

## Women lead in conserving the environment



Stone Quarry in operation

### LWSIT

Mathurapahari Upporpara village under Md. Bazaar block of Birbhum district, West Bengal is home to 41 poverty stricken tribal families. The vicinity of the village has been ripped apart by stone quarries destroying all natural vegetation in its trail exposing the area to environment degradation.

Almost all women in the village worked as daily labourers in either stone quarries or crusher units where they toiled hard for meagre wages and were vulnerable to sexual and other forms of harassment. Even though some villagers have arable land, they don't get adequate production due to the steady decline in rainfall and ground water. Hence, they are forced to either migrate or work as daily wage earners in the quarries.

The stone crusher units made many negative effects on the environment. The curse of crusher

units includes; destruction of vegetation, disruption of animal habitats, diversion and blockage of natural drainage systems, soil erosion, noise and dust pollution. Every second person in Mathurapahari Upporpara suffers from Respiratory Tract Infection (RTI) and women are vulnerable to Sexually Transmitted Infection (STI) too.

These women promised to bring a change by protecting their environment and stopped working in the quarry. With the advent of LWSIT, they were able to organise themselves into 3 Self Help Groups (SHG) through which sustainable development



Women's commitment towards Environment Protection

initiatives were undertaken. The groups have 41 members representing each family. With LWSIT support, the groups started apiary as an alternative livelihood. Till date they have made an impressive profit of Rs 76,909. Besides, as most of the wastelands in adjoining areas are being usurped by stone quarries, these empowered women were determined to save the land. With LWSIT support, they converted 1 acre of wasteland into a Mango orchard by planting 700 trees. This endeavour not only saved the land from being usurped, but also gave the area a green coverage.

As a result of alternative livelihood, out of 41 women, 26 have completely stopped working in the crusher units. Fifteen women who are still going to the quarries and crushers are empowered enough to demand equal wages as well as raise their voice against any form of harassment at the work place.

## Mushroom Cultivation: A Sustainable Climate Resilient Livelihood Model



### LWSIT

The rising of sea level have been posing a threat to many coastal villages along the Indian shoreline. Resinga, one of the coastal villages in Puri district, Odisha where LWSIT is operational is no exception and bearing the brunt of the impact of climate change. The village lies on the banks of river Dhanua which is a tributary of Kushabhadra and Bhargavi rivers. The village witnesses annual inundation of flood water of this tributary river which impacts the livelihood and livestock of entire community. Due to this, every year around 225 acres of arable land lie submerged in saline water,

gravely affecting their food security. This forces the men in the village to migrate to nearby towns in search of livelihood.

Even though all villagers are affected by the impact of climate change, it is the women who are affected the most. The women being the primary care-givers in the families, struggle to make ends meet and hold the family together.

It was during such times of turmoil that LWSIT initiated development work in Resinga village from 2005 onwards. To ensure that the community people have alternative livelihood options, LWSIT counselled the women

to undergo training on mushroom cultivation. The women convinced the men to undergo the training too. This resulted in 33 persons (20 women and 13 men) being trained on mushroom cultivation.

Over the years, 112 families out of 200 families in this village are engaged in mushroom cultivation which has strong market demand and culturally acceptable too. Resinga is now termed as 'Mushroom Cultivation Village' for local people. Although women were primarily active and engaged in this alternative livelihood, eventually it has graduated into being a family venture. Men

procure the raw materials from the nearby market and together with the women prepare the germinating bed for the cultivation.

Now each family collects 325 kg of mushroom from 500 germinating beds which yield a profit of Rs 36,000 (approx.) per month excluding the recurring cost.

In spite of the onslaught of nature still continuing in the village, their alternate livelihood is secured. The women are now able to ensure the family has a square meal, the children are able to continue with their education, and health needs of the family are met.



# Environment Friendly Cultivation

## LWF Laos

By Khat Malaythong

Poverty and insufficient food supply has become a fact of life for the people of LWF target villages in Viengphoukha district, Luang Namtha province. The consequences of climate change and uneven weather conditions have made their lives more difficult. Additionally, villagers have been suffering from malnutrition as a result from having low consumption food which is also make villagers especially the poorest more vulnerable. Since the majority occupation of villagers rely on upland rice farming, wild vegetable collecting and animal husbandry, frequent droughts and rains pose sustaining low production and generating inadequate incomes.

LWF introduces practicing environment friendly cultivation under the implementation of Rights Based Empowerment Project (RBEP). As a result from given awareness raising campaign on the effect of chemical used plantation and vocational training on natural fertilizer production and bio-extract making, villagers are more conscious about health matters and start varying their cultivation techniques.

Ms Khut Malaythong, a LWF Laos Community Empowerment Facilitator, said that “many of the villagers already have existing experience and skills in vegetable farming before project intervention but they just don’t know what is the good practices to sustainable plantation without negative effect to their lives”

Mr Perng, 55 years old, Khmu ethnic group, with his wife and 4 children, a worker in watermelon plantation farm of Chinese firm during February to April yearly who directly use chemical fertilizer apply into watermelon gardens told that “fortunately, I have not been immediately trou-



Photo: Soli Onyasak/LWF Team Leader

**Mr Perng Si with his vegetable garden**



Photo: Soli Onyasak/LWF Team Leader

**Mr Khamsavath with his vegetable garden**

bled by any health condition when I worked at the watermelon plantation but now I’m concerned since I’ve aware possibilities to manifest in the future”

Perng starts applying non-chemical fertilizers to his garden. He often makes bio extract and fertilizers to feed his morning glory, cabbage, garlic, long bean, onion, chilly, pumpkin, and corn. He finds them inexpensive and simple for production “The vegetables grow very well” Perng said. “I can earn more than 20.000 kip every week from selling vegetable to my

neighbors and I use remaining vegetables for our own consumption” Perng and his wife takes dried seeds to replant them as indigenous seeds since he and other villagers want to conserve traditional seeds to regenerate species.

Attach to promoting environment friendly practices and shift positive mindset of the villagers, LWF organizes campaigns on environment protection including climate change adaptation and mitigation, villagers were educated about the negative impacts of deforestation and slash and

burn practices to their communities throughout the campaigns.

Khut said that “Villagers are eager to learn more about the impact of climate change and what they must do if they might be facing with emergency and disaster”

Climate change remains as another challenge in the years to come. Since the increasing of disaster risks, LWF has been developing different tools and techniques to effective facilitate sustainable interventions to ensuring friendly environment livelihood and food security.



# LWF Myanmar Supporting for Energy Saving Stove in Delta



Workplace of Kyaw Kyaw Oo making energy saving stoves

## LWF Myanmar

Sel Ma village is located along the small river near the Pyapon – Bogalay highway road, Pyapon Township, Delta. The main occupations of the people from that village are farming and day laborer. LWF Myanmar arrived in that village in 2009 and started working with the community for the rehabilitation and village development processes after the Cyclone Nargis hit in 2008.

As the village is located in the Delta area, there is no forest around the village. Timely, firewood requirement for each family is turning as a challenge so that LWF Myanmar introduced energy saving stove making training under the project activities of Disaster Risk Reduction and Environmental Conservation for the hosted community in 2015. The participants were selected by the Community Based Disaster Risk Management (CBDRM) Sub-Committee. In the total of (32) participants (Male 14, Female 18) from (16) villages were benefited from the training. The training was designed for two days and effectively provided for both practical and technical. Benefits of the training were more visible

in the following years.

One of the training participants, Kyaw Kyaw Oo shared his experiences “In 2015, I attended the concrete stove making training which was organized by LWF Myanmar with the purposes of reducing the production of firewood and the environmental conservation processes. After the training, I shared my knowledge to the



Kyaw Kyaw Oo delivering energy saving stoves for the customers from nearby villages

young people in the village who were interested in it. And they also learned actively.”

Energy Saving Stove making training is not only helpful for energy reducing, but also encourage in improving job opportunities for the host communities. LWF Myanmar supported for one set of hand tools and molt for each participant after the training. On the other hand, it does not require large amount of capital fund for starting their owned business.

Kyaw Kyaw Oo got very well on the knowledge of the advantages of using energy saving stove and able to run as his own business within village by selling the stoves.

He continued, “As we could sell the concrete stoves for business, many young people did not need to migrate to other regions. I could distribute one stove for 5500 MMK (4.7 USD) and benefitted for 2500 MMK (2.1 USD). Now we could avoid from migration. So far, more than 200 stoves had been sold out. We all understand now that it can solve not only firewood requirement, but also conserve to the environmental and forestry. Personally, I would like to express special thanks to LWF Myanmar for supporting such valuable knowledge for us.”



# Bio-gas saves forests, reduces drudgery



## LWF Nepal

Ambika Bhattarai, 38, of Baniyani VDC-4 of Morang district, had been facing scarcity of cooking fuel as it was unaffordable for her to buy cooking gas. Her problem has been solved with construction of a bio-gas plant.

Like Ambika, many women of the village were facing cooking fuel problems as they had to go to far away forests to collect firewood. With firewood also becoming scarce, they began using cow dung, which is otherwise widely used as fertilizer, for cooking food. Sometimes they were forced to buy expensive cooking gas, adversely impacting their monthly expenditure.

On the surface, it may look like a minor issue, but it is a big problem for many poor and marginalized women like Ambika. Additionally, they were damaging their health due to smoke from the firewood. The situation has changed now as she is using bio-gas for cooking using the excreta of animals as raw material. Ambika says, "Now our home is smoke-free and clean;

we are getting fuel very easily without spending much time and money."

Social Network for Development and Justice (SNJD) with support from Lutheran World Federation (LWF) Nepal constructed bio-gas plants in five households of Baniyani VDC under the poverty reduction project. Ambika was one of the beneficiaries of the scheme. The organization provided NPR 15,000 (Euro 120) each to Ambika and her neighbors Krishna Maya Ropal, Tara Chaulagain, Rupa Bhandari, and Kamala Bhattarai.

They developed bio-gas plants with the help from a technician and now use it for cooking. "We don't need to cook in dried cow dung anymore. If the bio-gas plant had not been constructed, we would have been spending at least NPR 1,500 (Euro 12) per month," says Ambika while preparing tea on the bio-gas stove.

The installation of bio-gas plant has not only made it easy to wash dishes, but the entire house has become smoke-free now. The manure which is a byproduct of the plant is also better

compared to the cow dung. The greatest advantage of the plant is that it has contributed to saving forests as villagers were compelled to fell trees for firewood. This in turn is safeguarding the environment. "We are benefiting a lot from bio-gas plant knowingly and unknowingly," she adds.

Women of the village say the construction of bio-gas plants has reduced their drudgery, and saved time. Ambika's neighbor Kamala says, "While cooking food in firewood, we faced various health-related problems like asthma. But no more." They have even connected their toilet to the bio-gas tank, which increases the capacity of the plant.

Earlier, Kamala had no choice but to go to the forests to collect firewood. She had to do it clandestinely as collecting firewood from forests was prohibited. On top of that it used to take the whole morning to collect one bundle of firewood. "This bio-gas is boon for us as we can cook food very fast and our house is also clean," she explains, showing the bio-gas plant.



## Vermi-compost becomes popular among farmers



### LWF Nepal

“It seems like yesterday that people used to tease us saying ‘if we could not do anything by raising buffaloes, what can we do keeping earthworms?’, but these days the same people come to praise us for our work,” says Laxmi Shrestha of Bhardeu-1, Lalitpur. Other members of Laxmi’s group also faced such negative comments, but they did not pay heed to it. As a result, they have sold vermi-compost worth NPR 100,000 (Euro 800) in less than a year.

The Federation of Women Entrepreneurs Association Nepal (FWEAN) with support from Lutheran World Federation (LWF) Nepal trained some women of Bhardeu VDC in preparing vermin-compost in 2013 to increase productivity. Only a few women of the VDC had heard about the method of preparing vermin-compost. In the beginning, they did not feel comfortable handling earthworms. FWEAN and LWF Nepal connected them with earthworm sellers, showed them to build a shed

for keeping earthworms and possible areas for selling it. They borrowed money from Gupteshori Multipurpose Cooperative for the enterprise.

Eleven women of the village formed a ‘Vermi-compost Group’ and started commercial vermin-compost production. This was easy for them as they could use degradable waste and it required a small space. Vermicompost can be produced in a short span of time. So many people are attracted towards it.

Organic vegetable farmers here have been using vermin-compost. Member of the group Kamala Shrestha says, “The manure is very good as overuse of it does not have any negative effects on the crops or land.” It does not require raising animals and is more profitable. Another member of the group Ratna Shrestha says that the vermin-compost has been instrumental in reducing the use of chemical fertilizers and pesticides.

The earthworms eat leaves and foliage, bark of plants and perishable

garbage and produce manure. These waste products are collected in specific plastic bags and earthworms are put into them. After some time, the earthworms convert most of the waste into fertilizer. The fertilizer is then separated from the residual waste. The fertilizer is used for all food crops, vegetables and fruits as it increases the productivity of the soil.

The vermin-compost produced in Bhardeu is also being sold in different districts including Lalitpur, Dhading, Chitwan, Kavre, Kathmandu and Bhaktapur. They do not have any problems selling the fertilizer as people come from various areas to purchase it. People from nearby villages not only to buy the fertilizer, but also learn to make it. Many farmers of Bhardeu have been preparing vermin-compost as earthworms can be kept in bamboo baskets and even damaged/old vehicle tyres. “It is easy to produce and earn money from vermin-compost,” adds Sarswati Shrestha, another member of the group.

## About AZEECON

AZEECON is an informal, member-led regional network of field programs and Associate Programs of Lutheran World Federation/Dept of World Service active in promoting disaster risk reduction in seven countries.

AZEECON's primary role is primarily capacity-building - facilitating practical, peer-to-peer learning in the broad field of LRRD (Linking Relief, Rehabilitation & Development) responding to mem-

bers' needs and priorities. AZEECON offers a convenient and cost-effective platform for member organisations and staff to gain knowledge, exchange ideas and interact regionally.

Over the past 5 years, over 500 staff have participated in the range of capacity-building activities conducted in topics such as Trafficking, Food Security, Climate Change, HAP, SPHERE Standards, Youth, Advocacy, RBA etc.

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