise at all.

A company from Abu Dhabi called him to give training sessions in Cisco. This company also specialised in disaster recovery solutions. After gaining some experience, Mr Bilal left the company to form his own company – Ikhtira Systems – in Multan, a city chosen specifically because there was no competition in disaster recovery services there. Lahore already had so many companies doing similar work. His company's name 'Ikhtira' was taken from a band he was a part of in high school. But just like the band, the company suffered heavy losses and failed within 10 months of operations.

Mr Bilal was distraught; he did not want to go back home and ask his parents for support. People used to look up to him and appreciate the fact that he started a company at 22, and now they were making fun of him. He did not even have money to buy lunch for three consecutive days.

#### Freelancing pays

Destiny then led him to a guy who told him to start freelancing on the Internet. He had a network of very supportive friends in Multan. Even though, he did not have money to buy his own Internet service, being the geeky genius he was, he started hacking into other people's Wi-Fi. Freelancing started making him some money. He got his first project in 10 days and although he only made \$35 for his first project, he was relieved that at least now, he was earning something. "Things then started moving in a good direction. Freelancing really helped," he recalls.

With the confidence of some money in his pocket, he went back home and started living with his family in Vehari. But his parents were upset with his routine. He used to sleep all day and work all night. His parents worried that no girl would marry him if he continued like this. Mr Bilal then got the opportunity to move to Lahore. He started helping Arfa Karim's parents in setting up their institution in Plan9. He didn't charge them any money, just utilised the space for his own work. By this time, he had started working on Wifigen already.

#### **Getting breakthroughs**

During his freelancing gigs, Mr Bilal got a project from someone who turned out to be John Russell Patrick, the ex-VP of IBM. He pitched Wifigen's idea to him, but although John liked the idea, he said that he did not invest in early-stage companies. Mr Bilal was nonetheless adamant that Mr John could at least mentor him. Thus, began the journey of a mentor turning into an investor.

Mr Bilal then went on to do a project for another lady who had her own consultancy company in New Zealand. She introduced him to someone who wanted to be a reseller for this product in New Zealand, but was told to complete the product in two months. Mr Bilal argued that he needed funds to complete it in such a short period. The reseller in New Zealand agreed to fund the project without taking any equity. A lucky break, you may call it. He then hired some people on freelancer.com to help him build his product within 45 days. The proposed timeline for project completion was 60 days. This left a 15 days leverage to further test the product and eradicate any flaws.

But that was not enough for him. He was surprised to find that anyone could apply at Plan9. It was a very open community that really motivated him. He went on to launch his own company in New Zealand. Within three months of incubation, he raised funding from his old mentor, Mr John.

Then during a business trip to Singapore, he met a representative from Changi Airport who was really interested in deploying Wifigen on their airport. Mr Bilal then started beta testing Wifigen on Singapore's airport. Later on, he got Unilever Pakistan on board too. But this was only the beginning. He signed on the biggest deal in the history of Wi-Fi at Tahiti Island, which wanted to use Wifigen to give a better experience to tourists. Wifigen then was seen as a product with a huge application in the tourism industry.

#### What's next?

Mr Bilal has been trying to integrate artificial intelligence with Wi-Fi for the last three months. He realises that machine learning is necessary to make things easy for the advertisers and the people who will be using its Wi-Fi. It will allow the advertisers to know exactly who the end user is and how deep his pockets are, so they can accordingly pitch them different products.

He wishes to move into more markets as business expansion will be the key driver of Wifigen's success. His company currently has a multi-million dollar valuation while trying to raise another round of investment. For all those aspiring entrepreneurs out there, he has only one thing to say: "Keep failing until you are ready to change the world."

Source: https://www.dawn.com/news/1272454, Jul 22, 2016

## 'Over 90 species facing extinction'

ISLAMABAD: There are over 90 species of mammals, birds and reptiles categorized as critically endangered, endangered, vulnerable and near the threat of extinction in Pakistan, the Ministry of Climate Change told a parliamentary committee on Tuesday.

Species that are at risk of or nearing extinction include 50 mammals, 27 birds and 17 reptiles, the ministry informed the National Assembly Standing Committee on Climate Change during a briefing on measures taken to preserve endangered species in the country.

A brief prepared by the ministry revealed that all endangered wildlife species – mammals, birds and reptiles – are protected by provincial and territorial wildlife laws.

Critically endangered species include the Siberian crane, the white-rumped vulture, the long-billed vulture, the red-headed vulture and the hawksbill turtle. The Kashmir grey langur, Indus dolphin, finback whale, Balochistan bear, musk deer, hog deer, Indian pangolin, Egyptian vulture, green turtle and Indian narrow-headed turtle are endangered.

These species have been categorized as critically endangered, endangered and vulnerable, ministry says

According to the Convention on International Trade in Endangered Species (Cites), the common leopard, snow leopard, Ladakh urial, greater spotted eagle, fish eagle, houbara bustard, crowned river turtle, Indian soft-shell turtle and many other mammals, birds and reptiles in Pakistan are 'vulnerable'.

The national animal of Pakistan, the Markhor, is protected by local and international law such as Cites.

The ministry's brief said that the trophy hunting of the Markhor in Khyber Pakhtunkhwa, Gilgit-Baltistan, Balochistan and Azad Kashmir was a success story in Pakistan, as local communities conserve the animal and international hunters pay large sums for shooting licences.

Up to 80pc of the money from Markhor hunting permits is shared with the local community, which works to prevent illegal hunting of the animal.

The ministry claimed that the status of the snow leopard has also improved, and the species is now listed as vulnerable instead of endangered.

The snow leopard is found in various mountain ranges in 12 countries, including Pakistan.

**Rural Development in CIRDAP Member Countries** 

The committee meeting also took notice of relatives accompanying government officials to

international events.

The matter was raised by Pakistan Tehreek-i-Insaf MNA Mussarat Zeb, who has been asked

for a list of names and designations of delegates who travelled abroad for climate change

events since last year.

The name of former climate change secretary Syed Abu Akif was mentioned, as he allegedly

took his wife and his daughter to Paris when he travelled to attend the United Nations

Framework Convention on Climate Change.

Climate Change Minister Mushahidullah Khan said it was criminal that relatives were

portrayed as official delegates to participate in international events.

"The committee must order an inquiry to point out such criminal acts and end this habitual

exercise," he said.

Committee chairman MNA Malik Mohammad Uzair Khan observed that a member who had

not provided a list of delegates travelling abroad for the last year was disrespecting the

committee.

He directed Climate Change Secretary Khizar Hayat Khan to submit the list as soon as

possible.

Source: The Dawn, February 21st, 2018

360

## **Start-up spirit**

ENTREPRENEURSHIP and innovation are building blocks for tackling many of the economic and social challenges faced by emerging economies today. Pivoting towards an entrepreneurial-focused economy can help unlock a nation's potential in the same way that technology has engendered success stories in many markets globally.

Pakistan has many of the same assets its peers enjoy. Home to 130 million people under the age of 30, it is an emerging economy projected to continue growing quickly in the coming years. Data-enabled mobile connections have grown four-fold in the past three years and the country's e-commerce market beat analysts' predictions to cross the \$1 billion mark in 2018. Between 2015 and 2025, McKinsey's City Scope database projects that Pakistan will have an additional 700,000 high-income and 2.1m middle-income households.

Start-ups have taken off across the nation in an enhanced business environment, while incubation and incentives from the government have attracted new venture capitalists to Pakistan. But the country still has some distance to go in order to reach its full potential.

Pakistan's entrepreneurs need private-public partnership to thrive.

Using venture capital investing as a measure, the UAE has \$40 in venture capital investing per capita, while Pakistan has \$0.10 — lower than its regional peers Sri Lanka and Bangladesh. Yet the ecosystem holds tremendous opportunity. With robust planning, concerted policy action and private-sector initiatives, Pakistan can leverage entrepreneurship for public benefit across three different planks.

The public sector must lay the groundwork. Starting a business in Pakistan requires six steps that involve four different government departments in a process that can take up to two months. This deters most entrepreneurs from formalizing their business, in turn slowing their growth by minimizing their credibility, cutting off access to credit facilities and forcing them to absorb bureaucratic costs. Pakistan can learn from the experience of more than 80 other countries, where simplified procedures saw business registration rates double as compared to those without these adjustments.

Policy improvements and enhanced infrastructure are two palpable ways that governments can help. Launching single-window entities to expedite incorporation can save time and money for start-ups; such an initiative in Portugal resulted in 17 per cent more registrations the following year. The development of complementary infrastructural mechanisms, such as enabling digital payments or modernizing existing institutions, can improve start-ups' ability to scale. In Nigeria, for example, investing in a centralized data hub to support the credit bureau and allowing small to medium enterprises better credit access resulted in a decrease in the ratio of non-performing loans while increasing the number of borrowers.

The private sector can create access routes to finance. Half of all Pakistanis are without access to formal financial services, according to the World Bank. Of 3.2m small to medium enterprises in the country, banks have only lent to 188,000 enterprises. Pakistan's formal financial institutions tend to favour established enterprises, and the resulting financing gap prevents entrepreneurs from researching the technical feasibility of new products to build commercial and marketing channels.

This presents a significant opportunity for the nation's private sector to fuel profitable startups and engender greater socioeconomic value. Besides local market knowledge, investors can mitigate their risk by following certain guiding principles, such as following an insightdriven approach, driving core value, or investing along thematic lines, such as by geography or industry vertical.

Educators can create an inclusive talent ecosystem. A sizeable talent pool of about 600,000 graduates each year from Pakistan's educational institutions. Yet the nation only ranks 109 out of 170 on the Global Talent Competitiveness Index.

But these young people can each be empowered to bring their dreams to fruition with an ecosystem that nudges them to innovate. Pakistani institutions need to launch more programmes that develop talent at scale or team with incubators to cultivate start-up talent. In Pakistan, private-sector economies have taken the lead, but government institutes can do more on this front.

If Pakistan wants to safeguard the future of its youth, it needs to embrace some of these lessons from other markets and establish the networks between private and public sector to nurture the nascent start-up ecosystem and access the benefits of the digital revolution that is helping other countries leapfrog their social development. The nation's first billion-dollar valuation has yet to be sighted but — with the right encouragement — the day when it shows itself may not be too far away.

The writer is a partner at McKinsey & Company and leads the firm's regional technology and entrepreneurship work.

Source: Published in Dawn, May 2nd, 2019, https://www.dawn.com/news/1479767

## Treat the person, not the disease

Dr Fauzia Tabassum Afridi says empathy is key in helping victims recover from trauma



Dr Fauzia Tabassum Afridi has worked relentlessly in remote areas of Pakistan to improve women's health issues for over 15 years. Photos: Saengwit Kewaleewongsatorn

For over 15 years, gynecologist and obstetrician Dr Fauzia Tabassum Afridi has been providing reproductive health services to women and girls impacted by humanitarian crises in some of the most remote areas of Pakistan. Fiercely strong-willed, clearly she is the walking epitome of what it means to reach one's goals in life no matter the obstacles.

One of the few female doctors working in conflict-torn areas, Afridi was recently in Bangkok to mark World Humanitarian Day. The event in Bangkok was organized by the Australian Embassy in Thailand, the United Nations Population Fund (UNFPA) and the International Family Planning Association (IPPF). This year's commemoration focused on female humanitarian workers.

During the event, Afridi was invited to share her experiences and her inspiration that has made her a formidable campaigner for the rights of women to receive adequate medical care.

Afridi described the first time she saw a woman die during childbirth. That made her intend to devote herself to helping girls and pregnant women, intentionally and unintentionally, including those affected by sexual violence.

Hailing from the ultra-conservative Pukhtoon Afridi tribe in Pakistan, the doctor is the firstborn of six children. Her father was the first in his family to earn a scholarship to study engineering in Karachi.

The exposure of studying in the city played a crucial role in his ability to set aside his reservations on educating women, allowing his daughters to study to their highest potential, despite his conservative upbringing where the role of women was limited to being a dutiful wife and mother.

"I have much to thank my father for, if it wasn't for him, it would have been extremely difficult for me to have pursued my medical career," said Afridi.

"A particular incident that stands out goes back to the day I had secured my medical seat in the university. A man in our community reached out to my father with a monitory proposal, which called for me to give my seat to his son. He offered my father a huge sum of money, saying that his son could make better use of the medical degree than his daughter because as a woman she would eventually be married off and have to be at home."

When it comes to her humanitarian work, Afridi, who works both in private and government hospitals, said she has always made herself available when a need arises to help the most vulnerable.

"Since the very beginning, I believed in one thing, that when you are treating your patient, treat them the way you would want to be treated if you were in their shoes. So I always welcome my patients with a broad smile, I show empathy and compassion no matter their financial standing.

"In this manner half of the patient's suffering is alleviated."

Afridi said in her role with the UNFPA she has served as a master trainer of clinical management of rape, where empathy and acquiring good listening skills are pivotal tools to treat victims.

"I am a humanitarian from within, I suppose, as being emphatic comes naturally to me. This works in my favour as the victims open up quickly to me. This plays a huge role in my being able to support them through this tumultuous time in their life."

Afridi added that what keeps her going is the desire to give back to society, and be there for the women and girls that find themselves vulnerable and destitute.

"If I can make them just a little happy with my attitude, or with being able to offer other incentives to make their life better, it is a step in the right direction. I want them to realise that there is someone who really cares for them," she said.

"However, when I attempted to share the knowledge I received from UNFPA training with the staff, nobody paid attention. They said what are you talking about, we are so busy, empathy and having a sympathetic ear is all good when you have time. We are seeing 20 patients in 10 minutes, and you are telling us to be emphatic and compassionate."

Medical schools today, added the gynecologist, don't teach what really matters.

"They teach us to treat the disease not the patient, which shouldn't be the case as the medical profession is based on empathy and compassion.

"Giving offers inner satisfaction and when you take it burdens you. That is why I am glad to be there for people who most need me," she said.



Dr Fauzia Tabassum Afridi describes herself as a hand's on professional who goes out of her way to make her patients feel at home. Saengwit Kewaleewongsatorn

Among the numerous issues she tackles, Afridi rates gender-based violence cases as being one of her top priorities. In most of the remote areas her work takes her today, she has found domestic violence to be prevalent, however, with ongoing awareness programmes educating men to respect and treat women better, the situation is steadily improving.

"People we engage in these UNFPA awareness programmes are not just the husband and wife but also mother in-laws. In the social settings we work, victims don't consider spousal battery as a crime. They feel the physical abuse was asked for, primarily because they had angered the husband. We have to gain their trust first before we are able to address the emotional damage most of these women have suffered. Explaining to them just why it is very wrong for a husband to lay a finger on his wife is a huge part of their recovery.

"Apart from this, we have sexual violence cases, which are difficult to address because laws are still being implemented to bring perpetrators to justice. Most are incest cases as women reside in joint families and are not allowed to go out freely.

**Rural Development in CIRDAP Member Countries** 

"There is huge stigmatization by society in such cases, so we have to deal with the victim and her family in a most discreet manner. If the victim is found to be in her early stages of pregnancy, abortion is often considered primarily because of her young age and family which

blames her for the pregnancy. This resentment often leads to retaliation from them which could put the victim in harm's way."

Keeping such cases confidential goes a long way in helping make communities Afridi works

in trust her with the life of their vulnerable daughters.

"If given the opportunity, I would like to train medical caregivers on offering a personalized service for gender-based violence cases," added the woman who has fought tooth and nail to

achieve success in a patriarchal society.

"What I see today is that they are lacking the empathy and compassion required to treat

victims, that through no fault of their own, find themselves emotionally distraught and in

need of a sympathetic ear because someone close has physically violated them.

"We need to treat people, not just their disease."

Globally, one in every five girls is married, or in union, before reaching age 18. In the least

developed countries, that number doubles — 40% of girls are married before age 18, and

12% of girls are married before age 15.

Every day in developing countries, 20,000 girls under age 18 give birth. This amounts to 7.3

million births a year.

Ninety percent of women aged 15-24 in Guinea still think that wife beating is justified under

at least one condition.

Some 830 women still die every day from causes related to pregnancy or childbirth. This is

about one woman every two minutes.

Information from the United Nations Population Fund (UNFPA)

Source: https://www.bangkokpost.com/life/social-and-lifestyle/1757924/treat-the-

person-not-the-disease, 25 SEP 2019

366

# Where the government's handling of the economy is going wrong

#### Rashid Amjad



A currency dealer counts US Dollars | Fahim Siddiqui, White Star

The ruling Pakistan Tehreek-e-Insaf (PTI) inherited an economy that had been showcased as a success story by its predecessor government of the Pakistan Muslim League-Nawaz (PMLN). The previous government would claim that the national economy had been revived and economic activity had been put on the path for a higher and sustainable growth.

The reality was different. The PMLN's economic edifice was built on very weak macroeconomic foundations. Heavy dependence on foreign loans and short-term borrowing as well as stagnant exports had caused a foreign exchange financing gap of near 30 billion US dollars, almost 10 per cent of the Gross Domestic Product (GDP).

This gap stared in the face of PTI's economic team whose immediate primary task after coming into power became to raise foreign funding in order to save the economy from financial collapse and bankruptcy. Thanks to help from friendly countries such as Saudi Arabia, United Arab Emirates (UAE) and, most recently, China, the team was able to raise sizeable foreign exchange. It similarly managed to obtain concessions on payments for oil imports — also from Saudi Arabia. This helped Pakistan ward off an imminent economic crisis and provided some cushion to our fast declining foreign exchange reserves.

While the government was seeking help from friendly countries, many analysts worried that it was taking too much time to go to the International Monetary Fund (IMF) for a financial-assistance package. Prime Minister Imran Khan, indeed, was not keen, at least initially, on approaching the IMF because he had pledged to reduce Pakistan's dependence on external financing and the conditionalities that came with such financing. The government, nevertheless, decided to bite the bullet despite strong divisions on the issue among its team of economic advisers.

In the first few months of being in office, the government tried to negotiate with the IMF on a three-year assistance programme worth 8-9 billion US dollars. During these negotiations, the Pakistani team faced an IMF that was upset because all the previous governments – starting in the 1990s – had gone back on their promises to carry out economic reforms in return for aid packages.

The government negotiators found that the IMF wanted to put in very harsh terms and conditions for a new assistance programme. These included further devaluation of Pakistani currency, an end to the practice of using the State Bank of Pakistan's foreign exchange reserves — built mainly through foreign borrowing — to support the rupee's value, drastic decrease in energy and fuel subsidies to reduce the mounting circular debt, sharp tightening of monetary policy (that is, increase in interest rates), a significant decline in Public Sector Development Programme to reduce fiscal deficit and the privatisation of major loss-making state-owned enterprises. The IMF wanted the government to commit to — and initiate — all these measures at the very outset.

Pakistan's economic managers, led by finance minister Asad Umar, decided that taking these measures immediately was too high a cost to pay as these would "subject the people of Pakistan to unbearable hardship".

They, therefore, sought a relatively gradual process of economic reforms — something that the IMF did not agree to. The government, however, did not close its parleys with the IMF. A process of discussion has continued for the last few months and has now reached a stage where the two sides are again talking about the possibility of the approval of a financial package sooner rather than later.

The decision to not succumb to the IMF's harsh conditionalities was certainly a bold one but it needed to be complemented by some other important steps. Prime Minister Imran Khan's economic team, on the contrary, did not realise the importance of undertaking a quick and decisive, but also well-thought-through, short-term programme for the stabilisation of the economy in order to restore business confidence and ensure that economic growth did not stumble downwards. After displaying an understanding of the economy's underlying ailments, his team appears to have come up with somewhat simplistic solutions to deep-rooted problems. At times, it has made even conflicting economic decisions.

This was most clearly displayed in the government's approach towards the private sector. At one stage, its economic managers made it clear that private businesses will be the major engine of capital accumulation and job generation, and will be fully encouraged to undertake this task by freeing them from unnecessary controls and bureaucratic interference.

Yet, at the same time, the government set in motion a strong and overzealous drive by revenue authorities to not just bring habitual tax evaders into the tax net but also to pressurise the existing taxpayers — at times unfairly. Resultantly, it has failed on both fronts. Neither

did the private sector respond positively to its friendly overtures nor were its policies successful in bolstering tax revenues significantly.

Similar is the case with the mini-budget presented by finance minister Umar at the end of January 2019. Here we see a classic case of a government trying to please everyone but ending up in pleasing no one. The move to withdraw some of the tax concessions on salary income given by the previous government was perhaps justified given Pakistan's current fiscal position (where the gap between income and expenditure has been increasing consistently).

Similarly, the removal of high tariffs on the import of industrial raw materials was an important and much-needed step to increase the international competitiveness of local manufacturers. The revenue measures proposed in the mini-budget – and now approved by the National Assembly – were, however, certainly not sufficient to meet the revenue needs. Similarly, the planned cuts in government expenditure to decrease the burgeoning fiscal deficit were also not clearly spelt out. The IMF, for one, was not impressed.

The other flaw in the economic management has been a continuing uncertainty about currency exchange rate and foreign exchange reserves. Though the State Bank of Pakistan has been able to stabilise the exchange rate at around 140 rupees to a US dollar, many potential investors fear that the value of rupee will drop further – perhaps quite significantly – once an agreement is signed with the IMF. Such an agreement will preferably seek a free-floating exchange rate system. Short of that, the IMF will want to put a drastic limit on the State Bank of Pakistan's ability to intervene in the currency market. Many potential investors have, therefore, decided to wait till an agreement materialises.

As far as foreign reserves are concerned, dollar deposits given by Saudi Arabia, UAE and China have, indeed, given them a semblance of stability but these deposits have limited utility because these cannot be used for loan repayments or for foreign trade. Similarly, a rising dependence on imported natural gas for electricity generation has reduced oil imports and blunted the impact of concessions given by Saudi Arabia through deferred oil payments.

The reserves, in the meanwhile, continue to bleed by an amount ranging between 750 million and 1 billion US dollars every month. This haemorrhage is resulting from not just a high import bill but is also caused by payments being made to service foreign debts. What we have borrowed from our friends will certainly do nothing significant to ward off the twin impact of these two factors.

The overall economic situation reflects how the government has handled – or mishandled – various challenges. That the GDP growth rate is expected to drop – from 5.2 per cent recorded in 2017-18 to 3.5-4 per cent in 2018-19 – suggests there has been some break in the growth momentum achieved earlier.

The fiscal deficit, on the contrary, is expected to rise higher — to over 6 per cent of the federal budget at the end of 2018-19. And, though the current account deficit has narrowed in recent weeks — more due to a lull in imports than because of any significant increase in exports — considerable pressure still exists on foreign exchange reserves for bridging the gap between low export earnings and high foreign exchange requirements for imports and debt servicing.

Most worryingly, there has been a spurt in inflation primarily because of rupee devaluation which has raised prices of imported goods, significantly increased natural gas prices and, to a lesser extent, pushed up electricity rates (which have also risen due to reduction in subsidies).

Because businesses are setting prices for their products through a 'cost-plus' formula (due to uncertainty over foreign exchange rates), the knock-on effect of this pricing formula on non-tradable goods – such as construction and transportation, etc – means that the overall annual rate of inflation could be 8-10 per cent at the end of the current financial year on June 30, 2019. This will put pressure on the low income groups and those already living below the poverty line will immediately need a government-provided safety net.

The first major test of the government's economic team in the coming months will be the upcoming round of negotiations with the IMF. Given that this team has been in office for more than half a year now, it is expected to be better prepared for this round of negotiations. Its task has been made somewhat easier because the government has already implemented some of the reforms demanded by the IMF in order to soften their blow on the economy and poor segments of the society — although the IMF will clearly ask for more. These mainly include adjustments in fuel and energy prices through reduction in subsidies.

That the foreign exchange rate is already well near where it should be also makes life easy for the economic team during its negotiations with the IMF. Now it must try to ensure that the rate is not subjected to any significant decline.

It must also convince the IMF that fiscal deficit is brought down gradually so that sharp cuts in development expenditure and steep increases in taxes do not completely break the momentum for economic growth. It should, similarly, agree on achievable revenue generation targets rather than the ones which it cannot attain. Above all, the government must seek an increase in the amount of money allocated for the Benazir Income Support Programme and other social welfare initiatives, including housing for the poor — and keep this money outside the fiscal deficit targets.

The economic managers should, however, accept the IMF's contention that a greater autonomy is given to the State Bank of Pakistan in setting currency exchange rates and managing the monetary policy. As long as the bank's own monetary policy committee has an autonomous status and as long as there are frequent meetings of the committees that coordinate between the bank and the government, this autonomy should not hurt the

economy. There, though, is a need to make this consultative process more inclusive by enabling the participation of provincial governments in it.

The biggest challenge for our economic policymakers is to ensure that the stabilisation phase following the introduction of economic reforms is not prolonged (even if its sharp impact cannot be avoided in the immediate term). The other part of this challenge consists of the need to take the economy to a growth rate of 5.5-6 per cent in the next three years.

With China-Pakistan Economic Corridor entering a phase where new economic zones will be set up and with electricity shortages having been drastically reduced, Pakistan is well placed to attract private investment. Simultaneously, foreign and domestic investors are showing a high interest in the country's large and growing market and a fast rising middle class. Together these factors should help Pakistan achieve an even higher growth rate.

We must, in the end, realise that recurring foreign exchange constraints are the reason why Pakistan's GDP growth rate does not reach the level it has the potential to reach and why we continue to have start-stop cycles of economic development. To overcome these constraints, exports should be placed at the centre of a new growth strategy. Rather than trying an arbitrary slowdown in imports, economic managers should make policies that encourage exports. Finally, we should realise that Pakistan is required to aim for a sustained growth rate of 7.5-8 per cent if it is to meet all its security needs as well as the needs of its people.

The writer is a professor of economics at the Lahore School of Economics.

Source: https://herald.dawn.com/news/1398861, Apr 22, 2019

## **PHILIPPINES**

## Life's dream, realizedFamily farmer-turnedgovernment expert helps other farmers

Lowell Rebillaco grew up on a family farm in the Philippines.

"When I was a child I dreamed of helping not just my family but, our neighbours, who are also farmers," Rebillaco says. "I want to help them by improving their farm productivity so that they have more income and better access to basic necessities such as health, education, markets and can afford little bit of leisure."

As a Department of Agriculture employee, he uses innovative tools such as drones, his technical expertise in data management and project evaluation to help other farmers improve their work. This includes advising farmers on better cropping techniques and developing reports on vegetation, crop health and, in the event of natural calamities, assessing damage to crops and livestock from floods, earthquakes, volcanic eruptions and pests.

Rebillaco is also involved in a joint FAO-Department of Agriculture project that uses state-of-the-art drone technology to develop reports on crop size and health and speed up the process of determining the extent of damage to farmers' crops in the event of natural disasters.





Left: The information from the drones is used to develop reports on the extent and health of vegetation and, in the event of natural disasters, damage. ©FAO/Veejay Villafranca. Right: Rebillaco (R) and FAO Emergency Coordinator Abet Aduna discussing data on flood damage from recent monsoon rains. ©FAO/Veejay Villafranca

"The Philippines has almost 20 typhoons every year, so our farmers experience losses from calamities. This drone program has changed our work because it lessens the time spent in the validation of the total damage caused."

Fixed-wing drones can cover up to 200 hectares in just thirty minutes, while one person can survey roughly seven hectares a day. The images can be used to address a variety of conditions, including flooding and pest infestation and, in some cases, to lessen the impact of

such threats by timing harvests appropriately. Another example is the use of drone-generated information to design irrigation canals.



"Now that I am in the Department of Agriculture, I have the opportunity to help our farmers," says Agriculturist Lowell Rebillaco.  $\$  FAO/Veejay Villafranca

While Rebillaco has been able to use his expertise to help other farmers and also improve his own farming, he says that local farmers often strengthen the government's work by sharing their own knowledge and expertise.

"The average age of most of our farmers is 57, so the average time they have spent in farming is more or less 30 years. We've learned a lot from them because they're more experienced than us." He says he wants his own children to continue the tradition.

By working with governments to share technology and knowledge, FAO is empowering them to take action and be a part of the global goal to achieve Zero Hunger.

Source: http://www.fao.org/fao-stories. Phillipines.

# Restoring livelihoods of typhoon hit farmers in the Philippines

"If we had not received the rice seeds and fertilizer, we would have lost hope. As it stands, we are already deep in debt [from the previous cropping season]. So imagine if we had to borrow again. Some of the earnings [from the harvest] we will use to pay our debts, some to re-invest in our livelihood, the rest of the proceeds and part of harvest is to support our family." Ruben Abella.



Chairman of the Burgos Upland Farmers Association

When Typhoon Koppu made landfall in the Philippines in October 2015, it destroyed lives, livelihood and infrastructure in the country's major rice granary – Central Luzon. The heavy flooding that followed displaced close to one million people and caused damage to agriculture of more than USD 215 million. Less than two months later, Typhoon Melor hit, leaving rice and corn farmers without seeds and in even more dire need of input assistance.

Speed was of the essence to help them re-plant their land before the end of the ongoing cropping cycle, which was fast approaching. Without it, they would miss out on the next harvest and struggle to make ends meet through the coming lean seasons.

In this kind of situation, SFERA is critical to getting funds into the field at the turn of a dime and intervening at a time when livelihoods can still be protected. This, in turn, staves off larger food crises and avoids farmers getting stuck in cycles of dependence. Through SFERA, Belgium contributed funds to provide rapid support to rice farmers so they could resume production before the end of the season that December.

Belgium's contribution enabled FAO to deliver certified rice seeds, fertilizer and assorted vegetable packets with seeds for ampalaya, bitter gourd, string bean, squash, eggplant, okra and tomato. As a result, some 8 600 households across three provinces in Central Luzon were able to plant more nutritious food, weeks after losing much of their livelihoods during the typhoons – this was much more than the targeted number of households

### Tools for the trade to reach new markets in Manila

Roland's workshop sits by the side of the road, a large wooden structure from which the sounds of a lathe and a hammer emerge from time to time. In the garden, two teenagers are stripping dried palm leaves into fibre, which a woman is wrapping around a knife handle. Inside, there's a forge at one end, and the fire is lit – but the brightness of the room is from the wide gaps in the wooden walls, which let the light in, and the heat out.

This workshop is in Duit, a village in the northern Philippine mountainous province of Ifugao, where Roland Bongtiwon has been a blacksmith since 2006.

Despite being well-known for the rice terraces of Ifugao, a UNESCO World Heritage Site, which attracts tourists from all over the world, the province remains one of the poorest in the country. The Human Development Index is 0.483, on par with Haiti.

The two-lane roads that connect the towns and villages scattered across the irregular landscape are always in need of maintenance, and it's not uncommon to see minibuses being repaired by the roadside, outside mechanics' make-shift shacks. Entrepreneurs and skilled workers are few and far between here, due to the limited market in their communities and the challenges in overcoming geographical limits.

In this respect, Roland is an exception. When he started as a blacksmith, two government departments had helped him acquire space and materials. He was able to employ five workers who helped him make traditional tools that they sold in the area.

In 2006, IFAD launched the Rural Micro Enterprise Promotion Programme to provide some respite to the poorest provinces in the Philippines. It was designed to assist micro-entrepreneurs and poor rural people who stood to gain jobs from the development of rural microenterprises, ensuring the inclusion of women, youth, and indigenous people. The Government's Department of Trade and Industry implemented the programme by providing people with loans, training, developing new and improved products, and providing market linkages.

In describing the programme, Omer Zafar, IFAD's Country Programme Manager for the Philippines, also highlighted its targeting strategy, "It was instrumental in enabling us and the Government to reach poor rural people who we could not get to only through agriculture, but still needed support. These people wanted to develop new businesses, or to find jobs, but in those conditions it was almost impossible."

Roland took part in two steps. Firstly, he and his wife were linked to a specialist, who helped them develop new designs for the tools. Once they had made the tools, Roland was provided

transport, board, lodging, and sponsored for all other expenses he incurred during two trips he took to Manila, the country's capital, where he showcased his new tools at trade fairs.



The strategy was a success. Roland's tools sold well, and he has since been receiving a constant stream of orders from outside the region – he is now in the process of ramping up production to fulfil demand coming from both within and outside the province. Since he's so busy making tools, he doesn't have the time to deliver them so far, but his customers like them so much that they pay for him to send them over as well.

Thanks to the skills they learnt through him, four of his previous employees set up their own businesses, so Roland hired two new workers and his two children, who have specialized in their own tools. Thanks to the money they earn, they are now able to pay for their education. His wife is also helping out at the moment to cope with the amount of orders they have received.

He also rents out space and tools to others: "Since there are other people who work here, I collect fees from them, to cover for maintenance and other expenses".

The assistance that has been given to Roland has paid many times over – it has resulted in the establishment of four new businesses, the creation of additional jobs, and ensuring that a couple of teenagers stay in school longer. All this in one of the poorest areas of the country. The programme also provided an opportunity for the government departments involved to work together on common issues and the results are very promising for the future.

Roland is more a man of action than of words, and he chooses his words carefully when speaking in Ilokano, his local language. As he succinctly puts it, "Thanks to IFAD I was able to expand my business and help my community".

Source: https://www.ifad.org. 22 May 2018

# Poor Filipino fishermen are making millions protecting whale sharks

Whale sharks at Oslob are now part of a new ecotourism industry. Wayne Jones, Author provided

A group of the world's poorest fishermen are protecting endangered whale sharks from being finned alive at Oslob in the Philippines.

The fishermen have stopped fishing and turned to tourism, feeding whale sharks tiny amounts of krill to draw them closer to shore so tourists can snorkel or dive with them.

Oslob is the most reliable place in the world to swim with the massive fish. In calm waters, they come within 200m of the shore, and hundreds of thousands of tourists flock to see them. Former fishermen have gone from earning just a US\$1.40 a day on average, to US\$62 a day.

Our research involved investigating what effect the whale shark tourism has had on livelihoods and destructive fishing in the area. We found that Oslob is one of the world's most surprising and successful alternative livelihood and conservation projects.



#### **Destructive fishing**

Illegal and destructive fishing, involving dynamite, cyanide, fish traps and drift gill nets, threatens endangered species and coral reefs throughout the Philippines.

Much of the rapidly growing population depend on fish as a key source of protein, and selling fish is an important part of many people's income. As well as boats fishing illegally close to shore at night, fishermen use compressors and spears to dive for stingray, parrotfish and octopus. Even the smallest fish and crabs are taken. Catch is sold to tourist restaurants.

Despite legislation to protect whale sharks, they are still poached and finned alive, and caught as bycatch in trawl fisheries. "We have laws to protect whale sharks but they are still killed and slaughtered," said the mayor of Oslob.

"Finning" is a particularly cruel practice: sharks' fins are cut off and the shark is thrown back into the ocean, often alive, to die of suffocation. Fins are sold illegally to Taiwan for distribution in Southeast Asia. Big fins are highly prized for display outside shops and restaurants that sell shark fin products. Whale sharks come close to the coast to feed on krill. Andre Snoopy Montenegro, Author provided

To protect the whale sharks on which people's new tourism-based livelihoods depend, Oslob pays for sea patrols by volunteer sea wardens <u>Bantay Dagat</u>. Funding is also provided to manage five marine reserves and enforce fishery laws to stop destructive fishing along the 42km coastline. Villagers patrol the shore. "The enforcement of laws is very strict now," said fisherman Bobong Lagaiho.

Destructive fishing has declined. Fish stocks and catch have increased and species such as mackerel are being caught for the first time in Tan-awan, the marine reserve where the whale sharks congregate.

The decline in destructive fishing, which in the Philippines can involve dynamite and cyanide, has also meant there are more non-endangered fish species for other fishers to catch.

#### Strong profits means strong conservation

The project in Oslob was designed by fishermen to provide an alternative to fishing at a time when they couldn't catch enough to feed their families three meals a day, educate their children, or build houses strong enough to withstand typhoons.

"Now, our daughters go to school and we have concrete houses, so if there's a typhoon we are no longer afraid. We are happy. We can treat our children to good food, unlike before," said Carissa Jumaud, a fisherman's wife.

Creating new forms of income is an essential part of reducing destructive fishing and overfishing in less developed countries. Conservation donors have invested hundreds of millions of dollars in various projects, however research has found they rarely work once funding and technical expertise are withdrawn and can even have negative effects. In one example, micro-loans to fishermen in Indonesia, designed to finance new businesses, were used instead to buy more fishing equipment.



Former fisherman Jesson Jumaud with his daughter Kheny May, who now goes to school. The profits of whale shark tourism mean they now have a brick house, and Jesson was able to buy a motor bike. He can feed their family three times a day with good food. Judi Lowe, Author provided

In contrast, Oslob earned US\$18.4 million from ticket sales between 2012 and 2016, with 751,046 visitors. Fishermen went from earning around US\$512 a year to, on average, US\$22,699 each.Now, they only fish in their spare time. These incredible results are the driving force behind protecting whale sharks and coral reefs. "Once you protect our whale sharks, it follows that we an have obligation to protect our coral reefs because whale sharks are dependant on them," said the mayor.

Feeding whale sharks is controversial, and some western environmentalists have lobbied to shut Oslob down. However, a recent review of various studies on Oslob found there is little robust evidence that feeding small amount of krill harms the whale sharks or significantly changes their behaviour. Oslob is that rare thing that conservation donors strive to achieve – a sustainable livelihoods project that actually changes the behaviour of fishermen. Their work now protects whale sharks, reduces reliance on fishing for income, reduces destructive fishing, and increases fish stocks – all while lifting fishermen and their families out of poverty. Oslob is a win-win for fishermen, whale sharks and coral reefs.

Source: By Judi Lowe, PhD Candidate, Southern Cross University. 27 August 2019

## Stimulating development through a poverty alleviation fund



The Northern Mindanao Community Initiatives and Resource Management Project helped develop the abilities of poor rural communities to play an active role in their own economic and social development. One way the project achieved this was by setting up a poverty alleviation fund in selected municipalities. The fund provided a combination of seed money and much-needed credit to organized groups of poor producers, fishers, indigenous peoples and women who had, with project assistance, developed viable plans for sustainable livelihoods.

Cashing in on cassava chips in Los Arcos, Prosperidad

In 2005, Banal na Kaharian ng Dios na Buhay (BKDB), a self-help group of cassava producers from Los Arcos, about 12 kilometres from Prosperidad, Agusan del Sur, received financing of PHP 40,000 (\$850) from the poverty alleviation fund. This was the standard amount set by the Northern Mindanao project for all self-help groups. Half was considered a grant and half an interest-bearing loan.

With the money, BKDB initially developed value-added cassava products such as cassava cakes and cassava rolls. It then decided to concentrate on cassava chips, an inexpensive snack with a long shelf life and large potential market.

The project provided the group training in cassava production and processing. It also arranged a study tour for them in Leyte province, in eastern Visayas, so that they could learn

directly from other cassava processors. With this knowledge, the group set up a small processing centre and began to produce chips under the brand name of C3.

Like other self-help groups, BKDB had rough times, particularly initially when it had no regular buyers. Prosperidad, the nearest market, could only be reached on foot or by habalhabal (a kind of motorcycle taxi). To expand their client base, group members brought their products to the nearest school, 7 kilometres away, and sold directly to students and teachers.

Today, C3 cassava chips are sold in supermarkets, canteens and stores not only in Prosperidad, but as far afield as Butuan City (about 85 kilometres away). The group even hires sales agents. Members' earnings have shot up from less than a dollar to PHP 420, or almost US\$9.00.

With its profits, the group repaid their loan of PHP 20, 000 to the community institution. These organizations, generally cooperatives, farmers' organizations or former self-help groups, were trained by the project to administer poverty alleviation fund resources and serve as umbrella organizations for self-help groups. Under the project, community institutions were entitled to receive the interest accrued on the loans as payment for their services but used the principal amount to finance other microprojects as authorized by their Municipal Project Office.

In time, BKDB branched out into other activities as well. For instance, it started the village's first convenience (sari-sari) store. Villagers can now buy rice and other basic goods there instead of having to travel to town, a saving in both time and transport costs. They can even buy on credit.

Subsistence farming and microfinance growth in the remote village of Say-uga

"We heard about the poverty alleviation fund just in time," relates Mary Joy Valcovera, a young mother and a native of Say-uga, a small village in Dumarait, Balingasag, Misamis Oriental. Mary Joy and her husband grow bananas on their one-hectare plot of land. A few years ago, they netted PHP 1,600 (about US\$34) a month from their activities. With the birth of their child, they could barely make ends meet. "There were days when we had to eat cooked bananas for breakfast, lunch and dinner," Mary Joy recalls.

In 2006, their financial situation worsened. Pests and disease attacked their banana plants, wiping out almost half of their harvest. The couple were resigned to borrowing from the local money-lender when Mary Joy heard about assistance available to members of self-help groups taking part in the Northern Mindanao project.

Determined to overcome her problems, Mary Joy joined the Say-uga Farmers' Association and attended the orientation and training sessions organized by the project. By year's end, her perseverance had paid off. She received a loan of PHP 2,000 (about US\$43) from the Dumarait Comprehensive Agrarian Reform Farmers Association (DUCARFA), a community organization, which at the time had 49 members and three affiliated self-help groups,

including Mary Joy's. It had used its earnings from administering poverty alleviation fund loans to launch a small lending service. Its lending rate was advantageous: only 3 per cent, payable in one year with a six-month grace period.

With the money and applying some of the techniques Mary Joy had learned during project training sessions, the couple was able to rehabilitate their farm. Today their gross sales amount to PHP 2,000 (US\$43 per month).

DUCARFA is now responsible for seven self-help groups and has extended loans to more than 140 farmers. Because of its excellent record, it was chosen by the project to administer a second tranche of poverty alleviation fund resources.

"Our experience in administering poverty alleviation fund resources has improved our management skills and helped us to grow and mature into a viable small business and change agent for our members," Agapita 'Giging' Examinada, DUCARFA Secretary, reports.

Steps towards empowerment in Kitcharao

In Kitcharao, a poor municipality in Agusan del Norte, Caraga, another member of a self-help group has no doubt about how the poverty alleviation fund has changed his fortunes. "I no longer have to beg. I can support my family by selling mats," Neneng Tebang says.

Tebang lives in Mahayahay – a resettlement area for the Mamanwa, who are among the poorest of all the indigenous groups in Mindanao. Traditionally nomads, the group can no longer maintain this lifestyle. Land titles and concessions issued to other people have made them trespassers on what was once their traditional domain. Most Mamanwa beg for money to buy food; some even steal to ease their hunger. The Mamanwa often face hostility and discrimination from local populations because of their hand-to-mouth existence.

Many attempts have been made to alleviate the plight of the Mamanwa people, but most have failed.

In April 2004, thanks to the Northern Mindanao project's efforts, 20 Mamanwa formed a self-help group called NALUMA. Time was then needed to strengthen this new organization, a process complicated by cultural differences. Eventually, NALUMA accessed PHP 40,000 from the poverty alleviation fund and additional resources from a project fund for indigenous business ventures.

As its livelihood venture, NALUMA chose to make and sell handicraft items. This brought some security to the group: "The project's assistance brought food to our table. I can now stay in the forest longer, gathering as much rattan as I need to make hammocks, without worrying about whether my family has eaten or not," says Ricky Mansanna, a NALUMA member and expert hammock maker.

Hammocks are NALUMA's best-selling items since the Mamanwas are the only makers of hammocks in the area. Their market is not confined to Kitcharao but extends to neighbouring towns.

Lotty Magsanay, a volunteer community organizer and head of a self-help group, has noticed a difference in the Mamanwa community in Mahayahay: "The poverty alleviation fund has helped unite the Mamanwa here. They are more involved in village activities and less afraid to speak out. They can work on their own." These changes in attitude will help them find other ways to overcome poverty.

Magsanay also points out that NALUMA is fortunate to live in Kitcharao, where the Municipal Project Office processes microprojects in record time by bringing together all local government and stakeholder representatives concerned in twice-weekly meetings to discuss microproject proposals. Because of this 'one-stop shop' policy, all microprojects, no matter how complex, are processed in one day.

"We no longer spend so much of our time and resources just to get a microproject approved," Magsanay says. Fidel Bocboc, chairman of the Multi-Stakeholders Committee, adds: "If we followed the usual bureaucratic process, it would take months to approve a microproject. With our 'one stop shop' policy, we bring development to communities faster."

Source: <a href="https://www.ifad.org">https://www.ifad.org</a> . Philippines

## **SRI LANKA**

### Herbs that Saved Hundreds of Lives



At the height of the war in Sri Lanka, Dr Kurunathan Srigananathan realised they were running short on medicines in Jaffna. With local pharmacies sold out of vital drugs, the population were struggling. Malaria, in particular, was a huge problem.

Sriganananthan had a solution. Since 1993, he had been part of a producer group called the Siddha Medicine Production Sales and Service Cooperative Society. Better known simply as COPHARM, the society produced indigenous medicines based on recipes that were centuries old. One of these was a treatment for malaria that utilised just three local herbs. "We made it fully available to all and saved hundreds of lives," Srigananathan claims. As the fighting escalated, more and more people turned to Siddha for relief from the ailments that beset them.

Siddha has a long history in these parts. The earliest practitioners came from South India, and the medicines they created were designed to offer holistic solutions to disease. Some treatments were prophylactic—intended to be preventative—and diet and lifestyle were key to healing.

#### SRIGANANANTHAN -THE 'HEALER'

Sriganananthan himself came from a family of such healers. While his grandfather and father were self-taught, Srigananathan was the first in his family to study the subject at the Lanka Siddha Ayurvedic Medical College. "I felt compelled," he remembers now, "I believed that if I did not carry on the family tradition, it would be lost."



He used what he had learned to inform COPHARM's efforts to produce a range of medicines that included infused oils, kalippu or paste-based remedies and sooranai or powders, among others. Even though they enjoyed some successes, the society also faced significant challenges over the years, not least because of the conflict: their operations were interrupted more than once due to the conflict, and their members were displaced. But in post-war Sri Lanka, COPHARM found challenges of a different sort altogether.

REINVENTING COPHARM- POST WAR YEARS

There were serious issues related to production, including lack of critical equipment and less-than-stringent hygiene standards. The packaging, which did not matter quite as much during the war years, now did little to attract customers. Perhaps most critically, COPHARM had to face competition from better established companies coming in from the south of the island. They found a new generation of customers was unwilling to put work into preparing finicky and time consuming medicines—what everyone wanted was a tablet or a syrup that took no effort. COPHARM found they were out of step with the times.



Determined to reinvent themselves, they sought outside help. They became one of several cooperatives supported by UNDP through funding from the Government of Canada under the

Agro-Economic Development Project (ADP). The project's goal was to strengthen the agro-economic sector in the North of Sri Lanka, benefitting over 22,000 households across the Jaffna, Kilinochchi and Mullaitivu Districts. Of these, COPHARM would account for over 1000 direct beneficiaries and over 3000 of indirect beneficiaries in the Jaffna Peninsula.

Today, the society is ensconced in a spacious new production and sales centre some twenty minutes away from the main Jaffna town. The centre not only has all the new equipment they need, but also better packaging and distribution facilities. It is the focal point for the delivery of some 1,000 raw ingredients drawn from 75 direct local suppliers, and over 200 indirect suppliers. These include producers of sesame or gingelly oil, as well as farmers who bring the medicinal 'weeds' growing in their fields to the centre.

"I am happy that we can support so many families," says Suppan Sinnarasa, the president of COPHARM. He highlights the role their medicines have played in supporting the population here through thick and thin. "We managed to survive it all," he says. Now, as COPHARM looks to building a future in a post-war society, he believes customers will stay loyal. "Because of that history, we have the trust of the people."

Source: <a href="http://www.lk.undp.org">http://www.lk.undp.org</a> December 17, 2018. Sri Lanka

## A Fresh Start to Life



DWINDLING FASTER THAN NATURE CAN REPLENISH

"It hasn't rained in almost three seasons. I have abandoned my paddy fields since there isn't enough water to cultivate"

Only 3 percent of the world's water is fresh (drinkable), and humans are using it faster than nature can replenish it.

J.M.P Chandralatha, shares the bitter truth of the effects of the prolonged drought which has had severe impacts on paddy farming and other water intensive livelihoods in her small village Kalanchiya in Galgamuwa Divisional Secretariat Division. A village in the North Western province of Sri Lanka with a higher number of single mothers, women farmers like Chandralatha have had to look for alternate income generative mechanisms as they struggle to survive the effects of climate change.

A mother of three sons, her husband drives a Tuk-tuk in the nearby town as there are no livelihood options in the village during the prolonged drought. Due to the additional burden of water scarcity, she has had to pursue new livelihood and business opportunities as an adaptation strategy. In order to help support her family, she now is the owner of a thriving, drought-resilient home garden and a member of a well-established community managed regional marketing network.

#### **RESILIENT COMMUNITIES**

The United Nations Development Programme together with the Ministry of Disaster Management through the Climate Change Adaptation Project (C-CAP) funded by the Special Climate Change Fund (SCCF) of Global Environment Facility (GEF) since 2015 up until 2017 provided and trained farmers like her to engage in drought resilient farming and home gardening with a potted plant method. Using this method, farmers can make maximum use of the scarce water that is available during the drought period.

The \$3.12 million project initiated with the objective of increasing the resilience of development to climate change risks, supported farmers in the Kurunegala and Puttalam districts. Under this, 34 minor irrigation tanks were rehabilitated and 42 run-off water harvesting tanks were established as an adaptation measure to climate change. More than 18,000 people received access to water while climate vulnerability maps and plans were also developed for each district.

#### CHILLIES TO THE RESCUE

One of the many interventions was the establishment of 1350 drought resilient ecological home gardens. Chandralatha has a cultivation of over 130 chilli plants in pots, which was introduced through the project, for which she receives Rs. 500 per kilogram of its harvest. "During the drought season, I have even sold a kilogram for Rs. 1250!". She also grows ten types of vegetables including bitter gourd and eggplant. The vegetables which are grown in her garden only using compost, is also a source of food for the family. "We don't need to buy vegetables from the market anymore. We are able to eat fresh organic produce right from our garden. It has also helped us save."

She is one of the many farmers who sends her produce to the 'Wayamba Isuru Farmers Market' which was established by the C-CAP project in 2017 in Kurunegala together with the Provincial Department of Agriculture of the North-Western Province. Alongside 11 other farmers markets which were established through the intervention, the market sees people from all walks of life who come to purchase their pesticide-free eco-friendly produce weekly.

#### NETWORK OF ECO-FRIENDLY PRODUCE

A large share of the world population is still consuming far too little to meet even their basic needs. Halving the per capita of global food waste at the retailer and consumer levels is also important for creating more efficient production and supply chains. The farmers market has built a network to meet the growing demand for eco-friendly food produce.

S. P. Lakmali Rasanjali from Mawathagama plays a role of an intermediary as a part of this network. A mother of three sons, Rasanjali produces spice products such as chili and curry

powder. Prior to the establishment of the farmers market, she would sell her products in an ad-hoc manner to nearby offices and shops in town.

The market which follows a Participatory Guarantee System (PGS) introduced through UNDP's interventions, has also connected her with farmers like Chandralatha who find it hard or don't have the means to travel to the market. Rasanjali now has a network of about 10 farmers who supply their eco-friendly vegetables

These farmers' markets not only encouraged local farmers to produce more but also promoted locally produced food consumption in the North Western Province, which establish fruit and vegetable supply chains with less food miles. Reducing food miles of the supply chain has other positive impacts too. It helps to reduce the use of fossil fuel and minimizes the various emissions; especially those of GHG emissions in keeping carbon footprints low. This can help with food security, and shift us towards a more resource efficient economy.

"I used to earn around Rs. 20,000 a month. After this intervention I have managed to double my earnings."

#### FRUITS OF THEIR LABOUR

She takes her responsibilities as the Secretary of the Wayamba Isuru Farmers Market very seriously. "I always want to be of service to other farmers and especially women like me in the society. This makes me very happy."

Through this intervention, farmers are able to monitor their produce and value-added products. This in turn has helped farmers to have a more stable economic return for the fruits of their labour.

"From the higher income I now receive, I was able to purchase a water pump and lay pipelines in the garden which would help irrigation during the dry season" says Chandralatha.

She also maintains a bank book for her 11-year-old son, who helps her in the garden. "I have saved up almost Rs. 10,000 for him in the account. I hope these savings will help him one day when he takes on this responsibility".

Source: http://www.lk.undp.org . December 20, 2018. Sri Lanka

## **Energy Poverty**



In developing countries some 2.5 billion people are forced to rely on biomass—fuelwood, charcoal and animal dung—to meet their energy needs. These people are energy poor, in that they have an absence of choice in the energy they access or use in their daily lives. Therefore, biomass plays an enormously important role in the lives of the rural poor in these developing countries, in the form of wood for cooking and heating.

To mitigate this need, the UN General Assembly designated 2012 as the International Year of Sustainable Energy for All with three interlinked objectives: to ensure universal access to modern energy services; to double the global rate of improvement in energy efficiency; and to double the share of renewable energy in the global energy mix.

In January of 2015, given the importance of energy in climate change mitigation, reducing poverty, and meeting the United Nations sustainable development agenda, 17 Sustainable Development Goals (SDGs) came into effect with clear targets for all countries to adopt in accordance with their own priorities and the environmental challenges of the world at large.

#### **ENERGY & THE GENDER GAP**

One of the key aspects of economic poverty is related to energy. Energy poverty, which disproportionately affects women who are primarily responsible for collecting fuel and water at a community level, can benefit greatly by the use of modern biomass energy sources. However, besides household energy consumption, women are also capable of improving the livelihoods of their families through various small-scale entrepreneurial projects that use renewable energy.

#### THE LANKAN PERSPECTIVE

In Sri Lanka, rural women play a significant role in economic and social development, contributing to the wellbeing of their families. Many of these women manage their household expenses and family commitments through small scale entrepreneurial businesses which can depend on biomass energy due to affordability and the availability of fuelwood. As such, the empowerment of women in Sri Lanka is vital for their development.

To alleviate this problem, an islandwide renewable energy project called Promoting Modern Sustainable Biomass Energy conducted by the Ministry of Power and Renewable Energy together with the Sri Lanka Sustainable Energy Authority and supported by the FAO and UNDP provides islandwide energy services and programmes to promote women's skills development and employment.

## CASE STUDY 1: HOW CAN WOMEN UPSCALED THEIR FISH DRYING BUSINESS?

Tangalle is an important hub for deep sea fishing and has a thriving local dry fish industry. However, unlike drying other consumables, the process of drying fish is long and time consuming, subject to environmental hazards, unhygienic conditions and prone to contamination. This industry is also pursued by women who use this extra income to sustain their households. In 2016, through the assistance of the "Sustainable Biomass Energy" project, dryers have been introduced to rural communities to help them improve and sustain their home-businesses and to yield higher benefits.

For nine women the 40 KW flatbed dryer has vastly improved their production, productivity and incomes. In 2016, they were assisted by the Sustainable Biomass Energy with initial project financing and have cut short their production hours from 10 to four hours a day and increased their production from 200 kg to 800 kg per month.

After two years of using this modern biomass dryer, their fish drying business has reached a new level in its final product and has increased the living standards of these women working in the organisation. It is a fine depiction of women entrepreneurship which has to be encouraged.

During off season, the dryer is used to dry chillie, pepper and cinnamon, ensuring the



women have a supplementary income throughout the year.



**CASE STUDY 2: A LIFELINE FOR HOME-BASED BUSINESSES?** 

Shanthi Menike is a single mother who worked in West Asia to earn money to educate her daughter and to complete a half-built house. Although she managed to educate her daughter who qualified as an IT teacher, her house remained unfinished and her hard-earned money soon finished. In desperation, Shanthi started a home-based business of

drying fruit and vegetables. Initially she used an electric dryer which was, according to her, far too expensive.

In January 2017, through the assistance of the FAO and UNDP's Sustainable Biomass Energy Project, Shanthi invested in a 20 KW biomass fired dryer through a financial grant for Rs. 171,500. Her production has increased from four kg to 10 kg of fruit and vegetables daily. Firewood is sourced free of charge from the local timber store.

Although her supply and demand is relatively low at present, Shanthi has the option of increasing her manufacture in the future to overseas markets. In addition, she can also use the dryer for drying other consumables, thus giving her the option of increasing her income.

## CASE STUDY 3: BIOMASS TECHNOLOGY ENRICHES RICHME DAIRY PRODUCTS

Yogurt has always been a popular dairy-based meal/snack amongst all age groups. In Sri Lanka, yogurt is consumed as a snack and dessert amongst children and adults. Manthika Dilrukshi and her husband Chathura Munasinghe, started their yoghurt making business, RichMe Foods and Dairies in 2007.

For years, their biggest business cost was for power generation and the price they doled out for almost three gas cylinders per day for the heating process. "That was our biggest cost and we hardly made a profit after paying off these bills," said Dilrukshi. Also, there were times when the production had to be halted or discarded because of contaminants, or uneven heating processes that ruined the entire production.

In 2016, the duo approached the Sustainable Biomass Energy project and through a cofinancing availed themselves of a 12KW Biomass Fired Water Heating system for Rs. 425,000. This heater can boil 230 litres of milk per month saving them around Rs. 60,000 per month. Sustainable fuelwood is sourced from a neighbourhood timber store.

According to her, production has increased 100 per cent from 1500 batches of yogurt to 3000 per day. In addition, the temperature control allows them to perfectly manipulate the heat required to the exact second. The entire manufacturing process is clean, safe from fire hazards, hygienic and faster.

#### WHAT NEXT?

In conclusion, it is safe to say that access to modern energy is also a key enabler for women's empowerment because access to energy makes a significant difference to their health and well-being. While access to energy services would not necessarily guarantee gender equality, it would go a long way in relieving women and girls of the drudgery associated with their daily tasks and providing them time for income-generating opportunities and education. But

what next for the project? With a funding envelope of USD 1.9 million from the Global Environment Facility Phase 1 of the project has achieved some great results.

#### For example,

- The inclusion of biomass energy in the National Energy Policy specifically in relation to the production and establishment of supply chains
- The development of a standard and certification scheme for sustainable fuel wood production is a major step forward.
- Through the project UNDP and FAO have demonstrated 1000 hectares of pilot fuelwood growing models with the forest department and other NGO and CBO partners.
- The establishment of three large scale biomass energy terminals to improve the quality of fuelwood and support SMEs whilst also significantly reducing the emission of greenhouse gases.

Even more successful is the volume of co-financing from various partners and stakeholders amounting to USD 17 million in funds and in kind. With Phase 1 coming to an end in December 2018, UNDP is set to partner with the Ministry of Power and Renewable Energy on 04 December 2018 to launch Biomass Energy 2022, a Government co-financed project aimed at scaling up the results of Phase 1 by strengthening the rural economy and improving the living standards of communities engaged in small and medium enterprises through the use of clean and modern biomass technology.

Source: http://www.lk.undp.org/content/srilanka. December 20, 2018. Sri Lanka

### **Peddle Power**



Losing it all

"I lost everything," Pathmananthan Arulnanthi remembers.

During the war, the 37-year-old used to run a bookstore which sold magazines and newspapers in Vavuniya in Sri Lanka's Northern Province. On the side, Arulnanthi was part of group running a *seettu* – a chit fund in which participants contributed an agreed upon sum, and the pooled amount was awarded to one member of the group at a time. With the fund's initial success, Arulnanthi invested all his money, only to lose everything when the arrangement collapsed. "I was left empty-handed," he said.

It was a bad time to be broke. His family was far from home – having to flee Valalai where Arulnanthi was born, they had settled in Vavuniya as the war raged around them. His father would die there, in exile, without ever returning to their land.

Arulnanthi, who had been just 14 when they left, had attempted to return once, but their property had been claimed by the military, and it was inaccessible due to the fighting. "We tried to come, but that area was being shelled," remembers Arulnanthi.

#### A place to call his own

The conflict ended in 2009, and his land was released by the military in 2015. The house had been completely demolished, and today only traces of floor remain to mark the room where he studied as a boy. The hand-dug well had long since been filled in. But now Arulnanthi at least has a place to call his own. "This is our native place, and I was very happy to be able to return," he says.

With his days in the book business over, Arulnanthi decided to turn his hand to bicycle repairs. He had some experience, having spent 3 years in Vavuniya working as a bicycle mechanic. Unable to get help from local authorities, he decided to build a small shop himself.



With construction of small room complete, he was chosen to receive some Rs.100,000 worth of critical equipment from the UNDP under the Resettlement in Newly Released Areas (RNRA) project. Under RNRA, \$3mn in funding from the Government of Norway has gone toward supporting vulnerable families who have returned to their homes. The project adopted a sectoral approach to provide livelihood assistance on Fisheries, Agriculture, Livestock and Business Development.

For Arulnanthi, this meant the provision of an air-compressor and machines for vulcanizing

and stitching rubber. Training from the Industrial Development Board updated his skills and

helped him plan ahead.

Today, he earns between Rs.1000 - Rs. 1,500 a day. A complete overhaul of bicycle takes

him around 3 days to complete, but he has additional business from cars and auto-rickshaws

that come to get air pumped into their wheels.

**Expanding his bike business** 

He has ambitions to expand his services to include bike maintenance. He would also like to

start stocking spare parts like tubes and tires, making him a one stop shop for his customers. A bureaucratic tangle has meant that the land still does not have electricity connection, but

Arulnanthi has asked for credit support to lock down the Rs.50,000 (\$320) he needs. "When I

receive that the machinery using electricity can be properly utilized."

Four months in, the new business is slowly gaining a loyal clientele. Arulnanthi takes his

earnings back home to his wife Sashikala and his son Abish. "I want my child to have a good

future," says Arulnanthi.

Money can't buy happiness

Arulnanthi says he has found a kind of peace in this new work. His little shop overlooks a

busy lane, and new customers discover him every day. "I can also work at night, if I need to,"

he says, explaining that the flexible hours are a bonus. The income is enough to let his family thrive. "I know I am not fully experienced at this job yet," he says, "but it gives me

happiness." The work is simple, and keeps his hands occupied. "There is no tension," says

Arulnanthi, smiling.

Source: http://www.lk.undp.org June 28, 2019. Sri Lanka

397

# Production to partnership' – why grassroots success means better business for Sri Lankan dairy

When Sri Lanka's Rasoda Dairies took on eco-innovation, it focused on the quality, sustainability and productivity of its dairy business. In a short space of time, the results in grassroots farming, the supply chain and on the factory floor were startling. This is how the company made eco-innovation a success.

Nestled in Sri Lanka's north-western district near the town of Kurunegala, Rasoda Dairies Ltd. is a company with a story to tell. The business itself has humble beginnings, starting back in 1998 as a small-scale family enterprise specialising in manufacturing and distributing dairy products – albeit with very few small suppliers. It wasn't until 2011 that the enterprise formed a well-equipped limited liability company with the means to make products such as ice cream, yoghurt and jelly yoghurt.

As it happens, the dairy business in Sri Lanka is as challenging as it is promising for producers, all eager to meet growing demand. According to the country's Chamber of Commerce, Sri Lanka imports around 70 per cent of its dairy needs – something of a strain on the country's foreign exchange reserves. But the big potential for growth for local producers is hampered by a lack of technology, low productivity by the dairy farmers themselves, and insufficient knowledge about how the dairy industry works.

Since it upgraded its facilities, Rasoda Dairies has seen first-hand how on-the-ground conditions and a very conventional business model were stifling the company's growth.

Rasoda was sourcing farmers' milk through milk collectors, producing its products at the factory and selling through distributors. But in Kurunegala District, the average daily yield from a single cow is typically two litres of milk. In Europe, in 2015, it was 19 litres. Moreover, Rasoda's suppliers were scattered and located at great distances from the factory, adding to fuel and transport costs. Add to that the waste which the company was generating because of inefficient use of water, energy and materials, and economic conditions were taking their toll on the business and its sustainability.

This is where the Eco-innovation Project came in – and the company's use of "hotspot analysis". As the key approach used by eco-innovative companies looking to reduce their economic and environmental burdens, this targeted business evaluation would turn things around for Rasoda Dairies – by looking at problematic "hotspots" which were blocking progress.

"The project analysed the whole value chain of the company to identify key issues which act as a bottleneck for company growth," says Daminda Perera, the company's managing director. "We identified farmer development as the most critical aspect."

Rasoda found that big changes were needed to switch the company's focus from a "production orientation to partnership orientation". The company says that this was all about expanding its focus from the factory to the whole of the value chain.

This especially meant improving the quality and quantity of raw milk sourced from farmers, as well as reducing waste before and during transportation. According to the company, some 60 per cent of raw milk was wasted between the milking of cows and its delivery to the Rasoda Dairies factory. But with improvements to dairy farm practices, waste has decreased



to 20 per cent.

The company's eco-innovative approach also means a focus on grassroots initiatives such as education. In improving farmers' knowledge of dairy processes through educational programmes and partnerships, both the quality and quantity of milk has increased. "Farmers are benefitting from increased income and milk yield," says Perera. "But the company too, especially as we increased our profitability through sourcing high quality milk."

The company says that although it enjoyed milk yields above the national average from its suppliers, educational programmes were still able to increase average daily yields from eight litres to 11 litres per cow. On the ground, farming communities have seen the difference – in both economic and social terms.

**Rural Development in CIRDAP Member Countries** 

"We were engaged in dairy farming since the 1980s, but in a conventional way," says Ms

Dias, a Kurunegala dairy farmer. "But recently we joined the educational programmes conducted by Rasoda. We gained huge experience through those programmes, and as a result

we are doing our dairy farming with maximum knowledge on the subject – which has helped

us increase our milk yield." "We never did accounting for our dairy sales," adds Ms Dias, "but with this training we now keep accounts and we understand our performance now"

And the partnerships haven't stopped there for Rasoda Dairies. The business has also entered

into agreements with stakeholders along the value chain. Now research students from a local university conduct R&D activities to improve productivity at the factory level, and the

company is also entering partnerships with cooperative societies, enabling Rasoda to access a

wider range of supplier farmers.

Back in the factory, Rasoda Dairies is reporting reduced daily water consumption because of

its resource efficiency efforts; from three litres of water used for one litre of milk, down to half that. As for energy use, the company has installed a more efficient biomass boiler which

has replaced an older, inefficient model. But even in the face of wholesale improvements,

Rasoda is finding challenges. Plans for a new solar panel installation to give the factory the

energy it needs are only in the first phase of implementation. The company says that the USD

135,000 price tag has put off lenders. In Sri Lanka, low interest bank loans for sustainable

investment initiatives are still rarely available.

However, Rasoda maintains the results of its eco-innovation drive have been hugely positive

for the company, and for the surrounding communities of dairy farmers. "Dairy farming, being a dying industry, is now energised through such projects," argues Rasoda's Perera. And

with the company's educational programmes capturing the imaginations of younger people,

interest in the dairy farming industry has received a boost.

At grassroots level, the emphasis on partnership above production has opened the door to

better practices by farmers, better productivity for Rasoda, and better, more sustainable

business for all.

Source: http://unep.ecoinnovation.org. Sri Lanka.

400

## **Resilient Women – Stronger Communities**



#### Women left behind

By now it's evident that women are the demographic that's almost always left out of development dialogues yet are always those who face the brunt of the effects of developmental problems. And in the case of the issues that climate change imposes, it's no different either. Walapane, Nuwara Eliya is home to small holder upland farmers whose cultivations dominantly depend on the rainfall. However, with the climate crisis leading to significant and unprecedented changes in the weather—extreme swings between droughts and rainfall—have led these communities into a grave situation. As agriculture productivity slowly drops, these farmers have had no choice but to turn elsewhere for other employment to survive. This leaves women unemployed, without their own source of income, solely dependent on the male in the family or in the case of absence of such a 'breadwinner', completely without means of an employment.

#### No more worries

D. M. Janitha Darshani, is such a case in point. Without a husband or anyone to support her and her family, she took on small sewing assignments. A few blouses and jackets here and there helped her take care of her ageing parents and children. Darshani, who is now the deputy manager of the garment and textile production social enterprise in Walapane, established through the Climate Change Adaptation Project, says she and the other women in her community have never received such an opportunity to have their own source of income before. "A majority of the community here are impoverished. Many other single parents like myself take care of our parents and children by ourselves. We barely make a living by taking on small day-to-day sewing work. The only other option we had was to find a job in Colombo, which

would mean leaving our children behind to fend for themselves and this is not something I want for my family. Now, being a part of this enterprise has opened new avenues of income for me and I am so grateful" Along with Darshani, 150 women in Walapane have received training on textile production, entrepreneurship, and professional certification from the Sri Lanka Institute of Textile and Apparel and the National Enterprise Development Authority. They have also been supported with the necessary machinery and infrastructure through the project. "We have never had an opportunity to capitalize on our talents before. Although we knew how to sew, these trainings have given us new ideas and designs to work with. This coupled with the trainings we received were so far out of our reach before, so having a stable income like this is such a relief. Now we don't have to worry about all the other problems that were weighing on our minds like abandoning our families to look for work elsewhere," says Darshani.

#### Unprepared for the impending crisis

Darshani, voices for many other women in the community who were struggling to make a living amidst a whole host of forces that were working against them. Her and the other women's situations do point to plenty of lapses in policy and policy implementation. Lack of policy directive, focused on climate change and adaptation, especially in an area as vulnerable as Walapane highlights the crux of the issue—a nation wholly unprepared for the impending crisis. Although, there is a national policy on climate change, neither the government officials in the area or the communities have ever benefitted from any adaptive action before. The lack of initiative from any of the governmental institutions to identify and rectify the problems that arose because of the climate breakdown, lack of provision of viable alternative livelihood options, lack of technical support to combat the deteriorating agricultural productivity and markets beneficial to the farmers as well as lack of sustainable solutions to the rising instability of incomes are the direct of the issues. Darshani's case shines a light on another important point; women are always left out of these developmental conversations. Empowering women to participate in the economic life is essential for sustainable development, especially in the case of the climate breakdown as women and the resources they depend on are most at risk.

#### **Climate Resilient Livelihoods**

The Climate Change Adaptation Project, together with the Ministry of Mahaweli Development and Environment, United Nations Development Program and World Food Program through the financial assistance of the Adaptation Fund are working towards strengthening the capacities of the local government officials, provide women like Darshani with sustainable and climate resilient livelihoods, improve overall policy and establish a platform that assists such vulnerable communities with the necessary technical support. A special focus is put forth on empowering women to withstand the effects of climate change through a strong independent income sources which would in turn empower communities.

Source: http://www.lk.undp.org May 23, 2019. Sri Lanka

### **Silent Stitches**



Singaravel Janarthani loves to stitch. In silence, she expresses her creativity by designing and tailoring a variety of saree blouses, shalwars and bags. At 25 years, as the elder sister of two younger brothers, today she is well known for her creativity in and around the community of Thavasikulam, Vavuniya. As a young student, Janarthani, had a strong passion for sports and dance. Despite being speech impaired, her determination to go to school, make friends, and study enabled her to complete her primary education at the Thavasikulam Vani Vidyalayam. Having learnt basic language skills at this primary school, she later joined a special school for the speech impaired where she continued her studies. Subsequently she also received vocational training in tailoring and upon completion, she began training others in the same school.

In 2012, she left the school and started working on her own as a seamstress. Taking tailoring orders from those in the community, Janarthani started making a living for herself and her family, and over time she started tailoring more varieties of clothes and bags. On her own, Janarthani had many customers. However, communicating to her customers by herself to better understand their orders was quite challenging.

Realizing this challenge and the potential Janarthani has, in 2014 Jeyachandran Gowrieshwary, a former sign-language teacher at the school, brought Janarthani and a few others together and formed a team of seamstresses. Harnessing their collective determination and innovative ideas, coupled with their individual strengths, the tailoring business has expanded and the group has gained recognition for their quality fashionable products. Gowrieshwary's support in marketing and communication is also vital in bridging the communication gaps Janarthani faced before, with her customers.



To further their potential, UNDP stepped in to support this 'Group' by assisting them to develop a long-term Business Plan to improve and sustain their product line. Under the European Union funded Support to District Development Programme (EU-SDDP), UNDP is currently supporting this 'Ladies Fashion' Group and 83 other such Groups in the North and Eastern Provinces of Sri Lanka to sustain their livelihoods. Following the technical skills training provided by the National Design Center, equipment and assets were also provided, thus creating a conducive environment to meet new trends and demand of fast growing markets. The Group has now also been officially registered as a 'Producer Group' and recognized by the Department of Industries, Vavuniya.



This year, the Department has also given the Group space for a new outlet so now, 'Ladies Fashion' operates with 6 seamstresses stitching to meet the growing demand for tailored products. 2 of these women are speech impaired, including Janarthani. However Janarthani says,

"This is not a disability. What you need is self-confidence and this is something that I have gained through the exposure of being a part of this Group. Everyone has aspirations in life and what I can say to everyone else out there is – don't give up."

Source: <a href="http://www.lk.undp.org/content/s">http://www.lk.undp.org/content/s</a> January 14, 2019. Sri Lanka

## Sky is the limit



#### DETERMINED TO PROVE EVERYONE WRONG

"From my younger days, I had three dreams. One of it was to have the opportunity to work as a part of the UN System. Through the Youth Leads programme, I have now been able to achieve this"

28 year old Kasunjith Satanaarachchi, sits back and reminisces of the long journey it has been to get to this point. Kasunjith is an individual living with Cerebral Palsy and while majority of persons with disabilities living in Sri Lanka choose not to pursue their studies, he was determined to prove everyone wrong.

Hailing from a town in the Southern Province of Sri Lanka, he attended Kalutara Maha Vidyalaya where he completed his studies from Grade 1 to Grade 11 after passing his GCE Ordinary Level exams. The 11 years in school were not the easiest. Kasunjith had to go through constant bullying and rude comments from his teachers. One experience that he vividly remembers, was an instance when the sectional head of the school spoke to his parents. He had asked them why they were wasting their time and money trying to educate their child, who would be better off just at home.

Majority of Sri Lankan schools are not equipped and lack training to teach children with disabilities.

#### **BUT STILL HE PERSISTED**

He then enrolled himself to the Gurulugomi Maha Vidyalaya, an advanced level school supported by the ICRC. The administration was more welcoming of him, provided special washroom facilities and it is here that he completed his studies by passing the GCE Advanced Level examination with 1A and 2Bs as results. With his excellent results, he had the opportunity of entering a state university. However, due to the stringent regulations for applicants with disabilities, he was given limited subject streams to choose from. Kasunjith showed a great interest to pursue Law after having studied Logic and Poltical Science in school, so it was a disappointing realization with the limited allocations for students like him. He decided to enroll himself in a private university which offered the Staffordshire University degree. It was here that he felt like he was finally accepted.

#### **GREATER THINGS TO COME**

After 3 years of hard work, he obtained an LLB with a 2nd class in law. This was the start of greater things to come. Kasunjith went on to win Mock trial mooting competitions and was also a part of the Youth Parliament of Sri Lanka from 2016-2017, where he was the Deputy Minister of International Affairs and the Representative for persons living with disabilities.

He then worked as the youth focal point for a Disability Rights Organization for 3 years and also has experience working as a research intern at a leading law firm. His articles in Sinhala and English have been featured in national newspapers such as Silumina and Daily FT. It was during this period that he was fortunate to receive the opportunity to visit the Human Rights Council in Geneva, Switzerland.

#### YOUNG TALENT PROGRAMME

Globally, the United Nations Development Programme and United Nations Volunteers have designed a talent programme to enhance the employability and career prospects of young professionals with disabilities by providing them an opportunity to gain work experience within the UN.

As a part of this programme, the UNDP Youth Leads programme saw the inclusion of a young individual with disabilities this year. When Kasunjith saw the advertisement for the programme, he completely dismissed the possibility of him being able to qualify for the position. It was his friend who prompted him to apply for the vacancy. "I couldn't believe it when I got the callback for an interview". From then on, everything else just fell into place and the third batch of Youth Leads came on board in August 2018.

#### UNDP YOUTH LEADS

The UNDP Youth Leads programme was first introduced in 2015, as another step forward in opening UNDP up to young people of the country. A cohort of 4 dynamic young people would be chosen to work within the core areas of UNDP's portfolio for 50% of their time –

such as the governance, environment, and support teams - while the other half of their time

would be spent working together as a team furthering the innovation portfolio of UNDP.

Kasunjith as a part of his assignment has worked on mapping the disability sector, the Comprehensive Youth Development Programme, accessibility of the UN Compound in

Colombo and is working closely with colleagues working with the Governance and

Peacebuilding portfolio of UNDP.

He is proud to be the first person with disabilities in Asia to be working with UNDP as a part

of this programme. His teammates describe him as a "passionate individual who does not

give up".

**NEXT STEPS** 

"I do not expect much from people, but my only wish is to always look for ways in which I

can contribute to society"

Kasunjith hopes to go on and complete a Masters in Disability studies and continue to be an

advocate for the rights of persons living with disabilities in Sri Lanka.

"I have achieved two out of three dreams in life. I hope to one day participate at the UN

General Assembly and bring to light the importance of inclusion, accessibility and continue

to work towards leaving no one behind"

Source: http://www.lk.undp.org/conte . January 14, 2019. Sri Lanka

407

## Small -holder dairy farmer turns dairy entrepreneur



Progressive Sri Lankan dairy farmer provides critical services to the dairy community

V. Sivanesan from Killinochchi, Sri Lanka started dairy farming ten years ago. Needing to earn an extra income to support his growing family, Sivanesan offered his services to the country's largest dairy processor, MILCO, as a milk collector for his village and thus began his entrepreneurial journey. The regular interactions with other dairy farmers in the area exposed him to the gaps in the value chain. While he was growing his business by meeting the many demands of other dairy farmers, Sivanesan felt that his approach to managing the business may not be ideal. When MILCO representative invited him to attend the Market-Oriented Dairy (MOD) Project's 'Entrepreneurship Development for Dairy Input Retailers' training program conducted by Sarvodaya, the country's largest non-governmental development entity and partner to the MOD Project, he knew that this would help him organize his business better.

Source: <a href="https://www.market-oriented-dairy.org">https://www.market-oriented-dairy.org</a>. Sri Lanka. Market-Oriented Dairy (MOD)Project

## **Value for Waste**



"From my school days, I had a huge liking for anything IT related. Little did I know, of the many great things to come!"

It's been a long journey for 27-year-old, Suresh Madushan from Embilipitiya. After having missed the chance of entering university on the first two tries, he excelled on his third try and entered the Rajarata University, Sri Lanka. However, university life was not the easiest period, Suresh explains. While following his ICT degree, the university faced several issues including water scarcity and constant student strikes. "We couldn't study properly and that's when a group of us moved to Colombo," says Suresh.

Together with his friends, they took part in all 'Google Developer Group Sri Lanka' workshops held in collaboration with the University of Colombo which helped them to be up to date on new technology in the IT sphere. Using this knowledge, they were able to come up with a solution to the water issues they faced back in their University in Rajarata. When the call for applications of the HackaDev challenge in 2017 went out, it is this solution that Suresh and his friends submitted...

'HackaDev'- UNDP's flagship initiative which kicked off in 2016 is UNDP's take of a hackathon on hacking for development issues.

In 2017, Suresh and his teammates of 'Team Strangers' submitted an Information of Things (IOT) solution to the water crisis at the Rajarata University. This created a system to monitor the water quality and a delivery system thereafter. They went on to

become one of the 9 teams of the 2017 Hackadev edition that was selected to receive seed funding and incubation support.

#### YOUNG PEOPLE AT THE CENTRE

Achieving the 2030 Sustainable Development Agenda requires young people to be at the centre of the development of a country and calls for their active engagement. Under the leadership of the Ministry of Telecommunication and Digital Infrastructure and Foreign Employment and UNDP Sri Lanka together with the Information and Communication Technology Agency of Sri Lanka (ICTA) and the National Youth Services Council (NYSC), HackaDev - the National Youth Social Innovation Challenge has been nationally implemented for the past few years. In collaboration with Citi Sri Lanka, the Citra Social Innovation Lab and Youth Co:Lab, this is a platform where young people are given the space and support to develop their innovative ideas which tackles a social issue in the country.



Following this, the team was also given the opportunity to participate at the 2018 Regional Youth Co:Lab Summit in Bangkok. From the sessions at the Summit, the team realized that the solution they are offering does not offer a profitable option, and therefore wouldn't be viable to maintain with no stable investment. Suresh and the team were sent back to the drawing board to re-evaluate.

"I spoke to a lot of people in the industry as well. After this, I had the idea of using this same technology for e-Local Governance and particularly waste management," says Suresh.

Their solution went through a complete turn around and moved from addressing water pollution to waste management.

"Usually 90% of all startups end up in failure. So, we took a huge risk" says Suresh.

"I could have easily applied for a stable IT job, but I wanted to do this because I am genuinely interested in helping our communities." However, due to financial pressure, Suresh lost a number of team members who didn't opt to take this risk. So, it was up to him to spear head this initiative.

With a portion of the funding received, Suresh purchased a laptop with all the features required for him to develop this interface. He then started with his own hometown, Embilipitiya. The app was tested for 3 months where he would regularly receive feedback from officials of the local authority and add in more features. After seeing this success, the app was finally off the ground and officially launched.

#### WANTING TO DO MORE

But Suresh wanted to do more. A product launch only wouldn't be sufficient. He still needed to convince certain officials in the local authority and the general public that this will work. A PR campaign kicked into play, where all Garbage trucks in the area were repainted with details of the app and a QR code to download it. This created a huge impact and people's attitudes on waste itself changed!



Under the 'Haritha Nagara' eco-friendly city concept, the local authority now had targets to achieve, where the app helped them achieve these milestones and be an exemplary council. It was after seeing this success that Suresh was invited by the Western Provincial council to explore the possibility of implementing this in their local authorities too. The business model built around this will see 70% of its profits going back to the Government, while 30% of it

will be for the maintenance of the app. Suresh goes on to explain how the app not only focuses on waste management, but also addresses social issues within each city with a built-in chat room and other such facilities.

The app is currently being implemented under a 6-month pilot project for the Western Province in Minuwangoda, and will be implemented in the Hamabanthota Municipal council as a next step.



"There are 340 councils across the country. What they like most about this, is the database which is a user-friendly interface," says Suresh on what makes his app attractive to the Government.

Through platforms such as HackaDev, he was also able to bring many actors to the table including UNDP, ICTA and telecommunication companies.

Suresh proudly states, "waste is not an issue. It's the management of it that needs support, and that's where this app comes in."

#### LONG JOURNEY FOR SURESH

It's been a long journey for Suresh and it hasn't always been easy. "Friends who were with me at these various challenges and competitions now receive salaries of more than 150,000 rupees monthly and are software engineers at leading IT organizations. I'm still hanging onto this." This has created a lot of pressure even from home, where his parents have questioned as to what he is doing.

But he was always willing to take this risk.



"My friends had other priorities. They wanted to be financially stable, get married and settle down. That's not a priority for me at the moment," adds Suresh with a laugh.

"We have added in a disaster management element to the app as well, and this is what we submitted for HackaDev in the 2018 edition." Team Ideal Six, underwent a 5-day Social Innovation camp as a part of the challenge in 2018, where teams worked on validating assumptions, deeper understanding the issue and their pitching skills. This has opened doors for other tech giants such as Google, to offer cloud support for the team for their start up solution for the next 3 years.

#### **BIG DREAMS FOR THE FUTURE**

Suresh has big dreams for the future. As a next step, he has already started discussions with the ICTA where he hopes to develop a payment gateway for tax in the country, which has been a pressing issue for the Government. He has also been approached by an Australian local authority to develop a waste management app similar to the pilot projects in Sri Lanka.

Suresh has gone onto become a huge inspiration, sharing his story with other young people on local and global platforms.

"For me, this was never a big risk in my mind. If I take something on, I like to see it through. Because of this attitude I was able to overcome a lot of obstacles to be where I am today," says Suresh with a big smile.

Source: http://www.lk.undp.org July 31, 2019. Sri Lanka.

## **Wild Mushrooms**



When she was a girl, Nilanthi Kumarasinghe would fill a bowl with salt and chilli powder and head into the forest. Her parents were worried it was unsafe, but to her those were halcyon days. She and the other children ran wild, spending lazy afternoons climbing trees to pluck fruit, both sweet and tart; laughing and talking as they ate them with chilli powder.

"We grew up relying on the resources of the forest. We found things there that we could not find anywhere else," Nilanthi remembers, describing how her father used to return from his forays into the woods with large baskets of wild mushrooms. Their neighbours would bring home fruits, honeycomb and medicinal herbs.

Now 42-years old, Nilanthi is married and lives with her family in Mahakirindegama, a village near Mihintale in Anuradhapura. Her mushrooms come not from the forest but from a little shed behind her house. The seeds are grown in sawed-off PVC bottles, each container filled with a combination of mango wood dust, magnesium sulphate, calcium carbonate, soya and gram flour and gypsum to hold it all together. She uses only organic fertilizers to keep pests at bay and swears by fermented garlic juice.

Each container in her shed yields some 750 grams of mushrooms before it must be replaced. For every 200 grams of oyster mushrooms Nilanthi makes Rs.60; abalones get her a little more, at Rs.80 per pack. Her product is in demand, all her neighbours buy from her, and she also supplies the local shops. In total, in a good month she earns Rs. 40,000.

Training and supplies from the United Nations Development Programme (UNDP) helped her kick start what is today a thriving business. The Community Forestry Project is funded by AusAid and implemented by the Department of Forestry in collaboration with the United Nations Development Programme. It was initiated to reduce deforestation and forest degradation in the dry and intermediate zones of Sri Lanka.

At the heart of the programme is an awareness that the communities that live on the boundaries of the forest are in fact the best people to protect it. When empowered and equipped with knowledge of the ecosystem and best practices, technologies, market linkages, access to credit and ability to partner with the Government, private sector, NGOs and other entities, such communities can prosper.

Field operations began in 2012, with the project being rolled out across 17 districts. 23,000 ha of forests were replanted in 167 sites and productivity was enhanced in over 3,000 home gardens. As part of the support to the Department of Forestry, motorbikes and computers were provided to field offices, thereby helping to improve their capacity and access. A Programme Management Unit was established at the premises of the Forest Department to facilitate the implementation of the programme. In total, an estimated 10,000 households enjoyed direct benefits from the project, with indirect beneficiaries estimated to be some 90,000 people.



Before this work began, many of these communities were isolated, and lacking in access to basic infrastructure, water and other essentials. Most of the men in this area are daily wage workers, says Namali Ratnatunga, a forest extension officer with 15 years of experience in the department. To make money, they would often go into the forest, slashing and burning to create room for chena cultivation. Close to a small

tank, this village would also see large numbers of elephants and monkeys ransacking their fields. Now Ratnatunga sees alternative livelihoods making a huge impact.

Nilanthi is one of a dozen women who work from home. Ratnatunga has helped others set up business where they raise chickens, grow lime, mangoes and beetle leaves, and run a variety of small home businesses. In the next village, Ratnatunga helped the community plant teak trees, which have provided them with the wood they need to run their furnaces. Such initiatives have curtailed forest encroachments, while leaving the communities more prosperous, with sustainable sources of income.

Ratnatunga feels the project's focus on women has really paid off. "The work is being done by the women," she says, explaining that the family benefits when women earn because women are more likely than men to invest in the household and in well-being of individual family members. Nilanthi puts her own earnings toward the education of her three children, the youngest of whom, a girl, is in Grade 5. "We, the women in this area, are the ones sustaining this project," says Nilanthi with pride.

Source: <a href="http://www.lk.undp.org">http://www.lk.undp.org</a> December 18, 2018. Sri Lanka

# **THAILAND**

## A Thai Village's Ecological Success Story Offers Important Lessons

NAKHON SAWAN, Thailand – Amid all the focus today on climate change and greenhouse gas emissions, an important fact often gets overlooked: worldwide, the destruction of forests rivals automobiles as a source of carbon emissions. According to recent studies, the cutting and burning of forests – primarily tropical rainforests – is responsible for up to 30 percent of all greenhouse gas emissions.

Often the destruction of forests is tied to a host of economic and social conditions that can trigger the sadly familiar scenario of a seemingly irreversible ecological and social slide. However, research has shown that such a decline can, in fact, be turned around through an *EcoTipping Point* – a term we have coined to describe a combination of sensible environmental technology and the social organization to put it into use.



Thanawm Chuwaingan relaxes outside his home with other community leaders in Khao Din village.

The story of one Thai farmer and his village illustrates how an *EcoTipping Point* can work.

In 1954, Thanawm Chuwaingan migrated from the impoverished Khorat Plateau of Northeast Thailand to Khao Din village in Nakhon Sawan province, about 225 kilometers north of Bangkok, to stake a claim on newly opened forest land. The journey was in carts pulled by cattle.

"It was easy to find food here," says Thanawm. "There were many edible plants and vegetables growing wild near our houses. The fish in the streams were easy to catch, and there were also plenty of wild animals, like boars, deer, tigers and elephants. Life was simpler."

With abundance at hand and a cooperative spirit in the village, life was good. But things started to change in the 1960s and '70s, when the Thai government decided to pursue a Western growth model with export-led development as its centerpiece. The policy was to utilize forests and agricultural production as resources for foreign exchange revenue to generate investment in a growing manufacturing sector.

Half of the kingdom's forests, fisheries and agricultural areas were reoriented toward overseas markets. And if overall growth in gross domestic product is your yardstick, the approach was a raging success. Over three decades growth rates ran about 10 percent a year – one of the fastest in the world.

But for small-scale farmer Thanawm and millions like him, the story was entirely different.

The government wanted the farmers to modernize and grow cash crops such as rice, maize, jute, and cassava for export. Forests were cut to sell the timber and expand the farmland. The government provided loans intended for inputs such as hybrid seed, chemical fertilizers, pesticides, and farm equipment.

But the farmers, who never had so much money in their pockets before, also used the loans to buy radios, motorcycles and other modern merchandise. And after the initial flush of quick cash, crop prices began to decline because so many farmers were growing the same thing.

Then matters suddenly became worse when droughts came and their crops started to fail. People began to go deeper into debt. In a relatively few years, Thanawm and his family went from near Eden-like abundance and comfort to a hardscrabble existence typified by hunger, poverty and social disintegration.

Desperate to make good on their debts, villagers cut the last remnants of forest to expand their fields. "By that time, there were virtually no trees left on the hillsides. It became hotter and drier," Thanawm said.

The soil, which had been fertile for years, was eroded and became progressively harder with continued use of chemical fertilizers. Rainwater just ran off. Crop yields declined.

People started to have to look for work in the cities during the dry season in order to pay their debts. Families were split up. "Unlike in the past when people really cared for one another, everyone was now worried about their own fields and their own family's problems," Thanawm said. "For the first time ever, we began to have psychological and social problems. There was little trust and less cooperation."

Wide scale migration in search of urban jobs led to the disintegration of communities. Villages increasingly became populated by the young and elderly. Juvenile delinquency, previously unheard of, emerged as communities were rapidly torn from their traditional social norms.



Khao Din's community forest, which provides numerous edible and medicinal products harvested according to community agreements.

But fortunately the story does not end there. Thanawm and his fellow villagers made some key changes which set their village and its environmental support system in a positive direction. They created an EcoTipping Point that reversed the decline, restored ecological health, and forged a stronger, more sustainable society.

It began in 1986, when a team from the aid group Save the Children U.S. was sent to Khao Din village by the Thai government. By that time, the district had become one of the nation's poorest. Rather than simply distributing aid from donors, which had been the norm under the government's modernization program, the Save the Children team awakened villagers' awareness about the true source of their predicaments, and then helped them to devise their own solutions.

At first, the villagers were suspicious. Trust grew slowly, through long and at times arduous discussions, during which the aid workers asked villagers questions that enabled them to retrace the steps to their plight. This led to some startling realizations.



The irrigation pond on Thanawm Chuwaingan's farm. The pond contains fish for sale and household consumption and is surrounded by papaya and banana trees, which not only provide fruit but also prevent soil erosion.

Ultimately, villagers recognized that it was they who were primarily responsible for bringing about their problems, through the decisions they had made on how to use and manage their local resources. This shared awareness prompted the villagers to consider what they could do to change the situation, based on their new understanding of the problem and its causes.

The second step came when villagers and the project team formulated an ecologically viable strategy for their community. It began with the realization that it made no sense to "put all of their eggs in one basket," as had been the case with the monoculture cash crop systems. They designed diversified "agroforestry" systems in which trees and crops were interspersed on the same field, resembling in many ways the structure of the natural forest. They also decided to restore their damaged forests with local community protection and management.

Agroforestry was not new to the local farmers. Their now largely abandoned traditional subsistence systems had incorporated many of the same elements. The agroforestry drastically cut household food costs, as well as agricultural input costs, because "nature did much of the work." It simultaneously restored some of the ecological stability to the land that forests had maintained for millennia. Year-round food security increased dramatically. If one crop failed, others would succeed.



Thanawm Chuwaingan at his farm. The agroforestry features a variety of trees and crops for food, medicine, and other uses.

At first, only those who could afford to try something different were able to set aside some of their land and energy for the venture. But what started on eight acres of demonstration plots grew year-by-year as more villagers adopted similar approaches on their own farms.

It is more than 10 years since Save the Children finished its project in Khao Din, now a thriving community of 2,500 inhabitants. Twenty-five villages in Nakhon Sawan province are following Khao Din's example, pursuing a variety of locally designed forms of agroforestry and sustainable agriculture on land covering thousands of acres. Recreating natural ecological processes on the farms has reestablished recycling processes similar to those in natural ecosystems. In an area which, not long ago, had resembled a desert landscape and had been described locally as "bald mountains," soil erosion and degradation due to overuse of chemicals have been reversed.

Natural forests, largely devastated by misuse, are regenerating over an even larger area. The restored forests are repairing damaged watersheds. Streams, along with a variety of animals long thought to be locally extinct, have reemerged. Migration to Bangkok has declined, along with the socially disruptive trends it helped create.



The kitchen garden at Thanawm Chuwaingan's home. It features a variety of trees and crops for food, medicine, and other uses. The large ceramic pots store rainwater.

Thanawm summed it up: "Most of all, in terms of change, was the change in people's thinking. We are learning together as a community, sharing knowledge with each other. People no longer think we are in trouble, and we can do nothing about it. We know now that with some careful thinking and a lot of shared effort, we can solve our problems, and fix what is broken."

"Even though we don't have much money, I'm happy. We have friends who come to visit and we have enough food for them. We don't have to buy much of anything."

At the same time Thanawm and his neighbors have secured a better life for themselves, the return of trees to their landscape has removed carbon from the atmosphere. While the details of their experience may not be the answer for every place with apparently irreversible decline, the success in Nakhon Sawan offers an inspiring model for farmers throughout the tropics to reverse deforestation in their communities. The undeniable good news is that EcoTipping Points can in fact be created as levers for positive change.

By Gerald Marten and Amanda Suutari. <a href="https://www.eastwestcenter.org">https://www.eastwestcenter.org</a> Apr. 1, 2009

# **Agriculture Drones to Transform Farmers Lives in Thailand**



**BANGKOK** – An Agriculture Drone resembling a Goliath mechanical creepy crawler, a highly new technology drifts over a rice field in the region of Phetchaburi, in focal Thailand.

Wachiwarat Aungsupanith, the 27-year-old CEO of automaton creating organization Bug Away, figures these cutting edge contraptions could change Thai horticulture in an interview with CNN. Showering fields with pesticides and composts, the automatons – which can conceal to 60 sections of land multi day – could lift harvest yields, spare time and make backbreaking field work a lot simpler, as indicated by Bug Away.

With agriculture forming a major part of the Thai economy, the potential market is sizeable.

According to research and advisory company Oxford Business Group, agriculture in Thailand was worth \$31.6 billion, and accounted for 8.5% of national GDP, in 2016, while a third of the country's labor force work in the sector.

Thailand 4.0 — a government initiative introduced in 2016 that aims to transform the economy — targets growing farmers' incomes seven-fold by 2037. Along with rice — the biggest crop — other staples include tapioca, rubber and sugar.

**Agriculture Drones Innovators** 

Chinese company DJI pioneered the use of agricultural drones in 2015, and other

manufacturers followed suit.

Yamaha began selling a model in Japan last year, citing a growing trend of using drones for

small agricultural plots that are difficult to spray with unmanned helicopters.

The laws governing the use of drones to spray crops vary around the world. In the UK, for

example, Crop Angel is working to get permission to use Agriculture Drones to spray

commercial agrochemicals and pesticides.

Agricultural drones only arrived in Thailand in the last three years, says Aungsupanith, and

their use has not yet been widely adopted.

But he's not the only one who sees potential in the market, with Thai company Novy winning

awards for its sprayer drones.

Although some might balk at Agriculture Drones price tag, which ranges from \$2,400 up to

\$9,000, depending on the model, Aungsupanith hopes younger farmers will embrace the

opportunity to use drones.

He says his company has cheaper models under development.

If drones become widely affordable, we might see a real buzz around Thailand's farms.

Source: https://www.chiangraitimes.com Thailand. July 4, 2019

424

### Dare to Return



When asked why he resigned from an engineering career to start anew as a farmer, Pasawut "Jack" Roongrasmi, 33, simply replied, "Because I wasn't happy."

Like him, dozens of young men and women in Thailand are turning away from the modern comforts of big cities, determined to make a self-sufficient life for themselves through agriculture. To help them, a grassroots network of experienced farmers has developed a "smart" agricultural community called "Dare to return," assisting the youngsters in setting up their farms with modern and sustainable methods.

"I went through all kinds of training but I wasn't able to build upon what I had," Roongrasmi said. "The training I got from the Dare to return initiative opened a whole new dimension for me. I was able to learn from those who had experience working and living a better life, and little by little I was able to transform myself."

The Dare to return initiative is a collaborative effort to empower a new generation of self-sufficient farmers in Thailand, at a time when rural populations are aging. According to the Thai National Economic and Social Development Board, the number of people over 60 living in the countryside rose to more than 11 million in 2017 – or 17 percent of the total population.

The network aims to encourage young people who immigrated to the cities to return and develop their rural hometowns with innovative farming technologies. They believe agriculture is a vector of sustainability and resilience that can provide a long-term foundation

for a society ready to adopt technological change. Through mutual assistance, community learning and self-transformation, they hope to bridge the gap between old and new generations and build the basis for a more collaborative society, improving the quality of life for all.

"Once I internalized the fact that I am a farmer, I found that it's a much better life than that of a salaried worker. I've gone further than I ever thought I would. Agriculture works beautifully when it becomes a state of mind, focused on doing what is actually feasible," Roongrasmi said.

He now claims to be happy with his 1,600-sq. meter farm in Chiang Mai's Mae Rim rural district, where he uses automatic irrigation and electrical supply systems to grow bromeliad plants for export. He is also taking classes at Mae Jo University, studying the optimization of light for plants.

Purich Singkharaj, also 33, has a horticulture degree from Chiang Mai University. Born into a family of farmers, he chose his career path as a journey of self-discovery, among other reasons.

"After graduating, I used to work six days a week, doing overtime every day, until the company sent me to Nigeria for three years," he said, noting that the trip gave him the chance to think about what he really wanted from life. "I realized that I was wasting my time, and that I should start my own farming operation while I still had the strength."

Two years after returning to Thailand, he decided to open a homestay guesthouse. Visitors could use the land surrounding the house to grow onions, rice and organic strawberries.

"My return to Thailand coincided with an economic recession. I had zero capital apart from my chickens and my plants," he remembered. "My income came from day-to-day product sales. But I had time to pursue my interests in art and music, unlike when I was working at the company. I like this version of me better."

Aside from owning and running the Innkham Homestay and producing organic chrysanthemums and strawberries, Singkharajorganizes one of the Dare to Return networks of new-generation farmers. He also helps care for orange and lychee orchards on several hectares of family-owned land in Chiang Mai.

Duangjai Sirijai holds a bachelor's degree in business administration and lives in her family home in Chiang Mai's Doi Tao rural district. The 38-year-old woman worked in Chiang Mai for seven years before transferring to Bangkok. But her life changed when her parents fell ill, forcing her to return to her hometown.

She started preparing her move three years ahead of time – saving money, renovating the family home, making investments, and learning about agriculture, particularly longan fruit.

**Rural Development in CIRDAP Member Countries** 

Because the sandy soil of her land is particularly suitable for growing roots and tubers, Sirijai turned to permaculture farming methods. She prepped the soil for four months, growing groundnuts, then cultivating Japanese mountain yams and onions. Her agricultural activity is small-scale and focuses on quality, she said.

Today, Sirijaiowns two longan orchards, which she harvests in and out of season. The first has 130 trees on 1.1 hectares, while the second has 60 trees on one-half hectare.

Her farming activities not only provide for her family of six, but also help others in the community learn how to develop their own operations. She makes some of her land available to the Doi Tao Agricultural Learning Center, where she teaches agriculture.

Sirijai's determination has inspired a whole network of Dare to return farmers who are now fully integrated into local communities and organization.

Source: https://www.un.org > blog > 20 28 August 2018. Thailand

# Farmers cultivating illicit drug crops are usually among the most marginalized in society.



Providing alternatives for them has been a major challenge for drug control efforts in South East Asia over the past four decades. Alternative development has been one of the most successful approaches to this problem.

Mrs. Penee Mala is a member of the ethnic Tai Yai hill tribe from Huay Nam Koon Village in northern Thailand. She is one of many who participated in the Pang Mahan deforestation project. Asked about her experience in shifting away from poppy with the support of the project, she told how the alternative development project, which included agricultural assistance, market access support and infrastructure enhancement, gave her family a stable income and her children the chance to attend school and plan for higher education.

"My life is stable and secure now and I see a positive future for my children", said Mrs. Mala, explaining that her current situation is completely the opposite to when she was growing poppy. In those days, her children helped with illicit crop cultivation and had no access to education. Her family was also involved in the arms trade, counting and packaging bullets for sale, often forced to hide in the forest when police came searching for drug crop farmers.

Penee Mala's positive story is reasonably typical of what happened during the transformation in this part of the Golden Triangle (a major opium producing area, spanning Myanmar, Laos and Thailand) over the past several decades. Brought about by the far-sighted engagement of the Government of Thailand - including support from the very highest political levels - with formerly poppy-growing communities in the Golden Triangle highlands, it has resulted in the virtual eradication of opium poppy cultivation in the Kingdom.

Alternative development has brought about a significant decline in poppy cultivation in Thailand, which now accounts for only a negligible portion of total global opium cultivation, according to UNODC figures.

Link: https://www.unodc.org/unodc/en/alternative-development/thai . Thailand

# From Poor Peasants to Entrepreneurial Farmers: The Transformation of Rural Life in Northeast Thailand

Over the past 30 years, a transformation has occurred in the lives of the people of Northeast Thailand (Isan), and of many rural areas in East and Southeast Asia. Historically regarded (and even derided) as "simple peasants," concerned only with growing enough food to feed themselves, they have embraced the marketplace and thrived, setting off a cascade of changes, including increased education, and feeding aspirations. Agricultural advances allowed a shift from subsistence to entrepreneurial farming, and off-farm employment has become more common. These transitions have been accompanied by a shift from a village-centric social system to a more broadly connected social network. The resulting changes have dramatically altered the social fabric, including demography, social organization, culture, health, education, and employment, as well as aspirations and identity. The transformation is still in progress, but given the willingness of the Isan people to embrace change, the increasing globalization of the region can be expected to continue.

From 2005 to 2014, when a military coup brought all political activity to a halt, Bangkok was kept in near-constant turmoil by massive street demonstrations that pitted the mostly agricultural population of the Northeastern Region (commonly called Isan) against the governing elite and the urban middle class. On one side of the barricades were the red-shirted supporters of populist prime ministers Thaksin Shinawatra (who was ousted by a coup in 2006) and his sister Yingluck (who was overthrown by the army in 2014), many of whom were farmers from the Northeast. On the other side were their yellow-shirted middle-class opponents from the capital city. Although the Red Shirts asserted that they were defending popular democracy, and the Yellow Shirts proclaimed their loyalty to the King and distaste for Thaksin's corruption, the real struggle was as much over regional, class, and cultural identity as it was differences in political ideology. At stake was the allocation of power and prestige in Thai society, which had traditionally privileged urban over rural, rich over poor, and the Central Region over the rest of the country. The predominantly rural people of Isan felt particularly aggrieved by their long-standing social and cultural subordination to Bangkok. They had appeared to be politically passive peasants for a long time, but that was clearly no longer the case.

The Northeastern Region covers one-third of the Kingdom's land area and is home to 22 million people, who constitute one-third of Thailand's total population. The mostly Laospeaking inhabitants have historically been subsistence-oriented rice farmers, characterized by Thai elites as poor and unsophisticated, ignorant peasants who sold their votes to the highest bidder because they lacked the education and values needed to be good citizens.

In fact, however, the Isan villagers have never been the "simple peasants" conceived of in the elite imagination. Today their life as farmers is even more removed from that persistent

historical stereotype, due to a process of very rapid change, one that has broadened their economic base and provided greater profits and increased social mobility. This process is referred to by social scientists as an "agrarian transformation." It involves a major restructuring of agriculture from subsistence-oriented to market-oriented. It also involves changes in all aspects of rural life, including technology, economics, social relations, and cultural values.

Despite the magnitude of these changes, however, the perceptions of the region held by policymakers, the mass media, and the urban public in Thailand have lagged behind changes on the ground<sup>1</sup> so that many still conceptualize the situation of the rural Northeast according to an outmoded model ("the conventional model") that depicts the region as it was before it entered into a period of very rapid development beginning in the late 1980s.

According to this conventional view, the rural Isan people are poor, uneducated, and ignorant, insultingly referred to as "khwai" (buffalo) by some urbanites.<sup>2</sup> In this view, the Isan farmers live their lives within the confines of their native villages, with their time horizon limited to the next crop and their only aspiration for the future being to produce sufficient rice to keep their families alive. It is true that Northeast Thailand is a relatively poor region because its rain-fed rice farming is so unproductive. Yields are low and unstable due to the poor resource base (infertile sandy soils, very limited availability of surface water) and unfavorable environmental conditions (limited and erratic rainfall).

Despite these severe constraints, people in rural areas of the region have survived by employing time-tested environmental adaptations, especially reliance on a "diversified livelihood portfolio." This adaptation minimizes risk by avoiding over-reliance on any single source of income. This portfolio includes low input (limited labor and capital) subsistence-oriented production of sticky (glutinous) rice to meet household needs, growing of upland crops (such as cassava and sugarcane) to earn cash income, heavy reliance on wild resources that can be collected from fields, forests, and streams, out-migration to find new sources of income by working outside the region, and reliance in times of scarcity on a local safety net based on kinsfolk and fellow villagers.

The rural social system associated with the conventional model was characterized by a relatively high degree of egalitarianism, with little economic differentiation among households, low educational levels, limited integration into the larger national social and economic systems, and high levels of community solidarity.

Although the conventional model was a useful framework for understanding the Northeast until the end of the 1980s, the situation has changed so profoundly since then that it no longer reflects reality and a new "transformational" model has emerged. Adoption of a high-quality glutinous rice known as RD6, combined with mechanization and small-scale supplementary irrigation has largely solved the problem of rural food security while allowing farmers to plant a larger share of their land to jasmine rice, which is raised as a cash crop, providing

rural households with a new source of income. Sale of jasmine rice to the market is now the largest single source of agricultural income of farm households.<sup>4</sup>

Agricultural intensification, diversification, and specialization have occurred to an extent unimaginable a few years ago. Relying on remittances sent back to their families by migrant workers as well as cash earned by engaging in off-farm employment in new factories and service jobs in local urban centers, Isan farmers have been rapidly adopting modern agricultural technology. Households continue to rely on a diversified livelihood portfolio. However, it is increasingly based on production of high-value cash crops and livestock, with increased dependence on off-farm employment as the main source of income. There is also a growing dependence on social networks extending far beyond the boundaries of the villages, with connections outside the villages and government assistance providing a safety net to replace the weakened village solidarity. The rural social system is also changing, with declining rates of poverty, increasing levels of economic differentiation, improving levels of education, declining community solidarity, and ever-deepening integration with national and global social and economic systems.

The agrarian transformation is deeply affecting every dimension of rural existence, including demography (out-migration, declining fertility, population aging), social organization (increased economic stratification, emergence of new types of household structures, expansion of external social networks, and weakening of village solidarity), culture (erosion of indigenous knowledge, adoption of cosmopolitan cultural patterns), health (increased prevalence of obesity and diabetes, drug addiction and alcoholism), education (increased number of years of mandatory schooling, increased valuation of education as a route to upward mobility), employment (scarcity of agricultural labor, off-farm employment as a main source of income), to mention only some of the most evident types of change.

#### **Changes in Agricultural Technology**

In recent years, Northeastern Thai farmers have adopted new technologies at an ever-accelerating rate. Motorized two-wheeled hand tillers displaced buffalo for plowing in the 1990s and are now, in turn, being displaced by four-wheeled tractors. Mechanical threshing machines and combine harvesters are widely used. New improved rice varieties, notably RD6 and KDM105, have replaced thousands of traditional local varieties, while the use of chemical fertilizers and pesticides has greatly increased. So it is evident that Isan farmers are not innately conservative or resistant to change.

For example, it had long been assumed that mechanization of rain-fed rice farming in the Northeast was unlikely to occur very fast or proceed very far. Adoption of modern machinery was constrained by the subsistence orientation, low productivity, and cheap labor that characterized rain-fed rice farming. In recent years, however, spurred by the growing shortage of agricultural labor, mechanization of rice agriculture has been occurring at an ever-accelerating rate.

A number of interacting factors appear to be driving the process of mechanization, including a shift from production of sticky rice for home consumption to production of non-sticky rice for market; the out-migration of workers seeking jobs in urban centers and the movement of rural laborers into local non-agricultural employment with a consequent sharp decline in the size of the agricultural labor pool and a steep rise in wages paid for farm work; the decline in use of labor exchange arrangements among neighbors; and the increased access of farm households to capital due to cash remittances received from members engaged in off-farm employment.

Many village households have also invested in purchasing motor vehicles. Motorbikes have become virtually a necessity of life in the countryside, and wealthier households often own pick-up trucks, which they use for personal transportation and also to earn income by hauling their neighbors' crops to market.

#### **Social System Changes**

Changes in agricultural technology and practices have been accompanied by multiple changes in the rural social system, including human health, the nature of rural-urban interactions, the distribution of age groups within the population, household composition and livelihood systems, community social organization, and cultural values, aspirations, and sense of identity.

#### Traditional Versus Modern Health Problems.

The rural population in the Northeast is in the midst of an "epidemiological transition" in which traditional diseases and health problems such as malnutrition, anemia, and goiter are declining but modern diseases and health problems including obesity, type II diabetes, AIDS, alcoholism and drug addiction, and traffic deaths and injuries are rapidly increasing.

While malnutrition and the prevalence of under-weight and stunted children have greatly declined over the past 20 years, recent changes in diet and lifestyle have led to an explosion of obesity. A diet that formerly contained only small amounts of fats and sugars has been transformed by greatly increased consumption of "fast foods." Village shops sell many high-calorie packaged snacks and soft drinks. At the same time as calorie consumption is rising, human energy expenditure in farming is declining as machines replace human muscle power. Instead of walking, villagers use motorbikes to visit neighbors' houses, even those located close by. Children spend much more time sitting in school and less time helping their parents doing chores than in the past. Associated with the increase in the number of overweight people is a rapid increase in the incidence of diabetes mellitus. The Northeast now has one of the highest rates of type II diabetes in the world.

#### Changes in the Nature of Rural-Urban Interactions.

Tighter integration of rural villages into larger economic and social systems has led to a form of "rural urbanization," in which many goods and services that were formerly only available

in large cities are now readily accessible in villages. Mobile telephone service is available everywhere except in the remote mountains, and almost every villager in Isan has a mobile phone.

At the same time as their villages are becoming urbanized, rural people are developing closer relations with regional cities, which play an ever-increasing role in their lives. Until very recently, cities in the Northeast were quite small and had a relatively limited influence on agricultural activity in their hinterlands. In recent years, however, growth of urban populations and expansion of urban settlements into the surrounding countryside has been very rapid. Urban sprawl is exerting especially high pressure for change on agricultural systems in the peri-urban zone of transition between the cities and the countryside, where suburban housing estates compete with farms for land. Expansion of the area of urban settlement is pushing up the value of agricultural land in the peri-urban zone, leading many farmers to sell their land to developers for quick profits. Some invest this capital in buying land further away from the city where they continue farming but others spend the windfall on immediate consumption and end up as landless laborers. The growth of the urban market also creates new opportunities for those peri-urban farmers who are able to shift from growing rice to the production of high-value specialty crops (e.g., organic vegetables, flowers, and dairy products) desired by affluent city people. Access to urban employment opportunities is facilitating development of what might be called "weekend farmers," i.e., rural people who work in urban jobs on weekdays but carry out agricultural activities in the evenings and on holidays.

#### Population, Household Composition, and Livelihoods.

The rate of population growth has slowed while average life expectancy has been greatly extended from about 50 years in the 1960s to over 70 years in the 2000s. The population is aging, with the share of children and young adults declining and the share of those over 60 growing. In the Northeast, the effects of changes in fertility and mortality on the distribution of age groups within the population are accentuated by the high rate of out-migration as young adults move to Bangkok in search of employment opportunities. One major consequence of these demographic changes is that rural households are much smaller than previously. There are growing numbers of households composed only of grandparents and grandchildren and those made up only by an elderly couple or a solitary widow or widower.

Accompanying these changes in household composition are profound changes in sources of household income, including a growing share of income from non-agricultural sources. For the region as a whole, more than half of rural household income now comes from non-agricultural sources.

#### **Changes in Community Social Organization.**

Until the 1980s, Northeastern rural villages were relatively cohesive communities with shared values, limited economic differences among households, and a high level of solidarity based

on kinship ties and participation in community social activities, often centered on the temple. In recent years, however, village solidarity has markedly declined. Exchange labor has virtually disappeared, with farmers relying exclusively on hired workers to assist them at peak periods in the rice production cycle. Village households increasingly depend for social support on government assistance and their own extended family networks and rely much less on assistance from neighbors or village welfare institutions. One major social change that may contribute to the decline in households to move out of densely populated villages to live independently on their own farmsteads, where they are physically quite isolated from neighbors.

#### Cultural Values, Aspirations, and Sense of Identity.

The prevalent image of Isan people in the Thai mass media is of tradition-bound and village-centered peasants having only very limited involvement with or knowledge of the larger world, the Isan equivalent of the American "hillbilly" stereotype. This image is almost the opposite of reality. Rural people in Isan may well be the most dynamic and receptive to change of any people in the Kingdom. Although often referred to as "peasants," the people of Isan were never fully incorporated into the absolutist Siamese feudal system. Instead, until the administrative reforms of the 1890s, they lived in relatively autonomous villages that were under the rule of local chiefs with very limited coercive power to control the lives of their rural subjects. Consequently, Isan villagers never developed the "dog-eat-dog' competition for resources among individuals and families typical of peasants in highly developed feudal societies, neither was individual initiative suppressed by communal pressure for conformity as it was in these societies.

Since the 1970s, they have eagerly embraced globalization, both by finding employment in export-oriented factories in Bangkok and on the east coast of Thailand and by migrating in large numbers to live and work abroad. Many Isan laborers are employed in construction, agriculture, and factory work in the Middle East, Taiwan, and South Korea. Many Isan village women have married foreign husbands and live abroad with their spouses, who are mostly Western Europeans and Americans. These women send a steady stream of remittances back to their families in the villages. In many cases, the foreign husbands have moved to reside in their wives' home villages. No official data are available on the numbers of foreigners involved, but almost every village now has at least one foreigner in residence. Although many in the Thai elite view women who marry foreigners as being little better than prostitutes who are immoral seekers after material wealth (although they are also sometimes presented as naive victims of neocolonialist sex trafficking), an alternative view is that these women, who are often widows or divorcees with little chance of finding a Thai husband, have found an innovative way to expand the diversified portfolios of their families, by tapping a new source of income.

The underlying character of the Isan people has not changed, and the willingness to take risks to find and exploit new resources is still highly valued. Recently, however, there has been a major shift in the attitude toward education which is reflected in the investment preferences

of rural households. Parents used to favor investment in land, hoping to increase their holdings to have a sufficiently large area to be able to give each of their children a farmstead when they became too old to work it themselves. Thus, they tended to pull their children out of school as early as was legally allowed, so they could augment household labor resources. Now, parents prefer to invest in educating their children so that they can obtain non-farm employment in the cities that will allow them to support their elderly parents with remittances. At Khon Kaen University, for example, there are many graduate students from Isan farm families. Their parents, most of whom have only a few years of primary education, definitely do not expect or want them to return to farming after getting their degrees, and they themselves have no desire to do so.

One of the most important recent changes in the culture of Isan villagers is the change in the way they perceive themselves and their place in the world. Although never the servile peasants that many in the urban elite imagine them to be, increased education levels and the experience of participation in mass political movements, first the communist mobilization of villages in the 1960s-1980s, then the organizational work by NGO community development activists in the 1990s, and most recently the Red Shirt movement and the formation of "Red villages," have profoundly affected the villagers' sense of self. 13 Several professors at Khon Kaen University who have been conducting research in rural areas in Isan since the 1970s have observed that rural people, while still almost always friendly and helpful, no longer treat them with the automatic deference that used to be granted to any educated outsiders visiting their villages. Accompanying this change in sense of self is a new-found pride in being "luuk Isan" (children of the Northeast). Gone are the days when Isan children, going off to Bangkok to pursue higher education, would be cautioned by their parents against speaking Lao in public for fear that they would be ridiculed as country bumpkins. Given these changes, it is hardly surprising that the majority of the core participants in the Red Shirt demonstrations in Bangkok were members of the newly emerging Isan rural middle class<sup>14</sup> who had gained considerable education and become entrepreneurial farmers.

#### **No Turning Back**

Because the agrarian transformation of Northeast Thailand is still very much a work in progress it would be foolhardy to try to predict in detail how it will turn out in the future. What is already evident, however, is that the traditional subsistence-oriented agricultural system has largely been replaced by a capitalist market-oriented one that is inextricably linked to the national and global markets, just as the old village-centric social system has been subsumed into a multiplicity of extended networks that tie the Isan villagers ever more closely into the larger world. Barring a catastrophic meltdown of the global system, it can reasonably be expected that the rural people of Northeast Thailand will become ever more deeply integrated into national, regional, and global economic and social systems.

By A. Terry Rambo. https://www.eastwestcenter.org Thailand

# From Struggle to Success, Lisu Hill Tribe Enters The 21st Century

In 2014, I returned to Dton Loong, one of Thailand's most accessible Lisu villages located an hour's drive north of Chiang Mai in rising countryside. I was looking for Alay-pa, an amiable headman I'd interviewed in 1997. The village had changed, the old bamboo and wood houses replaced by concrete ones, the former mud lanes paved. But it retained the familiar deserted feel of a village at midday; people were at work – some in fields, and today, some at jobs as far away as Chiang Mai. Many came home only on weekends, leaving behind snarling guard dogs. The day I visited, two minimally protected young men roved the village, section by section enveloping it in thick clouds of pesticide.

Some 1.5 million Lisu are spread across highland Southeast Asia today, united by language, custom and a distinct, skewed sense of humor perhaps developed to help them live with perpetual uneasiness. Their discomfort is born of generations of statelessness, frequent migration to avoid conflicts and Chinese domination, and outsider status.

Adjacent to Dton Loong, Lisu Lodge, one of Thailand's first ethnic eco-resorts, was still in business. Established in 1992 and still operated by its original owner, the Lodge had scaled up a bit and joined a network of hostelries offering "hill tribe packages" to entertain education-minded tourists. Lisu Lodge provides service employment to local residents as hotel workers as well as singers, dancers and musicians performing in cultural shows. Workers dress traditionally, and they and the villagers make handicrafts to sell to guests. Tourism has become an important factor in preserving Lisu culture.



Dton Loong village in N. Thailand now has a paved road and mosquito abatement program. Development brings advantages and sometimes, new health hazards. Photo: Michele Zack

I was disappointed not to find Alay-pa, but in my search I was directed to homes of other former headmen. At one, an older, energetic woman in Lisu dress beckoned me up to take a seat on the veranda of her sturdy concrete house. She sat overlooking the lane at a tabletop

sewing machine surrounded by four or five giant multi-colored plastic bags and stacks of cloth. She was Ali-ma Loy-yee-pa, a member of the Sin-lee clan. She'd been married to a former headman, she said, but he'd taken up with another woman and moved away.

She gave a "what are you going do?" shrug. She was born here and had four daughters, but didn't read or speak standard Thai well. She spoke Lisu for most needs and got by in the northern Thai dialect at the market in nearby Mae Malai.



Author Michele Zack studied the Lisu in three countries over 20 years, here seen in China's Salween Valley. Photo: Mark Goldschmidt

#### There and Back Again

For most of the 1990s, my husband, small daughter, and I lived in Thailand. The first four of our eight years here, we were illegal immigrants, an uneasy and traumatic state that we fortunately had the resources to resolve. I reported for AsiaWeek and the Far Eastern Economic Review, and in 1996 I was asked to write the first book-length ethnography of the Lisu tribe for a Thai-based publisher who was bringing out a series of beautifully photographed books on the hill tribes of Southeast Asia.

I jumped at the chance. I had known about the Lisu, the "anarchists of the highlands" since the mid-1980s when, as a budget tourist, I encountered them living far from roads and, it seemed, independent of the Thai government.

As it happened, my own immigration difficulties proved good psychological preparation for writing about a minority that has forever been on the run. Where the Lisu were originally running from is a matter of conflicting, contradictory theories; what is known is that over the past few hundred years they migrated from high remote valleys in the Upper Salween watershed of Yunnan China into what is now Myanmar, and finally, into northern Thailand. A few also live in Laos and the Arunachal Pradesh state of India.

In the mid-1990s, I spent two years researching and traveling to remote Lisu villages in Thailand, China's Yunnan province and Myanmar. I consulted with Lisu scholars in Thailand and in the states and read everything written about them, 95 percent of which concerned the Thai Lisu, though they comprise only 5 percent of the total Lisu population. I finished the book, but before it was printed, the publisher went out of business. I returned to California in 1998.

Some 15 years later, I was still thinking about the Lisu. I revived the project with University of Colorado Press. By then, however, the world, especially Asia, had undergone convulsive modernization and change. My research was woefully out of date – so I returned to Asia to catch up with this egalitarian culture, focussing on comparing and updating Lisu adaptation in three countries with very different political and economic styles.

What I witnessed was something like a time-lapse display of globalization and its effects. In a few years, the Lisu had made the journey from stateless tribal minority to citizens in a new world economy. We've all made this trip, but most of us don't remember because, in fact, our ancestors conducted it in stages over generations.

On my return to Dton Loong, Ali-ma, the Lisu divorcee, told me that things were much better today than 15 or 20 years ago. Her Lisu identity was stronger, her culture more protected. I asked for specifics. First, she said, is that Thai citizenship problems have been solved for most people in her village. Now, only recent immigrants from Burma struggle to gain identity cards. She described herself as a prosperous Thai citizen who was also proud to be Lisu. In the past, this wasn't possible. She had a smartphone and held it up to show the village's strong signal. She opened one of the large bags, revealing it to be full of the Lisu purses and bags she makes.



Lisu children play in the Doi Laan community in northern Thailand. Photo: Michele Zack

"I do it to keep busy, I don't need the money," she said. They were well made, small to big, with tiny colorful folded cloth triangles and squares stitched between multiple borders - a motif adapted from Lisu baby caps.

My eyes found a glass cabinet on the veranda overfilled with household objects and topped with a framed dusty photograph of a young woman and older Western man.

"Oh, "That is my eldest daughter, she lives in California," Ali-ma explained, adding with a chuckle that all her daughters married foreigners. One was in New York, another in Osaka. Her youngest moved back to Chiang Mai a couple of years ago from Studio City, a Los Angeles suburb. On her cellphone, she showed me the telephone number of that daughter, Mayura, so I could jot it down. While she was at it, she pointed out her absent husband's number in case I wanted to talk headman business with him. She was pleasant and matter of fact.

I, however, was nonplussed – smartphones with four bars, daughters in America, husband with a *mia noi*. This was my first day back in the field since 1998, and I'd forgotten how unabashed and friendly the Lisu are. That had not changed, nor had Lisu humor. Saying goodbye, Ali-Ma quipped that she's thinking of taking up with a farang herself: Did I know a good one who'd like an old woman who had become just a little bit fat?

When I returned to Chiang Mai, I called her daughter, Mayura Sinlee Seagrave who, responding with "cool," "yeah," "okay," – agreed to have dinner with me the following night.

She picked me up from my guesthouse in an SUV, the backseat strewn with the detritus of school-age children: orange peels, soccer jerseys, empty cups. Mayura didn't sound as much like a Valley Girl in person as she had on the phone. Slim and attractive, with a cascade of shiny black hair, she wore a turquoise tunic over leggings and looked to be in her mid-20s rather than a 35-year-old soccer mom. She chose a hip vegetarian restaurant for dinner and told me her story:

"I grew up in Dton Loong but was sent to Suksasongkra boarding school in Chiang Mai when I was 7. . . the village school was no good. All the kids in my family got decent educations, because we lived so close to Chiang Mai. The school was fun, I liked living in the dormitory and meeting other hill tribe kids, just coming home on weekends. My father was a successful headman and farmer, also a silversmith. He attended ag school, and took classes in things like composting, planting rice between fruit trees, and raising pigs efficiently. Because he was headman, he got involved in economic development. Some Lisu didn't understand the importance of Thai citizenship. He "got it" earlier than many and moved ahead. For older, poorer people it was hard – too much work. You had to walk a whole day to renew your ID. You had to pay money, be insulted, and many just didn't do it. And it was actually not so bad in our village, we live closer to government offices than most. Even before Lisu Lodge, foreigners came there and we were exposed to modern things.

"My dad tried to steer me to ag, but I wasn't into it. Choosing not to go to University, I took a vocational course in sewing instead. Later, I realized it was important, and did a distance learning course through Sukhothai Open University. They send you books, you study

anywhere, just turn up to take tests. I got a bachelor's degree in English. Now I'm trying to get a biz degree, but it is hard with two kids and working in the family business.

"I met my husband Sean 15 years ago in Chiang Mai, when I worked at an internet café. His background is Burmese-American, and his family has lived in Asia for five generations. His parents are both writers. My husband and I have a graphic photography and retouching company, Ultrafina and do advertising for cosmetics, movie posters, and so on. It's U.S.-based, and first we lived in New York. It was too cold there, though. Then we moved to Studio City in LA for a few years. But after the second kid (her children are now 8 and 14) it was easier to come back to Chiang Mai. We moved here in 2009 to be closer to my mother, for good schools, and because household help is better here. Because we live here, my kids can understand, and one even speaks some Lisu. At home we use English and Thai."

I asked Mayura if she felt Lisu.

"It's me, of course. I feel kind of happy to be Lisu, but also Northern Thai, Buddhist, animist, and some American. I also feel good about the opportunities I've had to learn and to travel — not just stay in the village like my mother."

Her sisters, she said, had all married foreigners much older than they and also left the village. As a young girl, she'd thought she would follow their examples: "Marry an older guy, have a peaceful life."

This was a practical matter: She didn't judge her parents for allowing her eldest sister, at 16, to marry a man near 60. The age difference wasn't important. Unlike her parents, whose marriage ended in a divorce that was hard on the family, her sister was still happily married (today, she is in her 40s, her husband in his 80s).

Mayura said her father had picked up "Thai ideas" from involvement with government officials – especially that men have more power than women.



Thai Lisu Village Doi Chang, origin of the eponymous cofee, is now wired for Internet and exports 'beyond fair trade coffee' to large US retailers. Photo: Michele Zack

In the standard Thai way of showing success, he took a younger second wife, or mia noi. This practice was antithetical to Lisu values, which hold woman and men as equals. Divorce exists, but taking a mia noi is not part of Lisu culture and her mother would not accept it. This caused terrible fights. Her father divorced her mother but still supports her financially.

Today, Mayura, as the only daughter living close by, sees her mother regularly and encourages her to branch out in the things she makes, to "move into backpacks, and other useful things people need and like."

I asked Mayura if her father received a bride price for her. This practice persists among both animist and Christian Lisu, though many Christians have dropped it – or claim they have. Mayura's family are not Christians, however, and like every Lisu woman everywhere, she remembers the exact amount: "Father took 50,000 baht for each of us daughters (then worth about USD\$1,300) to keep everyone equal," she said. "But I think he turned around and spent it all on our wedding feasts." Mayura's husband was 11 years older, not a significant difference, she said. Cultural conflict had not been a big issue for them: "Marriage is hard for all couples sometimes, but we are together, we work together at our company. Our kids are happy, our family is good."

Mayura, whose mother is illiterate (but has clearly held on to her *myi-do*) and father used the advantages of being headman to advance, has used her own agency in moving from tribal village girl to international businesswoman in one generation.

On that first day back in the field, it became clear to me that my book would be more than a traditional ethnography. Indeed, "The Lisu: Far from the Ruler" is both narrow and deep, the story of one remote, lively, anarchic group's journey across time and into today's global economy – illuminating the benefits, trade-offs, choices and losses all modern people make on the way to becoming subjects of a state and participants in the new world order.

Source: By Michele Zack, January 18, 2018. http://www.khaosodenglish.com

## **Growing industry**

Patom Organic Farm is both a fun trip and a model for others to follow



Pasin Thongbo, right, shows fresh peppermint leaves to visitors.

Pasin Thongbo, 47, remembers the time when, more than a decade ago, Sampran Riverside Hotel introduced its plan for an organic farm. Back then, he did not think that he would become the man in charge, acting as guide for visitors coming for that organic farm experience. Patom Organic Farm, on the banks of the Tha Chin River in Nakhon Pathom's Sam Phran district, occupies about 40 rai of land just opposite the hotel. The farm was the brainchild of Arrut Navaraj, the hotel's managing director and grandson of its owner, the late Chamnan Yuwaboon, the first Bangkok governor.

"Khun Chamnan bought the farmland because he wanted to preserve the century-old ton lamphu [mangrove apple tree]," said Pasin, pointing to the large tree next to the pier where we had just disembarked after crossing the river on the hotel's paddle boat. The land, which used to be for growing roses, was taken over 12 years ago and now grows rice, vegetables, herbs and fruits for the hotel. "Since the early days, all hotel executives and staff had to learn about organic farming. It took us about three years before we were able to turn the dry land into a fertile farm," he said. Today, it is one of the leading organic farm models in Thailand, with certifications from the International Federation of Organic Agriculture Movements (IFOAM) of Europe and Canada, as well as from the Foundation of Organic Agriculture Certification Thailand.



The farm selects healthy seeds for the next round of planting.

The farm is also a learning centre, sharing knowledge and expertise with local farmers. The hotel introduced the Sampran Model in 2010 to encourage sustainable organic farming. The hotel also has a weekend organic market called Talad Sook Jai for the farmers to sell their produce directly to consumers.

Pasin, who has worked for the hotel for 25 years, is happy to share his knowledge and the success story of the farm with visitors. As we made our way along the new wooden walkway from the pier, Pasin showed us various plants. Many of them, you would not typically find in supermarkets, such as phak nam (geli-geli), whose young leaves can be used in kaeng som (a spicy-sour orange-coloured soup). We walked past the tom yam zone where they mainly plant herbs for making the soup, such as lemon grass, chilli and galangal. They also grow red and green basil and sweet basil along with chilli plants to ward off pests.



When we reached the reception area, Pasin and his helpers handed each of us a small cotton bag with a tiny water bowl inside. "The bowl is for you to have a herbal drink. Today, we're serving a mixed tea of lemon grass and pandan leaves," he said. The tea is high in antioxidants and helps relieve fatigue. He also served farang sai daeng, the signature guava of the Suan Sampran organic garden. This is a hybrid of two guava species: farang kimchu (a small light green guava with fewer seeds) and farang kee nok (tiny pink guava). The result is a crunchy round guava with pinkish flesh around the seeds. It is sweet with a mild citrus taste. After this welcome drink, Pasin handed each of us a small basket with a knife inside."We will have a workshop for you to make mint tea. It is made from fresh peppermint leaves. So you have to harvest one handful of the leaves to make it," he said. They led us to the peppermint plantation. Close to the plants, I could smell the pleasant minty fragrance. We were advised to cut each stem at least 15cm long. We needed to wash each leaf and later spread them over a hot pan on a charcoal stove to roast them. The process took a while "You can also have fresh peppermint tea. We roast the leaves so that they can have a longer shelflife," he said, adding that the tea helps strengthen the immune system and reduce stress. After the workshop, we each received a small container of dried peppermint tea leaves as a souvenir. After making tea, Pasin and his team prepared chilli seedlings for us to replant in eggshells. He taught us about soil and fertilisation. He also handed us a tiny bottle of fertiliser made from banana shoots to aid the growth of the chilli."We make sure that when you visit us, you'll have something that you can bring back. We also hope that our visitors will love to grow organic plants the way we do," he said. The tour was funand informative. The two-hour trip is ideal for the family or for an office outing, especially for those looking to get away from the polluted air in Bangkok.

Source: https://www.bangkokpost.com. Thailand. 31 JAN 2019

## How is Thailand Bringing Technology to the Table

In Asia, a country like Thailand has taken the initiative to implement agricultural biotechnology in its industry. The country has long been considered as the kitchen of the world since it's agricultural exports play a crucial role in its GDP.



Technology is revamping how the world works. We are leaving in a tech-savvy world where technological advancements are making their way to every industry.

You have players like Betway coming up. Yes, <u>Betway Thailand</u> is more popular than ever, with more players trying out Betway than before.

The agricultural sector too has never been left behind when it comes to implementing innovations. Over the past couple of years, the world's population has been growing tremendously.

There are more mouths to feed, but the resources for food production are still limited. Most countries are looking for methods that they can use to ensure food security. First world countries are adopting new agricultural practices that are tech-savvy to deal with the food crisis.

In Asia, a country like Thailand has taken the initiative to implement agricultural biotechnology in its industry. The country has long been considered as the <u>kitchen of the world</u> since it's agricultural exports play a crucial role in its GDP.

For instance, it is the world's leading exporter of rice. It also exports other outstanding foodstuffs such as cassava, pineapples, and canned tuna.

However, with only 34% of Thailand being arable land and the water resources declining to 36% of food security has become an issue in the country.

But the country has become one of the first countries in South East Asia to adopt agricultural biotechnology.



Thailand taking the mantle

The country believes that biotechnology will help shape the agricultural sector. Agriculture is an essential element to the economy of the country. In 2017 the Thailand Board of Investment received 215 applications which are innovations related to the agriculture. The projects which are estimated to be worth \$1.9 billion are expected to help various companies which are in the AgriTech and FoodTech. What is the importance of agricultural biotechnology? According to the National Policy Biotechnology Frameworks in Thailand, there are several goals which they aim to accomplish using this new technology. Some of the goals include;

Improve crops yields and livestock production. Improve the agricultural yields by using organic fertilizers to increase microorganisms in the soil. Utilizing waste products from the farm to other industries such as biochemical substances, sweeteners, and bioenergy biopolymers. Are their companies which are implementing agricultural biotechnology?

Agricultural companies in Thailand are already utilizing tech-savvy innovations to improve the quantity and quality of farm products. Some have also gone a step further to collaborate with farmers into using this form of technology. For instance, a company such as Eden Agritech has come up with a spray that enables fruits to last longer when on sale. Once the fruit has been sprayed, it can last 15 more days than other fruits. It has become the go-to choice for fruit farmers in the country. As the country is moving towards Thai 4.0, the government is working with both public and private sectors to grow the agricultural industry. For instance, the government includes incentives such as income tax exceptions and visa work permits. All of these is geared towards increasing the economy of the country and ensuring food security.

Source: https://www.thailand-business-news.com July 29, 2019. Thailand

## Organic Gardening Teaches Chiang Rai Hill Tribe Kids a Healthier Future



**CHIANG RAI** – Waking up early for school is difficult for most kids but not this 13-year-old Akha girl. Mallika Sae-lee is a 6th-grade student at Ban Ruam Jai School in Mae Chan district of Chiang Rai. She arrives early every day to take care of a vegetable patch before her school's morning recitation of the national anthem.

Mallika is among dozens of pupils who grow a bounty of organic vegetables using local resources. Every morning she waters the garden, puts compost onto the soil and checks if the vegetables are ready. She will then pick them for the school kitchen to be cooked under a free school meals project.

"Long beans are ready when their pods become green and feel full while morning glory grows easily from seeds and can be harvested every 20-25 days," Mallika says proudly. Saying she and her classmates help grow a variety of organic vegetables such as long beans, morning glory, eggplants, cabbages, tomatoes and basil. "I feel so happy when I eat food from the veggies I grew. There are no pesticides. I have healthy lunches every day," she says. "I like eating green curry with chicken and eggplant and spicy Thai basil chicken because they are tasty and good for me."

#### The school also teaches students how to cook the things they grow



Mallika says proudly she now also grows organic vegetables at home, and encourages her parents to eat homegrown produce. She believes most of the fruit and vegetables in the market are contaminated by pesticides or other harmful chemicals.

As well as growing vegetables, Jakkapong Palamae, an experienced school gardening teacher, says the school is teaching students in the 7th-9th grade, or Matthayomsuksa 1-3, to raise chickens for eggs and make compost for the vegetable garden.

The school also teaches students how to cook the things they grow. "Our garden is a source of pride for the children and community," Mr Jakkapong stressed.

The school's three farming programs are part of the "Dek Doi Kin Dee" project to promote healthy eating habits among students. Those living in upstream communities in Chiang Rai's Mae Chan, Mae Fa Luang, Mae Suai and Wiang Kaen districts.

The four-year project, initiated by the Hill Area and Community Development Foundation (HACDF), a non-profit organization set up to help develop the living quality of hill tribe people. It was funded by the Thai Health Promotion Foundation (ThaiHealth) and divided into four year-long phases.





Thirty-three schools, networks of farmers, and public health volunteers in the four districts in Chiang Rai gathered late last month at the foundation on Doi Mae Salong mountains in Mae Fa Luang district. To learn from each other and share their experience in taking part.

The general consensus was that the project has been successful and had stimulated interest among children and their communities in the importance of nutritious food, good health and daily exercise. They were also keen to call on ThaiHealth to continue supporting the project or begin new similar ones.

Charoen Apichai, Ban Ruam Jai School headmaster, said the project has benefited his students and helped to educate them about health risks and dangers with processed and packaged foods that have little nutritional benefit. Most students took the message on board and made an effort to change their eating habits, according to Mr Charoen.

As part of its commitment to the project, the school banned vendors from selling processed and packaged foods, as well as soft drinks with high sugar content, on its grounds. The school also sought cooperation from parents to make sure students were maintaining healthy eating habits at home, the school principal added.

Mr Charoen says the vegetable garden has been a great success and is helping to equip students with the skills to grow healthy produce organically and in an environmentally, pesticide-free, way. He also notes that the kids have learned that fresh organic fare tastes far nicer than processed alternatives.

#### Chiang Rai School Raise awareness about eating for good health



#### CHAINGRAI FARMING & AGRICULTURE

Organic Gardening Teaches Chiang Rai Hill Tribe Kids a Healthier Future

The school also teaches students how to cook the things they grow. "Our garden is a source of pride for the children and community,"

**CHIANG RAI** – Waking up early for school is difficult for most kids but not this 13-year-old Akha girl. Mallika Sae-lee is a 6th-grade student at Ban Ruam Jai School in Mae Chan district of Chiang Rai.

She arrives early every day to take care of a vegetable patch before her school's morning recitation of the national anthem.

Mallika is among dozens of pupils who grow a bounty of organic vegetables using local resources. Every morning she waters the garden, puts compost onto the soil and checks if the vegetables are ready.

She will then pick them for the school kitchen to be cooked under a free school meals project.

"Long beans are ready when their pods become green and feel full while morning glory grows easily from seeds and can be harvested every 20-25 days," Mallika says proudly.

Saying she and her classmates help grow a variety of organic vegetables such as long beans, morning glory, eggplants, cabbages, tomatoes and basil.



"I feel so happy when I eat food from the veggies I grew. There are no pesticides. I have healthy lunches every day," she says. "I like eating green curry with chicken and eggplant and spicy Thai basil chicken because they are tasty and good for me."

#### The school also teaches students how to cook the things they grow

Mallika says proudly she now also grows organic vegetables at home, and encourages her parents to eat homegrown produce. She believes most of the fruit and vegetables in the market are contaminated by pesticides or other harmful chemicals.

As well as growing vegetables, Jakkapong Palamae, an experienced school gardening teacher, says the school is teaching students in the 7th-9th grade, or Matthayomsuksa 1-3, to raise chickens for eggs and make compost for the vegetable garden.

The school also teaches students how to cook the things they grow. "Our garden is a source of pride for the children and community," Mr Jakkapong stressed.

The school's three farming programs are part of the "Dek Doi Kin Dee" project to promote healthy eating habits among students. Those living in upstream communities in Chiang Rai's Mae Chan, Mae Fa Luang, Mae Suai and Wiang Kaen districts.

The four-year project, initiated by the Hill Area and Community Development Foundation (HACDF), a non-profit organization set up to help develop the living quality of hill tribe people. It was funded by the Thai Health Promotion Foundation (ThaiHealth) and divided into four year-long phases.



**Learning from Each Other and Sharing Experiences** 



Thirty-three schools, networks of farmers, and public health volunteers in the four districts in <u>Chiang Rai</u> gathered late last month at the foundation on Doi Mae Salong mountains in Mae Fa Luang district. To learn from each other and share their experience in taking part.

The general consensus was that the project has been successful and had stimulated interest among children and their communities in the importance of nutritious food, good health and daily exercise. They were also keen to call on ThaiHealth to continue supporting the project or begin new similar ones.

Charoen Apichai, Ban Ruam Jai School headmaster, said the project has benefited his students and helped to educate them about health risks and dangers with processed and packaged foods that have little nutritional benefit. Most students took the message on board and made an effort to change their eating habits, according to Mr Charoen.

As part of its commitment to the project, the school banned vendors from selling processed and packaged foods, as well as soft drinks with high sugar content, on its grounds. The school also sought cooperation from parents to make sure students were maintaining healthy eating habits at home, the school principal added.

Mr Charoen says the vegetable garden has been a great success and is helping to equip students with the skills to grow healthy produce organically and in an environmentally, pesticide-free, way. He also notes that the kids have learned that fresh organic fare tastes far nicer than processed alternatives.

#### Chiang Rai School Raise awareness about eating for good health



To give the scheme an even broader educational context, a group of 12 students with a talent for public speaking for selected to help host a 15 -minute radio show which is played on speakers around the school before lunch every day. Two students a day take turns reading useful information about health and diet..

Monthita Sharemore, 12, one of the radio broadcasters, told the <u>Bangkok Post</u> live on air that the fundamental aim of the program is to encourage the students to skip eating processed snacks and other unhealthy foods.

"I tell them to eat local food with organic fresh vegetables and do daily exercise," said Monthita. Wuthipong Sawanchote, President of the Lahu Association of Thailand, praised the HACDF for carrying out the project in an effort to raise awareness about eating for good health for the hill tribe people.

"Our society has massive health problems in the form of obesity, lack of exercise and diabetes. So our kids must learn how to change their eating habits and exercise behaviour," Mr Wuthipong says.

However, he says that it's not just the schools' duty to promote good habits, and more parents and community leaders should also involve themselves with the work of the foundation and volunteer to take part in school activities related to healthy living.

At the recent gathering of project volunteers, Juthamas Rajchaprasit, the Dek Doi Kin Dee director, thanked everyone for the success they have brought to the project. She said that it has not only provided schoolchildren with a better awareness of diet and nutrition. It has also helped to forge strong bonds between the next generation of young leaders, senior citizens and community residents. She concluded by stating that it was her wish that even in the absence of an official project, they would continue to work together to make life better for everyone.

Source: https://www.chiangraitimes.com. Thailand. September 2, 2019

### The long learning curve: Bringing school up to date

A non-profit organisation is pushing a full STEM ahead approach to education in an effort to bring school into the 21st century By Chaiyot Yongcharoenchai



Recipe for success: Students at the Starfish Country Home School in Chiang Mai participate in a STEAM class. PHOTOS: SUPPLIED

Education is one of the key ways to help today's children develop into tomorrow's success stories. But for millions of Thai youth, access to the best tools to take on the future falls out of reach. With so many classroom hours, Thai students should be among the best performing students of Southeast Asia. However, they have been repeatedly found to lag behind their Asian peers in education rankings.

Is the national education system passing the test? One can still see examples of Thai kids snagging top prizes and scholarships in international academic competitions.



However, these students often have the advantage of having parents wealthy enough to send them to reputable schools.

Not everyone can afford access to quality education.

Fixing this problem is the focus of one Thai non-profit organisation, which offers alternative courses to supplement the standard curriculum. Its goal is to bring education up to date, and prepare kids for work in the 21st century.

The way the organisation seeks to achieve this is through STEAM, an applied and interdisciplinary curriculum, integrating science, technology, engineering, arts and mathematics.

#### **GONE GRASSROOTS**

The Starfish Country Home School Foundation was founded on March 9, 2005, with the mission to bring high-quality education to underprivileged and marginalised youth. It was formed by American scholar Dr Richard P Haugland, and certified as a non-profit organisation on Dec 17, 2007, in the Mae Tang district of Chiang Mai.

The Starfish Country Home School Foundation is fully funded by an

American endowment with the Starfish Education Foundation USA.

The foundation aims to support poor, abandoned, disabled and other disadvantaged youth to be raised, sheltered and educated.

To do so, it has set up a school, learning centres and various education projects, alongside a nursery, foster home, welfare protection centre, and development and rehabilitation centres.

A decade after the foundation was formed, the head of the organisation, Dr Nanthaporn Seributra, decided to take her work to the next level. As an active researcher and educator, Dr Nanthaporn has long sought to bring Thai education up to global standards.

Dr Nanthaporn is a constructivism advocate. She believes that knowledge and skills can only be self-constructed as children are encouraged to inquire, explore, question, debate, collaborate, create and reflect. She has been practising STEAM-integrated project-based learning in her school and early childhood centres for more than 10 years.

When she came across the STEAM curriculum, focusing on project-based learning, she thought it was just the prescription that the Thai system was in need of.

"Thai students are taught to memorise everything, and the children end up learning nothing from these lessons," Dr Nanthaporn said. "Thai children usually walk out with unemployable knowledge. They do well at school, but they can't use that knowledge in real life.

"[Since implementing STEAM] we have seen significant development in the children. They are eager to learn and explore new things. They collaborate with their peers and teachers. Their communication skills have increased as they work together as a group."

Besides the programme itself, accessibility is key to Dr Nanthaporn's mission.

"STEAM is not something new to Thailand," she said. "There are schools that offer the programme but they are mostly only available in expensive private schools. The majority of students in Thailand are not rich and, as an educator, I feel like it's only fair that we offer everybody equal access to education.

"That's why we launched STEAM to grassroots students in rural area with no costs. I just want to offer this opportunity to everyone, especially those who can't afford to."



#### LEARNING BY DOING

STEAM is a multi-disciplinary pedagogy approach focused on applying knowledge to solve real-life problems. After running a school in Chiang Mai, the Starfish Country Home School, for over 10 years, alongside two other schools in the North and a few others in Central Thailand, Dr Nanthaporn has seen the vision of the organisation's founder, Dr Haugland, morph into something much bigger than the original.

She decided to create a programme called the Starfish Maker Project to implement at her schools. The programme offers STEAM-based activities to develop students' skills and knowledge without limiting them to studying only one discipline at a time.

Students let their interests shape their learning experience, and the curriculum is based on connections to daily life. In the process of creating their curriculum, students have to connect and integrate several disciplines to solve any given problems. This approach is seen a "learning-by-doing" approach.

"We have run the schools under the foundation for more than 10 years and we can teach up to 500 students," Dr Nanthaporn explained. "But since launching the Starfish Maker Project one year ago, we have passed on the knowledge to more than 2,000 educators who can now pass on that knowledge to a lot more students. I feel like this is a step in the right direction."

The Starfish Maker Project aims to provide children across Thailand the opportunity to develop knowledge that will help them navigate the 21st century by working with several actors.

"We support and work together with educators, institutions and communities," said Dr Nanthaporn. "We opened Starfish Maker for the public to provide professional training opportunities, to create online community learning, and to provide a professional development programme to make for an engaging, inclusive and interactive learning experience."

#### FACING THE FUTURE

The Starfish Maker Project, or "Starfish Labz", seeks to develop capacity for both educators and students through project-based learning, alongside the Starfish Innovation and Makerspace.

These involve academic services, an online learning community, professional development for educators and consultation services for children, schools, communities and families, and comes free of charge.

Estimates say that 65% of primary school students will work in professions that do not exist today.

By 2020, the top 10 must-have skills for the labour force are expected to be complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision making, service orientation, negotiation, and cognitive flexibility.

These skills are noticeably absent in the standard Thai curriculum.

The focus on skills over abstract knowledge draws attention to the importance of actions, personalisation and solution acquisition in preparing for the job market.

The activities in the Starfish Maker project encourage students to solve problems using the STEAM Design Process, which also draws upon the arts in its approach.

The 21st century has brought rapid changes to people's lifestyles and technology, demanding educators adapt their approach to pedagogy accordingly.

The skills widely recognised as the most important for the upcoming workforce include creativity and innovation, critical thinking and problem solving, collaboration teamwork and leadership, and communications information and media literacy skills.

These skills can be developed through the Starfish Maker activities.

#### BEYOND THE CLASSROOM

The Starfish Maker Project is designed to help educators learn about the STEAM approach, which they can then apply to their schools. The programme created the Makerspace, which is a place where creators, innovators and makers can meet.

Makerspace provides opportunities for children to discover their interests and potential. It sparks curiosity and encourages children to take ownership of their learning.

Throughout the learning process, the children develop today's crucial skills such as problemsolving, design thinking, communication, collaboration, innovation and social-emotional skills.

With these resources, students are given the opportunity to plan, design and share ideas, with the goal of turning these ideas into innovative works.

Makerspace helps promote innovation by offering a learning environment in which materials and equipment are readily on hand, while professionals and experts are put in contact with creators to solve their problems and help them achieve their goals.

This includes studying a problem, then creatively brainstorming one's way to the best solution.

This accompanies the organisation's overall goal to make children into thinkers, problem-solvers and rational actors.

"We have transformed our organisation over the past couple of years," said Dr Nanthaporn. "We Maker Coaches helped the existing teachers at our schools in Chiang Mai learn about STEAM and turned them into trainers. We sent them around to many different schools in remote areas of Chiang Mai by the recommendation of Educational Service Area offices.

"We don't just offer know-how to educators -- we give them an online-based community to develop themselves constantly, even after the Starfish Labz training we provide for them is complete. I want the Starfish Maker to be the first online community that has a focus on developing education to educators."

Since the Starfish Maker is run under the non-profit foundation, the professional development provided to educators is free of charge. They are working hard to try to pass this approach on to as many schools as possible.

Since the Starfish Maker project was launched, more than 6,300 students and 400 teachers have learned and worked with the organisation.

"The schools we work with don't even have to be tech savvy," Dr Nanthaporn explained. "There's no requirement for any fancy gadgets. A simple tool like scissors can be used to develop motor skills as well as many other simple tools. With the right approach, any school can adopt our approach and implement these lessons that they are already teaching.

"We are collaborating with the Ministry of Education to get our programme into practice in several schools across Thailand. I want children to be able to learn important skills that will be useful for them in the future.

"I also want Thai educators to have a safe community to discuss and learn new things from what the approach they use. It's not only the students who can benefit from this -- the educators can also learn in every step of child development after using our STEAM approach," she added.



https://www.bangkokpost.com . 13 MAY 2018. tHAILAND



### 'Barefoot' engineer helps farmers ease hardship.



Farmer engineer Nguyễn Hồng Chương in his workshop. — Photo nongnghiep.vn

LÂM ĐỒNG – Nguyễn Hồng Chương, a 43-year-old farmer in Lạc Lâm Commune of Đơn Dương District in Lâm Đồng Province has succeeded in manufacturing 15 kinds of agricultural machineries which have been sold domestically and internationally.

Recently, Chương, who is only educated to secondary level, received the title 'Farmer Scientist' in a ceremony orginased by the Việt Nam Farmers' Association to honour those who made outstanding contributions to new rural development and sustainable poverty reduction, reported Vietnam News Agency.

Born in a farmer family in Gia Lộc District of the northern province of Hải Hưng (now Hải Dương), Chương and his family migrated to Lâm Đồng in the 1980s.

He had to follow his parents and work in the fields and saw how difficult life was for farmers, as well as how much unproductive manual labour went on.

"As a son of farmers, every day I saw my parents and my neighbours spraying insecticides with rudimental tools which were very heavy and time consuming to use," he said.

The image obsessed him, so he decided he had to do something to make his parents and other farmers' work easier.

"I studied and manufactured a high efficiency pesticide sprayer in 2004", said Churong.

"Each hour this sprayer can spray 8,000 to 10,000sq.m of vegetable fields, equal to four to six labourers, and helps reduce direct contact with toxic chemicals", he added.

After the first success, three years later, Chương spent all his all his savings of some VNĐ7 million (US\$300) to buy steel to manufacture a vacuum seed sowing machine. The product was very useful for farmers of high-tech nursery gardens.

With his passion and confidence from the initial successes, Churong decided to lend money from his friends to open his own Centre of Research and Appliance of Agricultural Machineries.

He continued inventing, creating an automatic soil excavation machine, a vegetable water squeezing machine and solutions for high-tech and clean vegetable planting, among others. Churong's products have been bought by Malaysian, Chinese and Cambodian businesses.By 2012, Churong had gone from an uneducated man, or a 'barefoot engineer' as other farmers call him, to selling his own inventions abroad.

Last year, he improved his automatic sowing machines to higher sowing capacity to meet the needs of international clients. The machine can sow 27,000 seeds per hour, without seed scattering. One machine has the productivity of 18 to 20 labourers. Using the machine helps reducing labour costs, so it would take four months for users to recoup their investment, said Churong.

Trần Đình Vân, a vegetable grower in Liên Nghĩa Towship of Đức Trọng District in Lâm Đồng Province said "My family has used the sowing machine for five years for 3ha of vegetables."

"This was truly useful agricultural machinery with reasonable price, helping to reduce costs of labour and production," Vân said.

According to vice president of Lâm Đồng Farmers' Association Nguyễn Thị Tường Vi, Chương's products are useful for farmers but his lack of education has stopped him from getting copyright protection.

"For a poor locality as Đơn Dương District, Chương – a farmer – had made efforts by himself to manufacture products serving agricultural production. It was really precious thing", said Phạm S, Vice Chairman of Lâm Đồng People's Committee. – VNS

Source: Viet nam news. Vietnam. 22-12-18

### A new development paradigm



©IFAD/Minzayar Oo/Panos

Vietnam - Sustainable Rural Development for the Poor Project in Ha Tinh and Quang Binh Provinces (SRDP) - November 2017

A conference taking place this week in Buenos Aires, Argentina reminds us that developing countries today look as much to each other for help along their path to development as they do to the developed world. In fact, dichotomies like "developed/developing" are rapidly blurring-- like so much else in our rapidly changing world. In the face of climate change, rising inequality, competition for resources, migration and other challenges, the "Global South," with its powerful emerging economies, is finding that it has a vast source of everything from finance to technology and expertise: itself.

The Second High-level United Nations Conference on South-South Cooperation, or BAPA +40, marks four decades since the first conference of the Global South was held in Buenos Aires, which saw 138 countries adopt the Buenos Aires Plan of Action for Promoting and Implementing Technical Cooperation among Developing Countries. This Plan of Action contained 38 concrete recommendations to enhanced cooperation among countries of the Global South, also called South-South and Triangular Cooperation (SSTC).

It's a very different world today from the one of the first BAPA. In 1978, the seven largest economies (the G7 group) contributed 62 per cent to the world's GDP, then at US\$8.5 trillion; in 2017, global GDP had grown to US\$80.7 trillion, while the share of the G7 had fallen to 45 per cent (World Bank, 2019).

BAPA+40 will attract more than 1,500 representatives of United Nations Member States, UN and other international organizations, multilateral development banks, civil society, and

representatives of the private sector. The three Rome-based UN Food agencies, or RBAs (FAO, WFP and IFAD) will be represented by IFAD Vice President Cornelia Richter. The RBAs have a particular interest in this conference because of their complementary mandates which help to fight hunger, strengthen smallholder agriculture and transform the lives of poor rural people all over the world.

In 2017 the RBAs adopted a "Joint Roadmap on SSTC towards BAPA+40" which includes the co-implementation of projects on the ground, and they are identifying countries in which targeted joint SSTC activities will be developed. The RBAs are also identifying private-sector entities that can provide technical assistance and knowledge to smallholder farmers in agricultural value chains, as well as exploring opportunities for private-sector financing. SSTC is well adapted to agricultural development because of comparable environmental, agricultural and economic conditions in many countries of the Global South. Agricultural production in the Global South is increasingly threatened by climate change, resource depletion, urbanization, and food loss and waste. Rural-urban migration is growing in all developing nations, leaving fewer rural producers under pressure to meet an increasing demand for food and related agricultural products.

Countries will need to enhance rural productivity, promote climate change adaptation, harness the power of new technologies and support the establishment of farmers' organizations and networks. These measures demand increased investment, the spread of new technology, knowledge exchange and policy support—all areas in which SSTC can play a role. Today, SSTC has emerged as a major development modality that operates in parallel with North-South cooperation. It also encompasses a much broader notion of development cooperation than the idea of "aid." It includes trade, policies, knowledge sharing, investment, and private sector collaboration. But SSTC is also about solidarity, reciprocity, trust and working to build self-reliance.

As the development community works towards the achievement of the 2030 Agenda and the Sustainable Development Goals (SDGs), SSTC is a means to strengthen multilateral approaches that have come under threat in recent years. In collaboration with member states, a number of agencies in the United Nations system are already expanding and diversifying their support for SSTC. For example, IFAD has launched an SSTC Facility with the Government of China, and established three sub-Regional SSTC and Knowledge Centres to ramp up its effort in SSTC.

The active participation of FAO, IFAD and WFP in BAPA +40 to promote food and nutrition security marks another significant milestone on the path to achieving sustainable rural development and the ultimate goal of eliminating hunger and poverty with the help of SSTC.

Source: https://www.ifad.org/en/web/latest/story/asset/41078038

# An economic success story: How Vietnam became Southeast Asia's top performer

#### SOCIAL BUZZ



A flower vendor wheels her bicycle though traffic in Hanoi's Old Quarter, Vietnam. Vietnam's economy grew at a healthy rate in the last two years and is expected to stay ahead of its regional peers in 2017. Source: AP/Tran Van Minh

VIETNAM's remarkable economic progress looks set to continue in the coming years, despite a regional slowdown which has affected other states in Southeast Asia.

Its increasingly diversified and resilient economy has grown at a healthy rate – of <u>above 6</u> <u>percent</u> – in each of the last two years, and looks well-placed to maintain its position as Southeast Asia's top performer in 2017.

Whilst <u>Vietnam's economy grew at 6.21 percent last year</u>, other ASEAN countries such as Indonesia, Thailand, Malaysia and Singapore endured slower growth rates as a result of a slowdown in global trade and declining growth in China. Not only was Vietnam the top-performer in the region, but it ranked <u>second behind India</u> – the only country which achieved growth of over 7 percent in 2016 – in the list of fastest-growing economies worldwide.

Vietnam's astounding economic performance is reflected in the end-of-year statistics for the country, compiled by leading economic forecaster, <u>Bloomberg</u>.

It was reported that disbursed Foreign Direct Investment (FDI) increased by 9 percent to a record US\$15.8 billion in 2016, whilst the manufacturing sector experienced a 13.61 percent

boost since the end of 2015. Total imports for the year increased by 4.6 percent whilst exports rose by 8.6 percent, contributing to a trade surplus of US\$2.68 billion.



Labourers work at a garment factory in Hung Yen province, outside Hanoi Jan 5, 2017. Source: Reuters/Kham

The reasons for Vietnam's strong performance in recent years – especially in comparison to other ASEAN countries – are multiple.

Firstly, Vietnam's trade resilience can be attributed to the <u>diversification of its economy</u> – in terms of both the range of goods produced, and its export destinations. Vietnam now exports to a wider range of markets than ever before, and has rapidly expanded exports in the manufacturing and electronics sectors, mitigating its once-heavy reliance on exporting agricultural products.

Secondly, Vietnam has become an increasingly attractive investment destination due to its rapidly expanding population – which now stands at more than <u>91 million</u> – and its demographics, with a youthful population amounting to a large and capable workforce, consisting of both skilled and unskilled labour. Vietnam's geography also remains an important factor, with its long coastline allowing free-flowing seaborne trade with countries in the surrounding region and beyond.

Thirdly, labour and operating costs remain relatively low in Vietnam – especially in comparison to its giant northern neighbour, China. This has resulted in a surge in manufacturing, as Vietnam has come to be seen as an attractive target and lucrative opportunity for multinational companies and foreign investors. Many firms have adopted a 'China-plus-one' strategy, in an attempt to mitigate risks and diversify their operations throughout East Asia – and more often than not, international companies are choosing to make Vietnam the 'one'.

Whilst Vietnam's growth has accelerated in recent years, it is far from a new phenomenon: Vietnam's economy has been growing at a fast rate for decades, since the opening-up of the country following the 'Doi Moi' reforms of the mid-1980s. The market-led reforms were designed to lift the country out of poverty after its landscape had been decimated, infrastructure shattered and economy ravaged by the long and brutal American war, which ended in April 1975.

In the immediate post-war years, the country struggled to get back on its feet, suffering from high inflation and low production levels after much of the working-age population had been killed. Vietnam's recovery was also hampered by its diplomatic isolation – largely imposed by the U.S. – which pressured multilateral bodies such as the International Monetary Fund and World Bank to deny Vietnam the aid needed to rebuild its damaged society. A 20-year U.S. trade embargo also held back Vietnam's potential to trade internationally.

The tide finally began to turn in 1986, when the Vietnamese Communist Party (VCP) adopted the idea of a market economy whilst holding on to its long-standing socialist principles. Foreign investment was encouraged and private businesses were welcomed, ushering in a new period of entrepreneurship and economic liberalisation.

Vietnam quickly became the world's second-largest rice exporter, and by 1995 its recovery was in full-flow: diplomatic relations with the U.S. were restored, and multilateral donors began to provide significant amounts of development aid. Poverty levels have since reduced dramatically whilst service provision has spread across the country, granting an increasing proportion of Vietnamese citizens access to education and healthcare.

In more recent times Vietnam has joined the World Trade Organization (WTO), and has developed an increasingly modern electricity network – which now covers 90 percent of the country. The tourism industry has also taken-off and is continuing to expand, providing new opportunities and sources of income for millions of Vietnamese.

These developments signal Vietnam's successful transition from a low- to middle-income country, and provide evidence of its new status as a fully-fledged member of the integrated global economy – which Vietnam has taken full advantage of in recent years.



A street vendor cycles past the Central Bank of Vietnam in Hanoi, Vietnam. Source: AP/Na Son Nguyen

At present, Vietnam's economic miracle shows no sign of slowing down: over the last 40 years, it has undergone a remarkable transformation from a war-ravaged and poverty-stricken developing state, to become the most diversified and resilient economy in Southeast Asia.

In the current context, political developments have also enhanced Vietnam's economic prospects, after the Communist Party recently decided on its leaders for the next five years – confirming Nguyen Phu Trong as General Secretary for a second term.

This renewed political stability makes the country a particularly attractive destination for future foreign investment, leaving Vietnam in prime position to retain its place as Southeast Asia's top performer in 2017, and beyond.

Source: https://asiancorrespondent.com/2017/01/economic-success-story-vietnam-became-southeast-asias-top-performer/

# Embracing flexible aid and technology in emergencies — the case for cash transfers in Vietnam



"Seeing a field of dead crops from drought is every farmer's nightmare. Sadly, it was my reality," said Ms. Dinh Thi Cam, when drought severely damaged her chili crop in Gia Lai. Her family received vouchers for farming materials, essential in restoring farming activities. "We are now fully equipped with seeds and materials for the next agricultural season without looking for additional loans," she said.

Vietnam suffered its worst drought in 90 years in 2015 and 2016. The El Niño-induced dry spell left one million people in need of food assistance and 1.75 million lost all or part of their livelihoods.

Embracing new tools and processes to tailor recovery to local needs, ECHO and FAO, in partnership with Action Aid Vietnam, used a cash transfer and agricultural voucher scheme to target the most vulnerable families, including female-headed households, the elderly, people with disabilities, chronically ill and landless people. The project's success hinged on flexibility. Each family received a voucher divided into three coupons to ensure maximum flexibility on the date and amount of the purchase, or a cash transfer divided into two transfers to cover the two lean seasons during the project's implementation.

The distribution of cash and agricultural vouchers allowed drought-impacted families to restart their livelihoods. As a result, they did not have to resort to negative coping mechanisms, such as contracting loans, selling assets or reducing the number and portions of their meals each day.

The project supported 5 469 households across three provinces, where 3 077 households received an unconditional cash transfer during two lean seasons (November 2016 and March 2017), and 2 392 households received agricultural input vouchers. The voucher beneficiaries also received post-harvest equipment to protect crops in the event of floods and/ or pest infestation. Women's unions organized trainings of trainers for female union staff on gender and climate change, community-based disaster management, and how to effectively communicate to bring about behavioural change.

The project used the Kobo Toolbox system, which allows anyone in a given project to collect field data using mobile devices, such as cell phones and tablets, and to instantly validate and rapidly analyse the data gathered. For this project, open-ended questionnaires were tailored to identify the impacts of the intervention on the livelihoods and food security of households, and to better understand how they experienced the distribution process, including waiting times at distribution sites and difficulty in reaching distribution points. FAO's implementing partners on the field – Non Governmental Organizations (NGOs), local authorities and extension workers – carried out monitoring activities throughout the project and received training on data collection with the Kobo Toolbox.

Source: http://www.fao.org/publications/card/en/c/CA1472EN

### Farmer finds success with agricultural programme



Vũ Thị Hậu feeds her fish with bread. — Photo danviet.vn

HCM CITY — Using out-of-date bread and sandwiches from supermarkets in HCM City, farmer Vũ Thị Hậu has found a clean source of food for her fish, and earns profits of more than VNĐ500 million (US\$21,700) per year.

She said that the bread and sandwiches she finds are only passed their sell-by date by a few days, so they were still fine to use as fish food.

"I never choose mouldy ones because the fish can develop diseases," said Hậu.

Hậu, 53, was born in the northern province of Bắc Ninh. She moved to the south to set up her business nearly 20 years ago.

At that time Hậu, her husband, as well as her children, stopped in Đồng Nai Province. She used her savings to buy a small piece of land and build a house.

Hậu and her husband worked so that their children could go to school. She believed that an education was the only way to escape poverty.

After several years in Đồng Nai Province, the couple decided to move to HCM City to improve the quality of life for their children.

With VNĐ80 million (\$3,400) from selling her house in Đồng Nai Province, she rented a house and some land in District 9 to do agricultural work.

"The money left after renting the house and land was enough for me to buy a pig. Although I knew a lot of difficulties were waiting for us, my husband and I are always optimistic because we think that if we are hard-working, luck will follow," said Hậu.

Thanks to their hard work, her pig quickly gave birth to more. By 2010, Hậu had more than one hundred pigs. She bought nearly 1.2ha of land.

In 2011, Hậu borrowed capital with preferential interest as part of a programme launched by the HCM City People's Committee, and increased her herd of pigs to 700.

Several years later, the municipal authorities decided to move breeding farms out of residential areas, so Hậu reduced the herd and turned to fish.

Now she has 300 pigs, while she produces 40 tonnes of fish per year.

The fish are sold at VNĐ14,000 (\$0.6) per kilo. On the average, the fish pond brings Hậu more than VNĐ500 million (US\$21,700) per year.

"Raising pigs is easier than raising fish, but with the city's development, I want to find another way to protect the environment," said Hậu.

Her two children graduated from university and have stable jobs. Her youngest son set up a private real estate firm.

Vũ Thanh Tuấn, deputy director of the Vietnam Bank for Agriculture and Rural Development (Agribank), said that Hậu was a good example of effectively using capital from the HCM City People's Committee's programme to support agricultural development.

"With Hậu's example, we can see that if a farmer is hard-working, the city's capital will develop well while the farmers can enrich themselves sustainably," said Tuấn. — **VNS** 

# From farm to market: improving the food value chain through women empowerment in Guinea



©IFAD/Barbara Gravelli

Saran Condé is a 30-year-old smallholder farmer in Guinea's Faranah region. She has improved her farming skills and increased her productivity since joining, early this year, an IFAD supported community garden in Salya village, where she found much better conditions to grow crops and the opportunity to learn from agricultural experts.

Thanks to IFAD's support, Saran now counts on adequate fertilization, organized row planting, stronger fences to divert animal intrusions and increased access to water provided by a solar-powered system. She grows peppers, aubergines and lettuces, making higher incomes to improve her family's livelihoods. There is also a very good work-life balance in her new routine. While her three older children attend school, the two-year-old spends the day in the garden with other farmers' children where they can play freely.

Working in Salya has been a great source of motivation for Saran, who became widow five months ago. She has received support from her colleagues from producers' association, Kankelen. It has 450 members, of which 350 are women, who work in three gardens. "There is a lot of solidarity here," she says, acknowledging how much women farmers have in common and help each other.

Established in 2018, the Salya garden is among 20 gardens benefitting from the IFAD-supported <u>PNAAFA-LGF</u> programme. Provision of equipment, technologies and training are helping to transform the lives of smallholder farmers with impact on the food value chain across Guinea. Farmers enjoy the opportunity to work, learn, share and socialize together.

The gardens count on farmer field schools (FFS) through which technical counselors give regular training sessions on agricultural techniques, business skills and group association.

#### Transformation towards zero waste

Nobody likes food losses and waste, especially farmers when vegetables go rotten and they lose revenue. To avoid that and make crops more profitable for smallholders, PNAAFA-LGF has engaged beneficiaries in food transformation activities, delivering training sessions on canning to 204 farmers – of which 173 are women – contributing to preserve vegetables for longer.

Mamah Samoura is among 45 farmers of the Kankelen association who have attended such training in Faranah. Thanks to the sessions, she has developed new skills and now she not only grows vegetables, but also processes 25 types of crops produced by herself and her partners, such as tomatoes, peppers, onions and eggplants. "Vegetables that before were rotten in few days or weeks can now last for even six months inside glass jars like this", says Mamah while pointing to a tomato sauce jar.

Food transformation can drastically reduce the waste of fresh ingredients as well as diversifies food use and consumption over year-round instead of just seasonally. It likewise strengthens smallholders' finances given the added value and time-efficiency of the process. For instance, roughly two kilos of tomatoes, that would otherwise be wasted, can be preserved as tomato sauce and sold for three times the price.

Now they have the capacity for canning, beneficiaries in Faranah are sharing this knowledge with others. University students of agriculture are undergoing internships to observe and practice food transformation techniques with Mamah and her colleagues.

"Here I am having the opportunity to acquire valuable skills for my future", says Françoise Toffa Mansaré, 22 year-old who is among ten interns working with the Kankelen association. A fast-learner, she sees this internship as a constructive way to complement her undergraduate studies at the Higher Institute of Agronomy and Veterinary of Faranah. While combining classroom education with practical field exercises, Françoise looks forward to new experiences "anywhere in the world" after graduating next year.

#### Training for trading

One can be very good in farming or canning but unskilled to market products, and this barrier can make a considerable difference for a household income as well as for consumers who might not be aware of what goods are available to buy. To fill this gap IFAD has provided marketing guidance to farmer associations across Guinea, fostering sustainable fair trade of agricultural products.

In Faranah, food processors of the Kankelen association have scaled up their sales and are being recognized by the local community, who regularly visits the storehouse where vegetables are canned. Consumers can just go in and purchase what they want, dealing directly with the artisans at the atelier.

As the word of mouth spreads fast, the business has expanded, and their cans and jars are also available in local fairs in the region. "We are proud to see our products out in the market", says Umu Camara, president of the Kankelen association, herself an avid producer and merchandiser.

IFAD's investments in Guinea also benefit the retailing sector, for which young rural entrepreneurs have received financial support to establish their own businesses. Aissatou Lamarana Bah is a 25 year-old undergraduate student who opened a small shop in Faranah that sells seeds and fertilizers thanks to an IFAD loan. She regularly pays it back and within seven months will have paid it off.

As well as studying, Aissatou has received training on trade and merchandising. Her business is doing quite well and she started to make a profit in the first three months, becoming known for pioneering the only shop of its kind in Upper Guinea. "I have customers coming from many places in Faranah and elsewhere, even from Sierra Leone", says this visionary female entrepreneur, who plans to expand her activities and diversify the products available in the shelves.

Source: IFAD, https://www.ifad.org/en/web/latest/story/asset/41204877, 27 June 2019

# Improving nutrition and food security through better farming techniques



Viet Nam has achieved a significant improvement in maternal and child nutrition during the last three decades, but reducing the extent of malnutrition remains a public health priority. There are significant differences in food consumption habits and patterns between peoples living in the midlands and mountainous areas, urban and rural environments, and among different ethnic groups.

Among children under five years of age, the rates for underweight and stunting are 20.2 percent and 35.8 percent respectively. It has been reported that an estimated 27 percent of mothers with children less than five suffer from chronic energy deficiency. Viet Nam has one of the lowest levels of breastfeeding in Southeast Asia. Only 57 percent of babies are breastfed within the first hour of birth despite 80 percent of deliveries occurring in health facilities. Only 17 percent of babies are breastfed exclusively during the first six months of life. In addition, only 41 percent of infant children aged six to 11 months are given appropriate complementary food.

Nutrition is the key to the long-term goal of achieving health and food security throughout the country. But, achieving this goal will require special attention to the supply, adequacy and access by all segments of the population to safe and healthy foods that contribute to better diet and nutrition.

To assist Viet Nam with its food security goals, FAO is working on capacity building and policy reform. Through its regular funding of projects, such as fresh vegetables, rice seed production, International food safety standards are gradually being introduced. An example is

the project Capacity building for improvement of seed source quality and rice production for food security in the highland and mountainous regions in Viet Nam (TCP/VIE/3101).

This project was implemented from November 2007 until October 2009 in six mountainous provinces, including Phu Tho, Ha Giang, Yen Bai, Bac Kan, Quang Nam and Gia Lai. Its development objective was to help Viet Nam realize its national strategy for social equity, peace and sustainable development by building the capacity for highland and mountainous communities to produce good quality rice seeds and practice sustainable rice cultivation.

Upon completion, the project demonstrated remarkable and sustainable achievements. Organising and managing the implementation of a multi-institutional project, the Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI) worked in close partnership with the target provinces' departments of agriculture and rural development, local extension workers and farmers and other relevant institutions to achieve all of the project's planned outputs. Valuable unplanned results were also produced. The project's achievements and contributions to food security for mountainous regions in food, crop seeds and the environment, including resilience to natural hazards, are impressive.

Under the project, many local, traditional rice varieties of specialty values were refined and their production was promoted. Newly developed and strengthened pure-line rice varieties were also tested and introduced for large-scale production. Together with appropriate rice cultivation technologies developed by the project, availability of these varieties greatly helped mountainous farming communities improve their livelihoods and living conditions. The project also helped them protect their land, water and forest resources in the difficult conditions of farming on the sloped and narrow terrain.

The project produced major achievements in capacity building and raising awareness among local communities and authorities about sustainable development, especially regarding self-sufficiency in the supply of rice seeds and the need to adapt to climate change. It also succeeded in establishing community systems of rice seed production and supply that will further promote the development of partnerships and collaboration between researchers, farmers and decision-makers towards sustainable rural development in the mountainous regions of Viet Nam.

Source:http://www.fao.org/vietnam/programmes-and-projects/success-stories/nutrition-and-food-security/en/

# VietNam: Disaster preparedness education will be part of the national school curriculum

Exposed by its 3,260-km coastline to 19 types of disasters such as typhoons, floods, coastal erosion and landslides, Viet Nam is one of the most hazard-prone countries in the East-Asia and Pacific region.

To strengthen schools' multi-hazards preparedness and scale up safety drills, the Ministry of Agriculture and Rural Development (MARD) and the Ministry of Education and Training (MOET) launched a five-year disaster prevention program for 2018-2023.

"The program will bring disaster education to all our schools. It will help students, teachers and communities to work together and make informed decisions on how to respond to natural disasters. It will minimize possible damages and, thereby, contribute to the Viet Nam's economic development," said Mr. Nguyen Xuan Cuong, Minister of Agriculture and Rural Development.

At the launching ceremony, the Minister of Education and Training Mr. Phung Xuan Nha expressed his appreciation for the climate change adaptation and disaster prevention initiative, which targets high school students.

Over the next five years the MOET will develop study plans and teaching materials suitable for different regions and age groups based on the best research available. According to minister Nha, the multi-hazards preparedness education will be provided as part of both regular curriculum and after school activities. This will give teachers and students access to the knowledge and skills they need to prepare for climate change and hazards, explained Nha.

UNDP support to Viet Nam's disaster preparedness

The UN Development Programme (UNDP) highly welcomed this initiative. Through the strong partnership Viet Nam Disaster Management Authority (VNDMA) and support from the Government of Japan, UNDP recently organized disaster awareness activities and emergency evacuation drills under the campaign "Schools of Son Tinh".

As a result, nearly 5,500 students in areas vulnerable for floods and storm surges were trained to save their lives in times of weather-related emergencies.

Ninh Thuan province was one of the provinces participating in the campaign.

"Through children, these skills spread to their families and communities. These skills are necessary to cope with climate change, which is increasingly affecting our country," said Nguyen Anh Linh, Deputy Director of Ninh Thuan Department of Education and Training. "We consider UNDP's awareness raising campaign as a starting point for a

much wider movement. Emergency drills are highly educational and necessary that will benefit the whole society," Linh continued.

Inspired by the UNDP's Tsunami Project, Ninh Thuan Province in Viet Nam brings safety drills to all schools

"It is very important to raise awareness about natural disasters among the young generation. In 2011, there was a strong earthquake in Japan that prompted a tsunami. It took lives of many young people, because they didn't know what to do to stay safe," said Akihiko Nakano, from the Embassy of Japan in Viet Nam.

"Among most vulnerable groups to natural disasters are elderly, disabled and young people. Young people can take care of themselves when they have necessary knowledge and skills as early as possible," said Caitlin Wiesen, UNDP Country Director in Viet Nam.

Raising awareness on climate change together with UNDP - Caitlin Wiesen's talk with the television

"Schools of Son Tinh" is part of a regional project that brings tsunami awareness and evacuation drills to 90 vulnerable schools in 18 tsunami-prone countries.

The project contributes to the achievement of the Sendai Framework's targets to reduce lives lost, numbers of people affected, and economic damage from natural and human-induced hazards. It also aims to achieve UNDP's goal to help vulnerable regions to adapt to climate change by integrating disaster risk measures into national strategies.

In Viet Nam, UNDP has been partnering with the Government of Viet Nam for 40 years and has supported the national formulation and implementation of the global development agenda, such as the Sendai Framework for disaster risk reduction, the Paris climate Agreement and its commitments to the Sustainable Development Goals.

UNDP has also been a key ally in the development of a policy framework including the first law on natural disaster in 2013. It also promoted institutional reforms like the establishment of the first Viet Nam Disaster Management Authority (VNDMA), in 2017, and has been strongly involved in building its capacity.

The success of UNDP's disaster prevention projects in Viet Nam have laid foundation for UNDP to provide further support to the Government to achieve its targets and goals for disaster prevention and climate change adoption.

# Protecting villages from flash floods and improving livelihoods in the Haor basin wetlands



©IFAD/GMB Akash

The Haor region is a wetland ecosystem in north-eastern Bangladesh, which is located in a tectonic depression. During the monsoon period, the Haor gets between 3,000 and 4,000 mm of rainfall, together with the flow of monsoon river from the Meghalaya and Barak basins. The Haor gets completely flooded with between four and eight metres of water for around six months of the year. At these times, the area looks like an inland sea. Densely inhabited villages are built on artificially constructed mounds of earth, and during the monsoon season they turn into islands, with boats being the primary mode of transport.

Flash floods are a common occurrence in the Haor, and during the height of the flood period the Haor is wracked with waves as high as three metres. Large-scale deforestation over the last 40 years has stripped away the natural barriers that have historically mitigated wave action. A significant part of villagers' income and time is spent fortifying the earthen mounds and repairing their damaged homes.

Extreme weather events in 2001, 2010 and 2017 resulted in between 80 per cent and 90 per cent of crops being lost, and this situation is expected to get worse as a shift towards premonsoon rainfall is projected to coincide with the paddy rice pre-harvest period. This will severely affect food production in the area, which makes up over 16.5 per cent of national rice production, and is fundamental to the food security of smallholders living in Haor. Their already precarious existence is thus being further exacerbated by climate change impacts. The lack of a pre-monsoon flash flood early warning system means, at best, a three-day advance warning through family networks makes it to downstream inhabitants. This is simply not enough time to harvest rice and transport it to safe ground.

Forecasting potential flooding

One of the key actions of the Adaptation for Smallholder Agriculture Programme (ASAP) financed component (CALIP) is to address the lack of an effective flash flood forecasting system to allow farmers to assess risk more accurately. A preliminary model has been developed by the Institute of Water and Flood Management and Institute of Water Modelling takes into account feedback on the different needs of women and men.

Villagers and market management committees are also being organized so that they can act on weather and flash flood forecasts, and special platforms are being built to store rice during flash floods. As well as this early warning system, different engineering models are being tested to protect villages against wave action. Reforestation will be carried out at the landscape level to recreate natural wave barriers and generate carbon sequestration benefits. Tests are ongoing to identify vegetative species, such as vetiver, as alternative and natural slope stabilizers and crops for livelihoods, as 10 well as for carbon sequestration.



©IFAD/GMB Akash

Access to clean water is always problematic during the floods, and indeed access to potable water was identified by all target groups as a top priority when the project was designed. The project is therefore improving access to basic services such as domestic water and sanitation by investing in tube wells and latrines. To make the best use of the short dry season, the project is also helping to reexcavate irrigation canals that have become silted up. Fish ponds will be rehabilitated because extensive siltation of beels (water bodies) is reducing the potential of fish catch. These actions are being completed by a range of initiatives to diversify livelihoods and build capacities.

Source: Ifad, 10 September 2019, https://www.ifad.org/en/web/latest/story/asset/41295176

## Village fields turn organic

#### Bùi Hoài Nam



Tourists visit an organic garden in Thanh Đông Village in Hội An. The farm has become a favourite site for educational trips and tourists as well as a source of safe food for local residents. VNS Photo Chu Mạnh Trinh

A group of farmers in Thanh Đông Village, nestled in the busy suburbantourist destination of Hội An's Cẩm Thanh Commune, have transformed their land into a healthy organic garden and a favourite rendezvous for nature lovers by moving away from their prolonged use of pesticides and fertiliser.

It was one of the first villages in the suburbs of Hội An that completely stopped using chemical-based nutrients and protective substances, setting the stage for the development of a unique organic agricultural destination.

Now, the one-hectare garden in Thanh Đông Village supplies certifiedorganic vegetables for the residents of Hội An and is soon expected to provide herbs to businesses to produce organic essential oils.

Lê Nhượng, head of Thanh Đông organic co-operative, said the first 10 farmers voluntarily began using organic farming practices in 2014 before introducing their first product free from chemicals in 2016.

Nhượng said that before the switch the over-use of chemical fertilisers, pesticides and growth simulators had exhausted the natural nutrients in the soil, forcing farmers to continue using the artificial products to see results.

"It's like we were returning the old farming model our ancestors used in past centuries," Nhượng said. "The natural structure has slowly returned to the farm and we gradually replaced chemicals with environmentally friendly 'green fertiliser' to provide nutrition for vegetables."

"Elephant grass – a tufted perennial grass that can grow tall – was planted as a boundary for the farm to isolate the influence of pesticide, weed-killer and fertiliser from neighbouring farms," he said. "Meanwhile leaves, kitchen ash and cow dung are processed to use as compostto improve soil fertility."

He said natural farming practices have helped farmers improve their skills by forcing them to visit their crops every day.

Lê Thị Bôi, 68, visits the garden twice a day to wipe out grass and clear away insects – the practice that she did not do before.

"Previously, farming productivity was based mostly on chemical fertiliser and stimulants, and we rested for days after spraying weed-killer and pesticides. But now we go to the garden very often with assigned work each day," she said, adding that cultivation was only halted for two months during the rainy season each year.

"All households are working together on the farm," she said. "We recognised that fostering natural harmony and peaceful coexistencebetween insects, flowers and plants can bring us a bumper harvest."

The old farmer said flowers were grown on the farm to lure birds, bees, ants and beetles to protect plants from harmful insects. Meanwhile, spices – ginger, chilli and garlic – were used as a natural pesticide.

"It has been a big change for us," Bôi said. "We earn much more from safe and fresh products and the working environment is healthier since we no longer breath in poisonous air emitted from chemical fertiliser and pesticides."

Each member of Thanh Đông Co-operative now can earn around VNĐ60 million (US\$2,600) per year – 30 per cent higher than before – from the organic vegetable farm.

The farm has also become a destination for tourists looking to learn about farming or cooking, with 3,500 visitors last year.

Nhượng said visitors can explore the farm by paying the VNĐ30,000 (\$1.3) entrance fee and VNĐ150,000 (\$6.5) for a tranquil lunch.

#### Aspiring Stories from Rural Communities

#### **Brand building**

He said produce from the co-operative is labelled with the symbol of Hội An – a UNESCO world heritage site – and sold at shops in  $\tilde{\text{Da}}$  Nằng and Hội An as well as online.

The village was the first rural area near Hội An to ban plastic bags and promote the sorting or rubbish to aid in recycling.

The village of 1,000 residents has made plans to grow rice and vegetables on an expanded area of 20ha.

Vice chairman of the Hội An People's Committee Nguyễn Thế Hùng said Thanh Đông Village had been included in the 2016-20 master plan to boost organic farming, community-based ecological tourism and rural experience in the suburbs of Hội An.

"We assigned villages in the suburban communes of Cẩm Hà, Cẩm Kim, Cẩm Thanh and Cẩm Nam to form a complex of organic farming areas and provide eco-tourism services," Hùng said.

"The organic farms will supply safe food for local residents and tourists and will provide herbs as a material to produce essential oils in the city in the near future," he said.

Hùng said the organic farms in these communes have been designed as educational centres for college and school students.

He said developing these sites in the suburbs of Hội An also helped provide tourists with more options after they explored the UNESCO-recognised old quarter.

#### Chemical-free

Farmers in Cẩm Kim Village were next to follow suit, beginning to eliminate the use of chemical fertilisers last year.

Five households began a pilot project to cultivate a 3,500sq.m farm on the banks of the Thu Bồn River.

Head of the Cẩm Kim organic farm project, 54-year-old Phan Công Thiệu, said green fertilisers and herbal pesticides were used to replenish the soil's nutrients to make sustainable growing practices possible.

"We raised beds and mulch for crops by growing plants that enrich the nutrition of the soil over six months," Thiệu said. "The first crop was half damaged by harmful insects that moved from neighbouring farms, but the second crop was recovered by rotated planting."

"Insects that eat one vegetable cannot live on other plants," he explained. "Worms that destroy morning glory cannot eat the leaves of sweet potatoes."

"The cost of organic farming is often higher than using chemical fertilisers, but organic products earn double the income," he said. "We are trying a healthy, environmentally friendly farm practice with fresh air, free of toxicchemicals to be a source of safe food."

Many villagers in Cẩm Kim have been encouraged not to use chemical fertilisers, pesticides or preservatives in their gardens to grow safe food.

Hội An has recently opened a plant to produce natural essential oils at Thanh Hà Industrial Park in the city in an effort to boost the use of local materials from organic farms.

The plant, the largest of its kind in central Việt Nam, has a capacity of one million units of oil from local herbs for cosmetics.

The director of the plant, La Ngọc Anh, said organic farms in the suburbs of Hội An would join the production chain by supplying at least 30 tonnes of local materials including sweet basil, peppermint, citronella, agarwood, coriander, Chinese parsley and pepper for use in shampoo, shower gel, skin cream, soap and perfumes.

He said the development of the production chain and the Hội An brand would help farmers earn more from their chemical-free agriculture. VNS

## Wake up and smell the cinnamon



Packed to market: Female workers are seen packing cinnamon in the store. — Viet Nam News/ANN

CINNAMON might smell like Christmas to many in the West, but to some Vietnamese farmers, it smells like prosperity.

The spice has been long seen by farmers of Phong Du Thuong Commune in the northern province of Yen Bai as a path to escaping poverty. In recent years, demand for cinnamon has become greater than ever and has helped many households in the province's Van Yen District get a better life.

Bearing that in mind, the province has developed an organic cinnamon platform, focusing on building an agricultural sustainable chain from this valuable spice.

To see how cinnamon has helped develop Yen Bai's agriculture and enriched farmers, Viet Nam News travelled to the fourth factory of Visimex Vietnam Joint Stock Company, which was opened two years ago in Van Yen.

As a reputed supplier of finished spices and agricultural products in Vietnam and abroad, the company's key products are pepper, cashew nut, cinnamon and star anise.

Nguyen Thanh Lam, head of the company's quality supervision department, said the company always made every effort to provide clean and safe agricultural products to clients.

"Five years ago, our main markets were China, India and Bangladesh. Later, we realised European and American markets have big demands for cinnamon products, and they pay higher, so we decided to switch to business partners in this area. To meet the demands of EU partners, the product must be made under an organic process and be controlled and given certification by a third party.

"In 2018, we built an organic planting area in Van Yen District. To safeguard the area, we cooperated with Regional BioTrade Project officials to train local farmers not to use chemicals, apply hand-crafted cultivation, collect products with special-purpose vehicles and use bar codes to show their origins. The use of preservatives is forbidden in the company's producing process."

Heading to the packaging store, we saw seven female workers standing around a table stacked high with cinnamon, selecting the best ones to put into package.

Nguyen Thanh Mai, a worker, said all labourers must try their best packing their assigned quota of 10-kg boxes of cinnamon, with a maximum quantity of 15 boxes per day.

"After we finish picking up the best cinnamon and are done packaging it, a supervisor will check again if our work is qualified. If any pack of cinnamon is not good enough, the worker must do another one. The rules are strict here."

Nguyen Thanh Mai said each worker has a quota to finish each day.

After passing a zigzag pathway, we reached the birthplace of cinnamon in Van Yen. The vast fields and the seemingly boundless horizontal lines spread out before our eyes.

Stopping by the cinnamon field of Trieu Toan Phu in Phong Du Thuong Commune, we were stunned at how fast the farmers' lives had changed.

Leaning by the harvested cinnamon, Phu told reporters his living conditions were extremely tough in the past.

"Perhaps poverty would still stalk us if we didn't have the cinnamon, especially this organic stuff. Our lives have been changed thanks to it."

Pointing to the cinnamon forest in front of him, he joked that, "We tell each other if we run out of money, we can go up to the forest and 'harvest' the money from the trees to bring back home."

"For each cinnamon tree trunk I peel, I sell for VND300,000-500,000 (RM54-RM90), depending on the quality and quantity of the product," he continued.

His house has a total area of 9ha of cinnamon, which he harvests twice a year, once in March and again in August.

#### **Aspiring Stories from Rural Communities**

His family has joined the province's cinnamon planting group under the organic process, and won a sale contract with an entrepreneur for VND60,000 per kg, three times more than if it were sold to small traders. The previous season alone, his family sold cinnamon bark for a total income of VND180mil.

His organic cinnamon planting must also follow clean procedure, without chemical fertiliser, herbicide or any chemical substances.

Each day, he takes careful notes on each step of his working process to submit to officials of Regional BioTrade SECO and Extending Commercial Initiative to protect Biodiversity and Ethical Values in the Herbs Field in Vietnam (Biotrade EU) to ensure the products can be certified as quality. While visiting a household which has become the main supply of cinnamon in Lang Tram Village, with a total area of 10-ha cinnamon, we were guided by Nguyen Thi Phuong, the house owner, to hike up to her planting area.

"Huge trees are better. We bark the trunk first, then cut it down. Wood is sold for VND1.2 mil per cubic metre. The rest of the roots will grow sprouts. The newly planted trees can be harvested after five years," Phuong said.By harvesting the whole 10ha, her family collect 10 tonnes of fresh bark, equal to five tonnes of dried bark, and sell it for VND250mil. As the main supplier of Phong Du Thuong, Phong Du Ha and Xuan Tam communes, she takes charge of buying cinnamon from local farmers to sell to other companies to process and export.

This year alone, her agency has bought 600 tonnes of dried cinnamon bark, of which 200 tonnes was certified as organic ingredients. The commune currently has 200 local households signed up to the organic cinnamon project of BioTrade SECO and Biotrade EU. All products are purchased by Visimex JSC for European export. An official of BioTrade SECO Nguyen Dieu Chi told the project established an organic cinnamon planting chain at Phong Du Thuong Commune.

"With that in mind, we have been successful in building a chain between farmers and entrepreneurs, aiming to have a higher qualified product for EU export target. This platform guarantees forest, bio-diversity and natural resources development purposes, " she said. According to head of the commune's People's Committee Lo Van Manh, cinnamon has long been a precious tree, used by locals to treat many diseases. To meet growing demand, farmers have started to plant the tree, expanding the area to 2,000ha from 300ha, with the participation of 1,000 households, taking up 94% of the commune's population. "Since 2018, the local authority has co-ordinated with several businesses to encourage farmers to switch from natural cultivation to planting organic cinnamon for export. The tree not only helps us to eradicate poverty but also re-greens the land and protects the environment, "Manh said. — Viet Nam News/ANN

Source: https://www.thestar.com.my

# Young smallholder farmers overcoming climate challenges in VietNam



©IFAD/Susan Beccio

Climate change is one of the major dynamics of change affecting rural youth livelihoods. It is having significant effects on the countries in which the rural youth population is concentrated and on the sectors in which they will be looking for employment opportunities. The climate shocks underlying these effects are expected to become more frequent and intense unless measures are taken to incorporate climate change adaptation and mitigation into broad development policies and investments. At the same time, investments targeting rural youth need to incorporate a long-run climate lens approach for two simple reasons: today's youth will bear the brunt of a failure to adapt to climate change in the future; and the sustainability of any investment in the creation of youth opportunities will be determined by how the effects of climate change unfold (as well as myriad other economic and policy uncertainties).

Climate change is a youth issue because most countries in which the youth population accounts for a sizeable share of the total population also depend heavily on agriculture – a sector that is highly exposed to climate change. Although climate change affects everybody, certain sectors and parts of the population are more exposed to the livelihood risks that it poses. Investments in the agricultural sector in these countries need to ensure that adaptive technologies are developed and are accessible and that young people have the capacity to use these technologies as part of an inclusive and sustainable rural transformation process.

In My Bang commune, Nong Thi Thao, has been tea farming since she was 16 years old. After graduating from high school, she began focusing more on farming as a career option. Now at 25, Nong is a beneficiary of the Agriculture Farmers and Rural Areas Support Project in Viet Nam.

#### **Aspiring Stories from Rural Communities**

Farming has been in her family since her grandfather's generation. Reflecting on the past, she tells, "We also grew rice and maize in the old days." Farming has changed significantly in the Tuyen Quan Province since her grandfather first began farming. She explains how years in past years, "weather conditions were much more in harmony with the growing season. We did not worry about water, we just used the rainwater available, care for the soil and picked the tea."

Now, the effects of climate change has made tea farming more challenging for Nong. "Now we have to care about the water," she admits. "There is less rain, but when it rains, it rains heavily, with a lot of water coming down at the same time." Nong has risen to the occasion in mitigating the effects of climate changes on her tea farm. She tells proudly, "As a young person, we have to take action to find our more information on cultivating techniques, by going on the internet and taking classes to learn about new technologies."

Nong and other producers have found inventive solutions to many of the obstacles they face as smallholder farmers, and the agricultural project has supplemented them with additional knowledge and training on the commercialization side of their business. The project aided Nong in business venture, supplying her and other beneficaries with opportunities to participate in on-farm and off-farm economic activities, increasing their access to markets and linking them to private agribusiness investors. All of these efforts have helped the agricultural producers grow their businesses further.

Source: IFAD, 04 July 2019, https://www.ifad.org/en/web/latest/story/asset/41212410

## Youth shape agriculture sector of tomorrow



Visit to Bananas Planting Model in Bac Kan province

FAO is working to inspire the youth of Viet Nam to become innovators and partners in the sustainable development of the country's agriculture sector. As the future custodians of sustainable agriculture development and food security, youth have a key role to play in Viet Nam's future – especially with more than 40 per cent of the nation's population employed in the

To inspire young people to view the agriculture sector as a dynamic employment option, since September 2017, FAO Viet Nam launched the project "Building Coalition with Youth in Sustainable Development through Agriculture, Forestry and Fisheries" in partnership with the Ministry of Agriculture and Rural Development (MARD) and the Youth Union.

The centerpiece of the project, conducted in the northeastern province of Bac Kan where youth make up one-third of the population and 40 per cent of the predominantly agriculture-focussed labour force, was a contest for youth to showcase innovative, tech-savvy ideas to develop the agriculture sector in a sustainable manner.



Field visit to the winner's model

In response, 22 creative entries were received encompassing cultivation, husbandry and economic development models associated with environmental protection and adaptation to climate change. While all entries had merit, two winners received financial prizes and FAO technical support to help realize their winning ideas. Meanwhile, all contest participants benefited from participation in a FAO-run youth capacity building programme focused on developing practical skills for good practices in sustainable agriculture.

FAO also arranged several field visits for participants to learn from examples of sustainable crop production and animal husbandry models. These visits were also opportunities to exchange ideas and receive feedback from experts to further refine their entries for possible replication in the future.

"My major is not agriculture, but I have a passion for this sector. I realized that my hometown has big agricultural business potential. I have learned a lot to develop my knowledge further for starting a successful farming business," said Dinh Tuyet Nhung, 26 years old, who took one of the top two prizes with her entry "Organic animal husbandry and cultivation of fresh herbs", which focused on utilizing all arming products in a closed cycle.

This closed cycle starts with cinnamon earthworms used as protein a source in home-made pig and chicken feed and worm's vermi-compost, used as a nutrient-rich organic fertilizer for production of fresh herbs. A balanced, home-made mixture of cinnamon earthworms, fermented bananas, cassava and corn or rice bran fed to the pigs helps to dramatically reduce farming costs, while achieving sustainable production. Pig manure is used for a small biogas plant, supplying two households with gas for cooking and electricity.

This innovative project has created a stable income for her family in Ba Be district, supplies the local market with safe and high-quality farming products and has even contributed to creating jobs for several unemployed local workers, including youth. Through realizing the advantages of local agriculture, the high demand for safely-produced fruit and vegetables and urgent need for creating jobs for youth, the second prize winner Luong Dinh Hung encouraged his family to convert its agricultural land to follow a safe vegetable production model.

His "Linking youth in cooperatives for production of fresh off- seasonal vegetables" entry has since been realized with establishment of the Youth Safe Vegetable Cooperative in Na Chay village, Nhu Co commune. With FAO technical assistance and funding, the pilot 0.6 hectare crop of vegetables has been expanded to 1.2 ha and has 11 members focused on production of watermelon, tomatoes, cucumbers, bitter melon and red dragon fruit. "We knew youth have an important role in developing the local economy. I gathered several young people into a group to carry out the pilot project. After initial success, we decided to organize ourselves into an agricultural cooperative," said Hung.Le Thanh Cong, the project's coordinator from MARD, said the project had demonstrated that youth were a rich source of innovative ideas who must be engaged to help further shape Viet Nam's agriculture sector. "Youth participants have taken full responsibility for implementation of their respective projects. According to the initial evaluations, the two models implemented look very promising and this bodes well for the future," said Cong.

Source: http://www.fao.org/vietnam/programmes-and-projects/success-stories/youth-project/en/

### CIRDAP

Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) is a regional, intergovernmental and autonomous institution. It was established at the initiative of the countries of the Asia-Pacific region and the Food and Agriculture Organisation (FAO) of the United Nations with support from several other UN organisations and donor countries/agencies in 1979. CIRDAP has 15 member countries which are namely Afghanistan, Bangladesh (Host courtry), Fiji, India, Indonesia, Iran, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam.

The Main objectives of the CIRDAP are to: (i) assist national action, (ii) promote regional cooperation, (iii) act as a servicing institution for its member countries for promotion of integrated rural development through research, action research, training, communication and information dissemination.

Eradication of rural poverty in the Asia-Pacific Region has been the prime concern of CIRDAP. The programme priorities of CIRDAP are set under four areas of concern: (1) agrarian development (2) institutional/infrastructural development; (3) resource development including human resources and (4) employment. Within these areas of concern, the thematic areas identified are: Poverty Alleviation through participatory approaches with emphasis on social development sector (e.g. health, education and nutrition); Employment generation through microcredit support, infrastructure development and localresource mobilization; GO-NGO collaboration; Gender issues; Governance issues; and Environment concerns for Sustainable Rural Development.

Operating through contact ministries and link institutions in member countries, CIRDAP promotes technical cooperation among nations of the region. It plays a supplementary and reinforcing role in supporting and furthering the effectiveness of integrated rural development in Asia and the Pacific region.

CIRDAP

Centre on Integrated Rural Development for Asia and the Pacific Chameli House, 17 Topkhana Road G.P.O Box 2883, Dhaka-1000 Bangladesh.

Fax: 02-9562035, 9571880 Web: www.cirdap.org