



The best practices **RESOURCE BOOK**

Volume 1



MEGHALAYA LIVELIHOODS ACCESS TO MARKETS PROJECT
(M-LAMP)





Meghalaya Basin Management Agency

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The Meghalaya Basin Management Agency (MBMA) first set up Enterprise Facilitation Centres (EFC) at every Community & Rural Development (C&RD) Block of the State in 2012 to function as an interface with the citizens and provide information on livelihood opportunities and grassroots initiatives that most suit their needs. They facilitate access to finance and link farmers and entrepreneurs to sources of technical advice, input supply, and market outlets. Based on the feel of the demands of the registered partners, the EFCs get insight into the kind of support and intervention required in every area.

The EFCs have since been upscaled and their activities have been merged with PRIME services to cater to the growing list of demands and provide next-level support including business incubation, planning, market connect and financial linkage. In most blocks, they now also operate as the offices of the PRIME Rural Hubs. The first-ever PRIME Rural Hub, however, is the Centre in Songsak Block in East Garo Hills district – Spark Hills – which formally opened its doors on 30 November 2020.

Chief Minister Conrad K. Sangma stated during the inaugural function at Songsak that PRIME Rural Hubs are state-wide initiatives to help and handhold farmers, producer groups, and agri-entrepreneurs realize improved incomes through market and credit linkages, technical know-how, access to better quality seeds, and funding, among others. Sangma added that in the next few years, the Government targets the establishment of 50 PRIME Rural Hubs across the State

The Promotion and Incubation of Market-Driven Enterprises, or PRIME, was launched in 2020 and works to make entrepreneurship the preferred career choice for the people of Meghalaya, especially the youth. The innovative entrepreneurship development program of the State Planning Department helps entrepreneurs, farmers and producers gain access to credit, technology, mentoring support, and high leverage markets as part of a systematic and dynamic collaborative ecosystem comprising activities in line with the Meghalaya Start-up Policy. PRIME is implemented jointly by MBMA and the Meghalaya Institute of Entrepreneurship (MIE) with IIM Calcutta Innovation Park (IIMCIP) serving as a knowledge partner.

Songsak **PRIME** Hub

The Next Level of Support to Farmers

PRIME Hubs are physical spaces where existing and aspiring entrepreneurs can visit to get support on various aspects of setting up or running an enterprise. These include support in making business plans, getting information on funding support, facilitation of credit, and training sessions. They also function as incubation hubs with provisions for co-working spaces that the entrepreneurs can access and for activities related to value addition such as processing and packaging.

Since the launch of the PRIME initiative, the impact has been substantial in that entrepreneurship has soared to become the third career choice in Meghalaya.



Songsak PRIME Rural Hub - A collaboration of MBMA and Bakdil.

PRIME Rural Hub activities in Songsak are implemented together with Bakdil, a Tura-based, grassroots-level Non-Governmental Organisation (NGO) founded in 1987 whose aims correspond with the program's Farmers' Collectivization for Upscaling of Production and Marketing Systems (FOCUS) initiative - to create, effectuate, and deliver support services to the farmers and small producers and promote socio-economic development.

Songsak is also one of 18 project blocks of the IFAD-supported Meghalaya Livelihoods and Access to Markets Project (Megha-LAMP), an externally aided project of the State Government implemented by MBMA that aims to improve farmers' incomes and the quality of life in rural Meghalaya. Megha-LAMP is mobilizing the formation of producer groups including extension services delivery and value chain development. PRIME Rural Hub activities in Songsak are supported by the Inclusive Supply Chain and Enterprise Development (ISC&ED) component of Megha-LAMP through a cadre of Group Facilitators and Producer Group Development Facilitators mobilized by the project. The Centre has received Rs 1.7 crores funding from multiple sources. Megha-LAMP supported with an investment of Rs. 50 Lakhs for various development activities.

Bakdil's work is holistic in nature and focuses on various thematic areas of development including disaster management, promotion of community-based organizations such as Self-Help Groups, farmer producer organizations, and cooperative societies, promotion of health and well-being, facilitating education, livelihood promotion and development, women empowerment, skill development, and environmental sustainability. To support its multi-faceted initiatives, it partners with donors such as NABARD and Caritas India, and for implementing the FOCUS program in 9 Blocks across the Garo Hills region including Songsak Block, the partner/ donor is MBMA.

The FOCUS model follows a bottom-up approach that begins with the mobilization of farmers to work collectively and form member-owned and member-controlled Producer Groups (PG). This ensures that the farmers can maximize returns and are protected from any exploitative party. Outcomes will include farmers with strengthened capacities to take up higher-order activities in aggregation, processing, and marketing. Funding support is given to the PGs and selected Service Providers to start identified value chain-related activities. Each PG is provided with a sum that would be equal to the number of members * Rs. 5,000. The Service Providers are provided with an amount ranging from Rs. 50,000 to Rs. 75,000 depending on the kind of service they deliver.

Bakdil's FOCUS program also identifies nano entrepreneurs and service providers, facilitates bank and credit linkages for the collectives, and provides them with capacity-building training. Father Sunny Joseph Mavelil, the then Director of the NGO, stated that Spark Hills was selected as the premises for a PRIME Rural Hub because of its location, geographically ideal for enabling an easy connection between the farmers of the East and North Garo hills districts. It is located at the very accessible Samin Rongalgre village. Guwahati airport is about three and a half hours or 164 kms by road, while Tura town is about 85 kms away. The nearest market is the Songsak Bazaar, which is inside 5 kms.

The Tura Diosis under Bakdil invited four Sisters from the Society of Sisters of St. Ann, Luzern to work in farmer development initiatives including FOCUS for a period of three years. The Songsak team comprises a Centre Administrator to look after the day-to-day activities, a Production Manager to help with aggregation, processing, packaging, and value-addition, a Centre Manager, and a Business Planner.





Spark Hills has a micro-processing unit where ginger, black pepper, and turmeric purchased from the Producer Groups under FOCUS are processed, packaged, and marketed. The Centre also provides infrastructure training and capacity-building workshops for farmers and youth of the East Garo Hills district. In June 2021, the first-batch Masonry Training Program for 100 boys from Songsak was conducted. The course was a one-month provincial training followed by two months of practical training. Some of the trained boys are actively involved in the construction of a three-storeyed hospital building within the premises of the site. Various kinds of training programs like spice cultivation, business planning, bookkeeping training, off-season cultivation, vegetable cultivation, bamboo craft

training, preparation of herbal medicines, etc. have also been conducted in the past year.

Spark Hills also provides other services. There is a medical aid facility unit in place to tend to the needs of the local populace, while integrated farms that include poultry farms, dairy farms, and piggery farms have been set up. Some of the produce from these farms such as cow's milk is sold locally. Other services include regular training programs on how to generate higher incomes from various sources, conducted in collaboration with line departments.

Farmer Testimonials - The impact of FOCUS thus far

Mavelil stated that the list of issues that are associated with engagement in the agri-allied sector continues to escalate. Farmers from the region do not possess enough knowledge of market subtleties nor are they aware of the true worth of their products. The results are poor bargaining powers and diminished returns as farmers are forced to price their products according to their immediate financial needs. Matters are further compounded by the shortage of post-harvest management practices. Facilities such as storage, value-addition, and processing units are not always available. Since the PRIME Rural Hub launch, however, Bakdil has been able to put into action, initiatives to alleviate some of the most pressing challenges currently impairing this sector.

Mr. Winnerson M Sangma, one of twenty members of the Songkama Rongalgre Black Pepper PG can attest to the same as he spoke about the support from the FOCUS program. “As a PG member, we received a sum of Rs. 5000. I was able to buy logs and other materials to grow my black pepper seedlings. I have planted over 10,700 seedlings. This year, I have collected 2 quintals and 230 kgs are ready for marketing. Before FOCUS, the maximum amount I would get for a kg was Rs. 400. Now I am selling at Rs. 800 per kg.”

The sentiment is echoed by Tangsang Marak, a member of the Banana PG from Watennggre who said, “I have been growing banana plants for years now, but I have been unable to profit sufficiently. After receiving training and support from Bakdil,

each of the 11 members of our PG has planted 100 banana seeds. I now have about 50 banana plants, and I am looking forward to the next harvest season.”

Access to financial services and credit linkage have also been a thorn in many of these farmers’ sides. Most also find it difficult to understand the complicated processes in banks. Ms. Jangse M. Sangma from the Banana PG of Bolsong Chok is grateful for the assistance with bank linkage. “I did not have any stable work before joining the group, nor did I know about savings in banks. But the team and the other group members have been supportive in many ways. Thanks to FOCUS, I have been able to open an account to deposit my savings.”

Another takeaway from the Producer Group mobilization initiative has been the empowerment of women members. As part of a collective, these women are given equal footing in all decision-making matters concerning the development and activities of the group. Ms. Sajin Marak, member of the Ginger PG from Danal Apal Village stated, “apart from the support which we have received from Bakdil, we now also have a strong platform to voice our opinions, and this has brought us closer as a group and has reduced the traditional gender inequalities in these areas.”

As of 30 September 2022, a grand total of 531 Producer Groups have been formed in Songsak Block under both FOCUS and Megha-LAMP of which 256 have been provided total support funding of INR 1.7 Cr.

EMPOWERING COMMUNITIES TO DEVELOP AND IMPLEMENT SUSTAINABLE NRM

Climate change and anthropogenic activities have put Meghalaya's rich natural resources under severe stress and have become pressing issues given nearly 80% of the population is reliant on these resources for sustaining varied forms of agri-based livelihoods. Shifting weather patterns have impacted the State due to its geo-ecological fragility, landscape, and socio-economic profile which, in turn, have affected agricultural productivity, biodiversity, water security, and livelihood assets. Environmental contamination that includes unscientific and primitive coal mining methods has contributed to the deterioration and the pollution of the ecosystems. The conditions are only worsening with growing populations and rising food requirements. Further, a report by the North Eastern Space Application Centre (NESAC) in 2012 revealed that as many as 1900 villages in Meghalaya had fast-depleting landscapes which served as an ominous warning that if unchecked, the conditions could impact livelihoods irreversibly.

Needless to say, these issues are complex and multifold, but due cognizance has been taken by the government. Various departments and agencies have placed NRM as a priority activity given the urgency for interventions. Of these include the IFAD-supported Meghalaya Livelihoods and Access to Markets Project (Megha-LAMP) and the World Bank-funded Community-Led Landscape Management Project (CLLMP), externally aided projects of the Government of Meghalaya that not only help communities tackle these challenges holistically but empower them to take the lead in the implementation of long-term solutions.



Megha-LAMP has supported communities to develop, implement, and manage integrated NRM plans to improve farm productivity, reduce drudgery, and increase output. The approach is to help communities identify key natural resource challenges that are affecting livelihoods, food security, and overall quality of life and address them through community-led planning and implementation. Attention is on capacity development and natural resource planning, land and water resources, food crop development, and institutionalizing a system of convergence with departments such as Soil and Water Conservation, C&RD, Water Resources, PHE, Agriculture, and Environment and Forests, among others.



CLLMP aims to help communities manage and conserve natural resources through a holistic landscape approach and support accelerated economic growth and institutionalize a model for governments (both state and central) on community-led management of natural resources in the country. A unique feature of CLLMP is that it is entirely “Community-Driven” which means that planning and decisions to take up and implement interventions are spearheaded by the communities. The project only builds the capacities of the communities through training, exposure visits, and learning from best practices, innovations, and traditional knowledge. Under its Scale Program, CLLMP has partnered with the Soil and Water Conservation Department (SWCD) and is engaged in capacity-building exercises so that learnings can be applied in the field. About 13,000 Village Community Facilitators (VCFs) have been trained to support the communities with the identification

of issues and preparation of plans. Concerning the community-led NRM plans (CNRMP), the communities identify the leading causes of degradation in their areas along with the impacts that such degradation has on the local population. Each plan adopts a landscape approach containing all possible interventions necessary for addressing the challenges.

In 2021, CLLMP launched the Centre of Excellence on NRM and Sustainable Livelihoods to strengthen NRM activities in the State, enhance ecosystem services, promote NRM-based livelihoods, and build resilience to climate change. The CoE acts as the single platform to anchor activities that facilitate widespread practices of NRM and NRM-based livelihoods across the entire State. It helps build an enabling environment of improved coordination, resource allocation, policy decisions, and implementation of NRM. The Centre is preparing and implementing Forest Management Plans across all 400 villages and is piloting the Payments for Ecosystem Services (PES) initiative to incentivize communities that are proactively conserving forests in the state.

AMINDA SIMSANGGRE AND CHAMBAGRE–WEST GARO HILLS

Awardees at the 3rd National Water Awards

In a moment of pride for Meghalaya, Aminda Simsanggre and Chambagre in West Garo Hills District placed second and third respectively under the “Best Village Panchayat” category (North East Zone) at the 3rd National Water Awards. The formal awards distribution ceremony was held at Vigyan Bhawan, New Delhi on 29 March 2022 where both villages were spotlighted for spearheading community-led NRM best practices. The awards were earned on the strength of efficient service delivery by their VECs and the active participation and commitment of the communities to bring about inclusive rural development.

Aminda Simsanggre is under Gambegre C&RD Block and is home to 95 households. A village survey revealed that only 14 households had water connections before CLLMP’s arrival while the rest of the community- Aminda Kongsang Gittim, Aminda Ading, and Bazaar Gittim – had to fetch water from a different source which would take over one hour per trip. Chambagre in Selsella C&RD Block has 42 households employed under MGNREGA. Pre-Megha-LAMP intervention, the village was struggling with severe water shortages for domestic and irrigation uses. The lack of an irrigation system had impacted paddy cultivation while women and children would spend 2 hours getting to and returning from a clean water source.



In Aminda Simsanggre, interventions included the construction of water conservation structures such as cemented storage tanks and conservation dams at 4 different locations in the village, contour trenches at 2 locations to recharge the springshed area and make them perennial, a 12-bedded community nursery for transplantation of local tree species to the forest reserve areas, and the promotion of the Berkeley method of hot composting to increase production and quality. Interventions in Chambagre included the construction of two water tanks in the upper and lower regions with capacities of 14,000 and 17,000 liters and an irrigation canal that covers a 1-hectare land area. About 5000 forest trees have been planted on 10 hectares of community land to treat the catchment areas while a community nursery has also been set up.

The impact of these multiple, community-led interventions of both projects has been tremendous. In Aminda Simsanggre, the afforestation activities have benefitted all households. The springshed management interventions have directly benefitted 12 households, the soil and water conservation initiatives have benefitted 13 households, while the community nursery has benefitted all households where 40% of saplings have been sold. Further, the community has declared the forested area a community forest reserve area and has enacted rules and regulations for all the existing water bodies. In Chambagre, both tanks are benefiting all 42 households while 15 households have benefitted directly from the construction of the irrigation canal. The time taken to fetch water has been reduced to only 30 minutes per day. The initiative



to promote afforestation activities within and outside the village vicinity has resulted in the creation of livelihoods for the village's unemployed youth. NRM Committees have been constituted by both projects at the villages to ensure the participation of households, especially women, in the decision-making process for the planning and implementation of further activities.

At the event in New Delhi, the villages' representatives expressed pride and happiness at the recognition of their efforts to promote development adding that they hope to inspire others to follow suit.

MAWTEIBAH

EAST KHASI HILLS

Mawsynram Block in East Khasi Hills district, Meghalaya is widely known as the wettest region on earth, making it a popular tourist stop. However, the heavy rainfall patterns have also resulted in huge drawbacks including Mawteibah village making it on the list of NESAC's most critical landscapes. Apart from the deteriorating natural resources, the village also faced issues related to the loss of topsoil cover and water insecurity during the winter seasons. And given that many are reliant on these resources for sustaining varied forms of livelihoods, the need for sustainable interventions was immediate. But CLLMP has since been able to alleviate the challenges in a big way.



Following revisits, training, and capacity building in various domain areas, the community came together and formed the Village Natural Resource Management Committee (VNRMC), a committee that is given charge of overseeing the implementation of project activities at the village level. As per CLLMP mandates, 50% membership of the committee comprises women. The challenges were addressed thoroughly in their CNRMP. The village is also supported by a team of 3 VCFs who were selected from the communities and trained in different areas of social management, environment management, and monitoring and evaluation work.

Project interventions in Mawteibah include recharge pits, afforestation, contour bunding, and construction of water conservation structures like irrigation check dams, taken up by the communities to improve the groundwater and recharge aquifers. Springshed management activities were carried out to improve their springs and ensure water security. A ridge-to-valley approach was also adopted for watershed management. While implementing recharge pits, techniques like “A” frames were adopted by the communities to demarcate the contour line of the slope. These activities have yielded productive results in land and resource reclamation and significant improvements in the groundwater and vegetative cover. The community continues to chalk out further plans for enabling further development.



ANANGPARA SONGSAREK

SOUTH WEST GARO HILLS

A nangpara Songsarek in Zikzak Dev. Block, South West Garo Hills is rich in natural vegetation and boasts varieties of plantations. The community is very environmentally-sound and is known as a Green Agent in the region. From the start, the community was very responsive to the sensitization drives on NRM best practices and water management systems carried out by the teams from Megha-LAMP, Soil & Water Conservation, and DRDA. The community was able to put their understanding of the sensitization programs and workshops to good use.

Project interventions first started in 2019. The entire community came together for the implementation of 1600 trenches covering 16 hectares of land. During the rainy seasons, one trench pit can store up to 300 to 400 litres of water. Considerable differences in the natural flow of water to their ponds and ring wells were noticed as water would be secured during the dry seasons. A spring chamber was also constructed for both domestic and irrigation purposes. It benefits 15 households directly. Anangpara Songsarek has since become a model village for water conservation.



Four community members started a sapling nursery to utilize the abundance of natural vegetation in the area. The group is known as the Anangpara Nursery Group. They not only grow saplings to generate income but are also planting trees. Their saplings are also supplied to the neighbouring villages. A massive tree plantation drive under catchment area protection was carried out in 2021 where over 800 saplings covering 2.7 hectares of land were planted.

Other activities include 10 households taking up mushroom cultivation for livelihood following training in partnership with ATMA and cultivating medicinal and aromatic plants as part of the project's collaboration with the Megh Aroma Mission. Mushrooms have huge demand and are sold in markets at Rs. 600 per bucket, while over 10,000 lemon grass saplings have been planted in the wastelands near the village.



Mukhaialong Village

Treatment of AMD through OLC Technology

The East Jaintia Hills District is a major coal-producing area in the State of Meghalaya, reportedly¹ contributing to total exports of about 8 lakh tonnes to Bangladesh every year from a total reserve of 37.25 million tonnes² of coal. Thousands of households are dependent on this sector for livelihood. Mining methods, however, are primitive and unscientific, most notably, the illegal rat-hole mining practice being the preferred method despite the well-documented associated dangers.

The coal found in the region is a sub-bituminous type, which indicates that it has many impurities, one of which is the high concentration of sulphur content making it detrimental to the environment especially the water and air qualities. Further, the layer of the coal seam is thin and hence, mining methods practiced in other states cannot be replicated. The extent of coal mining has affected land use land cover where green vegetative landscapes have become highly degraded. Impacts have affected all sectors of life – depleting natural resources, pollution, health implications, agriculture in terms of poor soil health, traditional livelihoods, and social problems due to the rise in crime and the gap between the rich owners and the poor workers expanding. These also include the contamination of safe and clean water owing to Acid Mine Drainage (AMD).

The National Green Tribunal (NGT) had, in 2014, issued a notification to completely ban rat-hole coal mining in the wake of continued reports of accidental deaths of miners and severe degradation to the environment. But in 2021, the Government of Meghalaya announced that the Supreme Court of India had passed an order to lift the ban following the finalization of standard operating protocols that permitted only scientific coal mining activities. This helped restore the region and the State in terms of opportunities for livelihoods for the former and revenue generation for the latter, but the consequences remain adverse for the lands and ecosystems of Jaintia Hills.

Over the years, the previous and ruling governments including the State's specialized NRM-focused projects have been tasked with finding and implementing long-term balanced solutions to these challenges. One of these has proven effective in tackling AMD - an Action Research Project in Mukhaialong Village, East Jaintia Hills District to rejuvenate safe and uncontaminated water, initiated in 2017 via an Open Limestone Channel (OLC) intervention piloted by the Institute of Natural Resources, Meghalaya (INR) with funding support from the International Fund for Agricultural Development (IFAD).

¹<https://energy.economictimes.indiatimes.com/news/coal/meghalaya-allows-coal-mining-for-domestic-purpose-barred-export/75506865>

² District Survey Report for Minor Minerals in East Jaintia Hills District







Mukhaialong Village is located under the Khliehriat C&RD Block of the District. Coal mining has been the predominant source of livelihood for its residents but following the ban, many became cognizant of how the activity was negatively influencing the water bodies in the village and of future implications given a dearth of wide-scale post-mining treatment and land reclamation initiatives. The causes of water contamination include wastewater disposed from the mines which are laden with chemicals that significantly change the pH balance and are hazardous to aquatic life and harmful for domestic use.

The team from INR identified the Moolawar Steam that flows near an abandoned mine for piloting the AMD treatment research. The acid water discharged from the mines had polluted the stream appreciably. The OLC is intended to neutralize the acidic water from the coal mine seepage into a basic condition so that the water can be recycled and reused for domestic, agriculture, and other household purposes. The process involves passively treating the contaminated water using the abundantly available limestone. Installation was one-time and was made near the source of the outlet which is expected to last five to six years depending on the strength of the limestone concentration. It is cost-effective and monitoring post-installation is simple.

The stream is a bifurcate perennial spring measuring about 30 and 33 meters long. After levelling, the stream was filled with pieces of limestone (about 15–20 cm) to a height of about 30 cm. To prevent the downstream sliding of limestone pieces, gabion check dams were constructed from the starting point and along the stream which measure 4.5 and 9.0 meters. The stream water was channelized through the OLC. The gabion check dams ensure that the limestone inundated the contaminated stream water. Two PVC pipes were fitted at the bottom of the dams, and they connect to a water storage tank located at the centre of the village, constructed by the Megha-LAMP project and MGNREGA.

The intervention has yielded desired results and has gone a long way in alleviating some of the issues in Mukhaialong. A benefit is that other communities can easily replicate the entire process. Quantitative and qualitative data were recorded, and they showed the effectiveness in the physical and chemical properties of the water. It was found that the project had also improved the aquatic habitat in the treated section and restored aquatic flora and fauna. Four years on, the community reports that clean water is available to 170 out of the total 322 households in Mukhaialong, while the condition of the OLC remains good. The community visits the area regularly for monitoring.

Parts of this Story have been referred from:

“Contaminated Water and Ecorestoration of Stream in a Coal Mining Area of East Jaintia Hills, Meghalaya” by Wansah Pyrbot, Lamjingshaihun Shabong & Om Prakash Singh, Mine Water and the Environment, Journal of the International Mine Water Association



The **NONGLWAI**
Orchid Conservation Society
Preserving Indigenous Orchids

School Teacher Charles Tympuin is a resident of Nonglwai Village in West Khasi Hills District, and in the last 10 years, a large chunk of his after-work hours has been spent on preserving the wild indigenous orchids of Meghalaya through his own methods of management, propagation, and in situ cultivation with exceptional care given to the endangered varieties.

His love for orchids began inadvertently in 2009 during a stroll through a forest near his village with a friend. While on the walk, he noticed that the forest had several wild orchids blooming abundantly. He took a few to the market to look into the sort of prices that they could fetch. To his surprise, the response was remarkably good despite there being no sellers in the area. Thus began his extracurricular activity.

Charles stated that he would make anywhere between Rs 1000 to Rs 1500 per day selling these flowers. In no time, people started following him and were also going to the forests in search of indigenous orchids to sell at the markets. It even became a source of livelihood for some.

This activity continued for a couple of years until he realized that the flowers were slowly disappearing. Simply picking wild orchids to sell at the markets was unsustainable while the felling of trees for firewood, timber trade, and charcoal contributed to the waning number. Charles felt that he should shoulder the responsibility of helping his community members come up with innovative ways of preserving the activity.



He started growing orchids in his garden and encouraged his friends to take his cue. Soon after, they formed the Nonglwai Orchid Conservation Society under the self-fashioned “To Preserve the Beauty of Nature.” Charles assumed the role of the general secretary.

But as the demand grew, they found that supplying orchids from their polyhouse and using simple methods of propagation became unmanageable. They needed support in the form of training, capacity building, and exposure visits, and approached the Meghalaya Basin Management Agency’s (MBMA) district Basin Development Unit (BDU) in Nongstoin, West Khasi Hills for help. The BDU facilitated training on pest management and in situ cultivation, and an exposure visit to the ICAR-National Research Centre for Orchids (NRC) in Sikkim was arranged where they learned about plant breeding and identification and propagation of the flowering plants.

Today, the Society conserves over 16,000 plantlets of indigenous orchids. Experts from the Bio-Resources Development Centre (BRDC) in Shillong have identified over 70 species conserved by the Society. ICAR, Umiam, Botany Survey of India Shillong, and ICAR-NRC have identified 75, 100, and 200 varieties respectively. Charles felt that the knowledge must be shared with the next generation. His son is trained in different preservation and propagation

methods. Interestingly, the preservation activities have also improved the environment in the forests where they now grow plentifully. Charles had tied these plantlets on trees and they multiplied in large numbers.

But there are a few issues that have yet to be ironed out. One is finding the best and most lucrative market connect, a search that has proven to be challenging. Another involves the preservation of the rare and endangered varieties as their methods were not entirely effective. For the latter, Charles and his group are planning to collaborate with the Botany Department of the North-Eastern Hill University (NEHU) for propagating these species at the department’s tissue culture lab.

On 5 June 2015 during the celebrations of World Environment Day in Meghalaya, Nonglwai Orchid Conservation Society was felicitated for their service and contribution to the conservation of the State’s indigenous orchids. In 2017, through the assistance and support of ICAR-NRC, the group was felicitated by the Protection of Plant Varieties and Farmers’ Rights Authority (PPFRA). But despite these accolades and state-wide renown, the Society members remain resolute in their objective. They only seek to spread further awareness of the value and promising role of Meghalaya’s indigenous orchid species in livelihood generation and as a tradition.



TANGBANG N MARAK

Wood Carving in Jongkol

Wood carving is an occupation that demands immense levels of patience. One would need to be seated in a place and focus on each nook and corner of the fibre while slowly bringing to life a visualized image. These sittings can stretch for days depending on the intricacy of the design. In Jongkol, a quaint little village located under the Baghmara Tehsil of the South Garo Hills District of Meghalaya resides an artisan who has dedicated his life to the activity and is a recipient of the State Handicraft Award in Wood Carving.

Tangbang N Marak's passion for wood carving started as a child when he would keenly observe his family members carve wood around the clock. Among those that influenced him the most was his brother, a policeman by profession, and himself a winner of the Best Handicraft Award at an exhibition held by the State's Police Department. Although he never underwent any formal training, Tangbang credits his brother for inspiring him to become the artisan that he is today.





Tangbang has participated in numerous state and national-level competitions and exhibitions. He first displayed his work in 2009 at a competition organized by the Department of Arts & Culture where he secured third place. He also participated in the A-tong Festival in Kharukol, South Garo Hills and the 2012 Indian International Trade Fair (IITF) in New Delhi. In 2016-17, he received the Meghalaya State Handicraft Award. Tangbang utilized the prize money to build a workshop to train other aspirants. Over 20 people signed up for the first session. The students have since pursued similar careers.

Tangbang has also received support under the Guru Shishya Parampara Scheme of the Government of India, Department of Culture through the Zonal Cultural Centre (ZCC). The scheme is a form of scholarship that aims to preserve and promote rare art forms, whether classical or tribal, so that young talents are nurtured by experts in a chosen field of art. As a Master Trainer (Guru), he received Rs. 20,000 to train 25 aspirants for four months. Those trained under him (Shishyas) received funds of Rs. 4000. Of the 25 trainees, 22 were from his district, 2 were from East Garo Hills district, and 1 was from West Garo Hills district.

Following the training, he visited New Delhi, Kerala, and Puducherry to showcase his work in various exhibitions during which he was able to earn Rs. 70,000. The District Commerce & Industries Centre (DCIC) bore his travelling costs.

Apropos of the work, Tangbang buys the materials from local sellers. His preferences are Sal, Gmelina, and Teakwood but he only buys dead wood. The time taken to carve an item can last up to 6 or 7 days. The costs typically range between Rs. 5000 to Rs. 6000 but they may vary depending on the style, size, and elaborateness of the designs. The process starts by sorting the whole wood according to the size required for carving. He removes the skin with the help of a flat knife to smoothen the surface area. To shape the final image, he uses implements such as chisels and gouges.

Tangbang's passion for wood carving is not limited to creating figurines and ornamentations. The plan is to take it to a level where this ancestral knowledge can be nurtured and passed on. He feels that the youth of today are torchbearers for the next generation of artisans because they have access to both traditional and new methods of crafting. He, therefore, understands that there is a responsibility to work closely with each of them so that they too can share their learning. Most importantly, he believes that the activity has immense potential as a source of livelihood. He is the living example.

BLACK CLAY POTTERY

A Well-preserved Traditional
Knowledge



Traditional Knowledge (TK) is synonymous with the identity, value, and culture of indigenous communities across the world. Its preservation is of supreme importance given how TK has proven to be essential in harmonizing various developmental processes for the communities. The recognition for its preservation is well established and universal. A multilateral treaty was agreed upon by the participating countries during the Convention on Biological Diversity held in Rio De Janeiro in 1992 for “the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.” As of 2016, the agreement has been formally endorsed by 196 countries to reinforce the importance of TK and its role in sustainable development and livelihoods.

Meghalaya also possesses diverse and invaluable TK. The state’s indigenous citizens have for ages lived in close proximity to nature and the environment, and in most cases, if not always, they offer insightful solutions on how to best preserve their homes as they are the sole custodians of these practices. There are, of course, a wide variety of non-development-related TK that are equally important sources of the identity of these communities and expressions of their unique individuality and tradition. Black clay pottery in West Jaintia Hills is one such example.

In the State, there is no clear and definitive origin about the nascence of clay pottery. Only a few references can be found. Citations³ include Philip RTG Gordon’s “The Khasis” which mentions that pottery is a customary activity of the locals of Tyrshang and Larnai villages. To this day, these products represent rich TK at its best, nurtured and verbally passed down from generation to generation.

Tyrshang in Thadlaskein Block is located 18 kilometers from District Headquarters, Jowai, and has

294 households. The population is largely dependent on agriculture and its allied activities for sustaining livelihoods, but a small segment is still actively engaged in clay pottery.

Tyrshang potters produce about 40 varieties. These include cookware, containers, tableware, and decorative items. The most sought-after item is the khiew ranei or kchu lyrnai, a black terracotta pottery used for preparing the popular local delicacies such as pumaloi and putharo. These pots are also biodegradable and are made by pounding, mixing, molding, and shaping the clay. The clay, however, can only be used with the prior permission of the clan chieftain or the ‘Doloi’ and cannot, at all costs, be sold.



³ Women in Jaintia Hills keep clay pottery tradition alive - Rituparna Roy


Materials for making the black clay pots are only available from Sung Valley, an area that belongs to the Doloi of the Nartiang Elaka. Procurement is not customarily made in cash. Instead, the Doloi will gift the clay annually as part of Durga Pooja festivities. The materials include black clay or khyndaw iong and green serpentine stones or khyndaw khluit. Other materials include cow's skin for pounding, a rectangular-shaped wooden board, a triangular-shaped beater, and an iron-like plate for polishing the products.

As part of an initiative to support the State's rural artisans with training, capacity building, skill development, and market connect, among others, the Meghalaya Basin Management Agency (MBMA) through its Enterprise Facilitation Centre (EFC) in Thadlaskein, West Jaintia Hills was able to facilitate the scaling up of the activity. In 2016, MBMA helped form the Tyrshang Lurshai Cooperative Society comprising 19 potters.

MBMA supported with market and credit linkages after recognizing that these products had every potential to score big in niche international markets. The State's Planning Department also facilitated the construction of a working shed that has three storage rooms, a workshop, a room for storing the molds, one for the firing process and glazing of the clay pots, and a big-sized oven.

The workload is shared to cater to bulk orders by buyers from Jowai and Ummulong locally, Mumbai and Delhi nationally, and London, Paris, and Rome internationally. Although initially adamant that their old ways trumped technology, the members soon became receptive to employing modern methods of pottery making after seeing the results.

The Society has had many firms, institutions, and interested parties visit to witness their methods for cross-learning and exchange of knowledge and understanding of the beneficial properties of cooking in these pots. The slow-cooking nature makes the food tastier because it naturally retains the nutrients, while it can also stay warm for longer periods. A meal would require less oil and seasoning because of the moisture that stays trapped within the confinement, while the aromatics are much more discernible in these pots.

A person wearing an orange shawl and a blue sweater is working on a pottery wheel, shaping a dark clay bowl. They are wearing a striped headscarf and red sandals. The workshop is filled with various pottery items, including bowls and plates, some of which are stacked on shelves in the background. The person is using a tool to smooth the rim of the bowl. A container of water or slip is visible in the foreground.

The Society has been a shining example of how to manage and preserve TK. But in the overall Meghalaya context, it has been observed that the practice of transmitting knowledge from one generation to the next is waning and is in danger of becoming a tradition of the past. Issues⁴ include population growth, the quest for unsustainable developmental activities, and indiscriminate exploitation of natural resources. Those that have stakes are especially concerned with its dwindling nature. Hence, the need is to spread wide awareness of its importance and empower the indigenous communities to take ownership of what is theirs so that there are reciprocal benefits. In this regard, current interventions include the World Bank-funded Community-Led Landscape Management Project's (CLLMP) active support and promotion of TK management and preservation methods as vehicles to enable rural development across the entire State.



HIKINDRO SANGMA

Bael Tea Farming

At the start, Hikindro Sangma made and drank bael tea because it eased his gastritis pain. This was sometime in 1996. His grandmother had recommended that he drinks tea made from bael leaves after medicines prescribed by several doctors had failed. He was told to cut the leaves, dry them in the sun, and make tea from them. In a month, the pain had subsided considerably. Decades later, not only is gastritis no longer an ailment, but Hikindro has been able to turn traditional remedy into remunerative innovation.

Hikindro lives in Bolongpang Village under Bajengdoba C&RD Block, North Garo Hills. He has registered with the Meghalaya Basin Management Agency's (MBMA) Promotion and Incubation of Market-Driven Enterprises (PRIME) Rural Hub in Kharkutta C&RD Block. Through the Hub, he has been provided various support such as incubation, market connect and skill development. He was also given a sum of Rs. 50,000 as an awardee of the Chief Minister's E-Championship Challenge during the first edition of the PRIME Entrepreneurship Awards in 2021.

A part from Meghalaya, his products have markets in Arunachal Pradesh, Nagaland, Manipur, and Assam. Every so often, his customers would call to convey positive feedback after purchase. Most have stated that a daily cup of his organic bael tea has boosted their wellness. Hikindro is, in turn, communicating these health benefits to his community members and encouraging them to opt for bael tea leaves instead of the other varieties.

Processing in the early days came with a few challenges and was not as straightforward as some might think. There was no equipment, and drying the leaves took time because they require direct sunlight, and if it rains, then the quality of the nearly ready products is compromised and cannot be used. He could also not afford to lease other farmers' plantation fields for his trees, which would have helped because of the abundant spaces. He had to use his backyard to nurture and grow only a few trees.

Years of arduous work have led to Hikindro possessing a larger land and tending to about 20 bael trees. Sales range anywhere from Rs. 8000 to Rs. 20,000 per month depending on the demand. He employs three women whom he calls to work only on non-rainy days. Each woman is paid Rs. 3000 a month. As a way of extending support to his community, he allows them to sell his products at the local markets in exchange for a small commission. He would also urge them to grow these trees on their lands so that when they bear fruit, they would have the option of selling them directly to him at fair rates.

His product is named HBT, short for Hikindro Bael Tea. One kg of loose tea sells at Rs. 400. Packaging is in two sizes – 125 grams and 250 grams. Hikindro stated that plans are in place to expand activities thanks to the continued support from PRIME. He is currently working to collaborate with producers and industries within and outside the state.





The Wa·dak Boldak Handicraft Group

Where Nothing goes Wasted

The Wa-dak Boldak Handicraft Group is an example of how naturally talent can develop when nurtured and supported with the right resources. The Group is promoted by the Meghalaya Basin Management Agency (MBMA) through the District Unit in South West Garo Hills and registered under the Meghalaya Societies Registration Act, XII of 1983.

In early 2019, MBMA visited the district to promote bamboo handicraft as a livelihood option. Enthusiastic youth from Kawahagra and Jengrinpara villages in Zikzak C&RD Block showed up to participate. MBMA in collaboration with the State Institute of Rural Development (SIRD) and the State Council of Science Technology and Environment (SCSTE) arranged for two youth, namely Hartin D. Shira and Ringsan M. Marak, to be trained at the State Institute of Rural Development (SIRD) in Nongsder, Ri Bhoi District on “Skills Training on Low-Cost Appropriate Technologies” in February 2019. Both Hartin and Ringsan were part of an unregistered group of persons that every so often, made bamboo handicraft after spending the day farming. Needless to say, their skills at the time of training were limited given the dearth of resources, but both performed well and MBMA recognized their potential.

This led to them being sent to the Cane and Bamboo Technology Centre (CBTC) in Byrnihat, Assam for further training and skills-honing. The two were trained on “Bamboo Processing Machines and Maintenance (Special Techniques of Finishing)”, training sponsored by the North Eastern Council (NEC), Shillong, Ministry of DONER, Government of India for 30 days in March 2020. When they returned, Hartin and Ringsan were determined to share their new-found knowledge with their community. Seventeen interested persons who shared a love for handicraft were trained at their first self-organized workshop. They started with simple techniques – creating small items out of bamboo waste and bamboo leftovers from other works in the village.

On 12 November 2021, there was a meeting of the Kawahagra Integrated Village Cooperative Society Ltd. (IVCS) and their Managing Committee with MBMA. Among other lists of business, ways to formalize the group was also a discussion. After much deliberation, the “Wa-dak Boldak Handicraft Group” was formally formed. The name of the group was thought of by the members. It means wastes of bamboo and wood. The idea is to make full use of the remains to ensure that nothing goes wasted. The members have also made it a point to replace the bamboo that they cut for their work and monitor the felling of bamboo trees in their forests. They have also been proactive in planting trees in barren lands in and around their village.

The bamboo items produced by the group soon caught the attention of the Office of the South West Garo Hills Soil & Water Conservation Division in Ampati which supported them with the procurement of tools and machinery to further enhance their work. Wa-dak Boldak Handicraft Group grew in strength with more member registrations, creating beautiful and unique handicraft items that have since found their way to exhibitions and homes of proud owners. The District Unit of MBMA in Ampati also linked the group with the Meghalaya State Skills Development Society (MSSDS) and they became the local resource persons in South West Garo Hills District for providing training on bamboo handicrafts. The group was formally registered soon after.



Wa-dak Boldak Handicraft Group presently comprises 12 active members who hail from Kawahagra, Jengringpara, and Debajani villages in Zikzak Dev. Block. Most recently, Kangkangre village has been added to their area of operation and the plan is to recruit more members. Items produced by Wa-dak Boldak Handicraft Group include hair clips, kitchenware, decorations, and furniture, and costs can range anywhere from Rs. 50 to Rs. 6,000. The group has generated over Rs. 120,000.

The group is regarded as a success story locally. They were able to thrive because the members had the drive and determination to succeed amid a scarcity of opportunities. They were provided with an energising work environment which has since translated to steady incomes and genuine potential for effecting economic change across the rural communities of South West Garo Hills.

Leisure Time Earning



21st-century India is witnessing the position of women in matters of rural development and sustainable livelihoods gradually changing for the better. Various initiatives now center on empowering women socially and economically including in Meghalaya where community-tailored projects such as the Community-Led Landscape Management Project (CLLMP) and the Meghalaya Livelihoods and Access to Markets Project (Megha-LAMP) have given weight to establishing enabling environments for transforming long-standing gender inequalities. The former is mandated to promote NRM best practices across the State and has mobilized Village Community Facilitators (VCF) to carry out sensitization and facilitate community-led NRM planning and implementation on the field. Each village is supported by three VCFs and one has to be a woman. Megha-LAMP has put in place a dedicated gender team to enhance women's participation in community institutions and decision-making to help strengthen their standings. A model example of women empowerment can be found in Jani Mawiong Village in East Khasi Hills where through CLLMP's intervention, three women members now preside over the top leadership positions of the Village's NRM committee– the roles of president, secretary, and treasurer – a first recorded and unprecedented occasion across any rural setting in Meghalaya.



In agriculture, women's increased participation and contributions are closing the gender gap. NGO Oxfam India reports that as of 2018, 33% of the agriculture labour force comprises women while 48% are self-employed farmers. This figure will only trend upwards given that significant numbers of men in agriculture are migrating to cities in search of job security. This has made women's contributions all the more crucial as aside from the traditional household and domestic obligations, they are now tasked with labour-intensive roles on farms to sustain incomes and food security for their families. Hence, women are becoming instinctively empowered and independent, indicating a paradigm shift towards equal opportunity and perhaps one day, even egalitarianism, but to advance the status quo, they must be provided with support services that include access to agricultural input and credit facilities, skill enhancement programs, and tools and technology, among others.

But the non-farm sector is where women's contributions have generally been most visible. In Meghalaya, women have always stood out for their strong participation and efficient use of resources in handicraft, horticulture, baking, food processing, and animal husbandry. These are other illustrations of productive employment where women are playing valuable roles in progressing the village economy such as the Leisure Time Earning (Kamai Haba Shongkai) activity in Raid Iapngar, Ri Bhoi District, innovated by Iaishah Rymbai.

According to Iaishah, Leisure Time Earning, by definition, is an activity that enables women to earn additional income through weaving and spinning yarn in their free time. The school teacher stated that she spends her after-work hours engaged in the activity, a personal hobby that started at a young age when she learned from her mother. Through the years, her reputation as a gifted weaver grew

across the region. She planned to scale up, but there were very few women who were interested in an activity that was common in the past but that had lost momentum and waned in popularity because of the poor linkage to remunerative markets and buyers.

To overturn this, she teamed up with the Raid Iapngar Handloom Weaver Cooperative Society in 2019 to create awareness of the potential of eri silk as a good source of livelihood for enterprising women and put the abundance of eri silk in the region into good use. Women were recruited and trained in yarn production and efficient ways of spinning and weaving. There was sensitization on the value of time and work and an introduction of the activity in the (Socially Useful Productive Work) Arts subject in schools. This all led to the revival of a lost tradition.

Iaishah received funding support from PRIME, the Cooperation Department, the Department of Sericulture and Weaving, the Block Office, the SELCO foundation, and the local MLA. Her initiative quickly became renowned across the State. Today, there are about 300 eri silk farmers and 15 full-time spinners and weavers from Raid Iapngar's cluster of villages (which are Mawtneng, Nongrim, Nongladaw, Liarkhla, Liarbang, Kdonghula, and Thadnongiaiw) working leisurely to produce some of the finest traditional women's attires in Meghalaya – stoles, shawls, and wraparounds. Customers can find these products at various markets including retail outlets in Shillong where she supplies weekly. They can also find these silk brands at Iaishah's 'EriWeave', her exclusive outlet in Kdonghulu, Ri Bhoi District. Prices range from Rs. 2500 to Rs. 3000 per meter. Revenue has also multiplied manyfold. In 2019, Rs. 20,000 was generated. By 2021, the revenue had become a handsome Rs. 40 lakhs. Iaishah aims to generate Rs. 1 crore by 2024.

One of the farmers, Felicia Rymbai stated that many in Raid Iapngar have always had the talent, but it was never developed because the line of work had previously not translated into sustainable livelihoods. Since the intervention, that school of thought has changed completely as women would return from the farms or their household chores to start weaving and spinning and earn extra income while engaging in friendly conversations. She stated that what has been most rewarding is the creation of jobs for the women in her community. What has been most empowering, however, is to watch them take ownership of the activity and contribute to sustainable and inclusive development after being afforded a positive and enabling work environment.



FEDERATION COLLECTIVE MARKETING CENTRE

Bolstering Farming Activities





Collective marketing initiatives are being promoted across the country to respond to the growing challenge of the small and marginal farmers having little to no control in supply chains - to enable them to regain bargaining power, cut costs of transportation and storage, and eradicate the influence and position of middlemen while realizing fair and competitive negotiation prices for their produce at the markets. In Meghalaya, the working conditions of these categories of farmers are no different. The current trading model involves produce either being sold by individual farmers directly to traders in local or cluster-level markets or aggregated by the village aggregator who sells it to the cluster-level aggregator. Hence, this pattern has unavoidably resulted in meagre returns. Farmers continue to struggle to keep up with fluctuating market dynamics because of production and marketing issues that they face as individuals and are not helped by their poor grasp of the nuances of markets. If the model is to persist coupled with an inability to compete with produce from large-scale farms, thousands of farmers and their standards of living will be impacted.

Given this, the Meghalaya Livelihoods and Access to Markets Project (Megha-LAMP) of the Meghalaya Basin Management Agency (MBMA) felt that there was a need for an intervention to ameliorate the existing conditions of its farmers in the agri-marketing sector and develop improved linkages and credit, but most significantly, better their share of the profits.

In July 2019, IFAD arranged for Megha-LAMP to visit Uttarakhand and learn about the success of the collection centre model of the IFAD-funded Integrated Livelihood Support Project (ILSP), which had established community-based collection centres and mini-collection enterprises across local levels for undertaking value addition and processing of produce. IFAD felt that Megha-LAMP can absorb ILSP's best practices when rolling out the implementation of their collection centre model in Meghalaya. And hence, the establishment of the Collective Marketing Centres (CMC) in the State.



CMCs are entities for marketing and processing agricultural produce and for providing forward and backward linkages. These centres act as one-stop shops for cluster or village-level aggregation, processing, marketing, and input supply. Their establishment was also to create awareness of collective marketing and its merits, initiate a system of aggregation and value addition at the market level, ensure transparent and good governance for the marketing of produce by a collective, and enhance the skills of the stakeholders in areas of marketing and financial linkages. CMCs have been set up in villages or clusters from among the 1350 project villages of Megha-LAMP. The project had decided that ownership should reside with the Integrated Village Cooperative Societies (IVCS), while Collective Marketing Centre Committees comprising 2 to 5 progressive farmers or current aggregators familiar with the marketing business have been formed by the IVCS to oversee the management and day-to-day operations. Each CMC is provided a grant of up to Rs. 7 Lac or 75 percent of the investment cost, whichever is lower but is made available to only those IVCS that are willing to make in-kind contributions i.e., free labour, stone chips, sand, building materials, etc., for construction.

A working capital returnable grant has been provided to each of the 185 IVCS for establishing CMCs. These include the Mawphlang & Sohiong Federation CMC in East Khasi Hills, formed on 28 September 2019. Thirteen CMCs comprise the Federation namely, CMC Pyndeng Litha, CMC Mawthwan, CMC Mawlumrum, CMC Jabar Lumtap, CMC Laitnongrim, CMC Mawmaram, CMC Dong Iewrim, CMC Jait, CMC Kyiem, CMC Madankor, CMC Wahsohlait, CMC Krang, and CMC Mawthlong. The objective is to maximize resources and expertise and minimize costs of logistics, production, marketing, and storage.

Each CMC contributed a share of Rs. 50,000. The presidents and secretaries represent their own CMC. Before formation, a market survey on pig feed was conducted to study the difference in price if farmers were to purchase individually from Shillong and the CMCs. Detailed analyses were made - from expenses of transportation and prices of the feed to additional costs for delivering the produce to the consumer. The survey revealed considerable variations in the pricing and potential profit margins. This prompted the individual CMCs to create the Federation and band together as one collective organization to fight against the exploitation of their farmers. Pig feed which was usually procured from Shillong at the price of Rs. 1120 excluding transportation costs is now available from the Federation for Rs. 1090. Megha-LAMP has further supported the activities of the Federation with funding of Rs. 15 lacs for setting up a showroom to showcase the rich produce from the region. These produce are also available at the Lwai Farmers' Market in Mawphlang.

The farmers from the area have been helped tremendously by its formation. CMC services include collecting, processing, and aggregating produce at the CMC and selling to various markets that include Shillong, the Garo Hills, and Ri Bhoi in Meghalaya, and Assam and Mizoram outside the State. It stated that it is currently taking active steps to increase farm productivity, adopt post-harvest technology, and provide better storage facilities. It hopes that local markets such as Lwai can be developed to ensure that consumers pay lesser and farmers earn more. It is also urging local talent from the region to make the most of the enterprise development platform in non-farm provided by organizations such as MBMA. The goal is that these activities can remedy the current issues in agriculture and its allied sectors in the region including addressing the existing information asymmetry.



The Integrated Village Cooperative Societies

Providing Farming Households with Access to Financial Services

In Meghalaya, the need for ensuring the availability of basic financial services especially for the farming households in the rural areas stemmed from a recognition that there existed a thin spread of banking networks and micro-financial institutions across such regions. The penetration of the formal banking sector has always been minimal because of the non-viability of operations in remote areas mainly on account of difficult topography, limited transportation facilities, and a dearth of communication infrastructure. Residents would often need to travel long distances just for availing of basic banking services like deposits and withdrawals. Even in areas where bank branches are present, clear gaps exist because of the cumbersome processes of banks, language barriers, and poor knowledge of financial literacy. Further, other institutions such as the Service Cooperative Societies have not been able to function at the levels intended due to their large areas of operations spread over multiple villages, and lack of good governance, among others.

To contend with these challenges, the Meghalaya Basin Management Agency (MBMA) through the Meghalaya Livelihoods and Access to Markets Project (Megha-LAMP) has leveraged the strong social capital of the State to establish Integrated Village Cooperative Societies (IVCS), which are home-grown, community-led institutions that are deeply rooted in the local culture of the people aimed at ensuring long-term financial inclusion.

In 2016, the State Government constituted a core team comprising members from MBMA, the Cooperation Department, Govt. of Meghalaya, and the Meghalaya Cooperative Apex Bank Ltd. The team was mandated to work out a roadmap for the creation of the IVCS in the State. Exposure visits were made to Kerala to study village-based cooperatives while the Bankers Institute of Rural Development (BIRD), Lucknow assisted with capacity building and training of the staff of MBMA and helped develop a process manual on formation.

What followed was the formation of the first IVCS at Megapara Village in Tikrikilla C&RD Block, West Garo Hills district on 16 January 2017. Today, there are 330 IVCS across the State. They are recognized as Primary Agricultural Cooperative Societies (PACS) vide GoM, Cooperation Department notification dated 2 February 2021.

An IVCS is an autonomous Community Based Organisation (CBO) that is formally registered as a Cooperative Society under the Meghalaya Cooperative Societies Act, 2015. They are designed to be able to legally carry out financial activities and provide thrift, credit, and other financial services to the people. They also provide a range of other services to meet the local demands such as the provision of a facility for aggregation, input supply, sale of groceries, and storage.

The IVCS is modeled to be self-sustaining in operations. Every community member who intends to become a member must first purchase one share in the IVCS. The proceeds from the subscription of shares form the capital of the IVCS. Ideally, Megha-LAMP targets a membership of at least 300 people to ensure the IVCS generates sufficient capital to sustain operations.

To support the activities of its IVCS, Megha-LAMP visits each of them regularly for handholding, especially in areas relating to maintenance of books of accounts, capacity-building exercises, and training, and the preparation of business plans and action plans. The expectation is that trained IVCS members can in turn serve as resource persons for the other IVCS. These visits have instilled a sense of security and self-assurance among the members to manage operations independently even beyond the project period.

To ensure that financial literacy is spread holistically and seized of the problem faced by residents in the IVCS villages to attend such programs, the project has empowered and trained Financial Literacy Facilitators (FLFs) selected from the progressive members of the IVCS themselves. These FLFs have been conducting financial literacy programs in their own local dialects at the IVCS level to educate members with financial capabilities to manage funds or investments. Suitable training materials on the subject duly translated into Khasi and Garo languages are prepared and distributed to all participants.

On 25 May 2022, Katchi Garantai IVCS Ltd. in Baghmara, South Garo Hills district became the first Banking Correspondent (BC) of the Meghalaya Cooperative Apex Bank Ltd. (MCAB), the first instance for an IVCS with any bank.



An agreement was signed, and a micro-ATM was handed over to the IVCS. Few trials were conducted before the IVCS started transactions. The objective was to ensure greater financial inclusion and outreach while extending savings and loan facilities to the underprivileged and unbanked population. In Meghalaya, there are presently 425 bank branches catering to over 6200 villages. Hence, it becomes unviable for banks to open branches in remote areas. But the IVCS have emerged as village-level organizations that not only provide access to basic financial services catering to the economic wellbeing and livelihoods of the residents but are looked upon as potential Business Correspondents (BCs) of Banks. Apart from Katchi Garantai IVCS Ltd., Megha-LAMP and MCAB have agreed to make an additional 199 IVCS banking correspondents of MCAB.

For augmenting the capital of the IVCS, the project is providing a Corpus Fund. For operations and setting-up of the IVCS during the initial stages, one-time support for the purchase of office equipment and furniture is also provided. Support in the form of viability gap funding is also provided in cases where the revenue earned by the IVCS is not sufficient to cover operating costs. Further, a set of books of accounts, registers, ledgers, passbooks, etc., have been designed, printed, and provided by the Project to all IVCS, free of cost.

Following the outbreak of the COVID-19 pandemic, many of the IVCS utilized a part of their working capital (consisting of the share capital, corpus fund, deposits, funds built out of profits, and funds raised by borrowing) to open grocery shops that provide food essentials at fair prices. The Block Administrations also engaged the services of the IVCS to transport food essentials and other requirements during these difficult times.

The 330 IVCS are registered with the office of the Registrar of Cooperative Societies, GoM and they cover about 950 villages across 18 C&RD Blocks in all 12 Districts of Meghalaya. Over 58,000 total shareholders are contributing to a total share capital of Rs.2.81 Cr. About 41,900 members have opened savings, fixed, and recurring deposit accounts with a total cumulative deposit amount of over Rs. 22 Cr. A total of INR 8.8 Cr has been loaned to over 9600 members.

By making financial services accessible to the last mile, many farming households have been able to take up higher and expanded economic activities for enhancing incomes and quality of life.



Case: The Nongkdait-Nongtwah IVCS Ltd.

The Nongkdait-Nongtwah IVCS Ltd. is located in Nongnah village and is one of 22 IVCS registered in Ranikor C&RD Block, South West Khasi Hills District. Formed in 2017, the IVCS is one of the best-performing institutions anywhere in Meghalaya and is graded A by the project owing to its strong management and operations. The IVCS covers all 138 households in the village. There are 402 shareholders contributing to a total share capital of Rs 2.75 Lacs. Over Rs. 72 Lacs of savings has been mobilized. The IVCS has also sanctioned about Rs. 24 Lacs as loans to 62 members.

Bah Maxstarwell, the secretary of the IVCS, stated that the mobilization of members to purchase shares in the IVCS during the initial stages was a challenge since most could not fully grasp the concept of a multi-purpose cooperative society. However, the project was on hand to support with awareness, and after a few follow-up visits, the Nongkdait-Nongtwah IVCS Ltd. was formed. He is pleased to report that every household in the village has a member registered with the IVCS.

The IVCS is open for 2 to 3 hours daily, but timings are not specific since there are no full-time staff working in the IVCS. Unlike bank branches, this flexibility in office timings of the IVCS offices has enabled members to stick to their daily work timings in their fields or elsewhere. But Maxstarwell is available for discussions and meetings with the members at a moment's notice.

The main activities of the IVCS are broom grass and a hardware store that sells cement. It also owns a pickup truck to transport farm produce inside and outside the village. Because it has demonstrated big potential to improve the incomes of its farmers, Megha-LAMP has set up a Collective Marketing Centre (CMC) in the village to be owned by the IVCS in a social enterprise mode. The CMC offers the farmers of Nongkdait-Nongtwah a facility for aggregation, marketing, and processing of agricultural produce.

Bah Maxstarwell added that the IVCS has brought about socio-economic development not just in the village but in the entire cluster. Having an institution that provides financial services in the village has helped many farmers take up expanded activities due to the easy access to credit. Plans include leveraging the tourism potential of the village and turning it into another income-generating activity of the IVCS



A glimpse of Nongkdait-Nongtwah Village

SNIPPETS

FROM ACROSS MEGHALAYA

The popularity of green tea is growing. First consumed in Asia, green tea has now become a favoured choice of beverage across the world, especially among millennials. This is because of the well-established beneficial health properties such as green tea containing polyphenols, which are rich in antioxidants. It can promote weight loss and reduce the risk of many life-threatening diseases, among other benefits. For tea farmers, many have also gained the advantages of producing green tea. It is the least oxidized of all the teas when processed and is generally sold at a higher rate than the other varieties because comparatively, the processing methods are much more intricate and labourous, and production per tree plant is lower.

Jelume R. Marak is one of these tea farmers who has benefitted after adding organic green tea to his items of production. The inspiration behind green tea first emanated from an exposure visit to a Tea Expo in Umsning, Ri Bhoi District, and a workshop at Guwahati in early 2016 where Jelume learned about farming green tea and its many advantages.

Jelume's tea farming enterprise had initially started in 2002 when he approached the Horticulture Department intending to set up a tea plantation estate near his place of residence in Alokpong Dabrek under the Rongara Tehsil of South Garo Hills district of Meghalaya. He invested Rs. 5000 from his savings and bought saplings from the department at Rs. 50 paise per sapling. After learning of the application, the Block Development Office in Rongara C&RD Block conducted a full assessment of the 1.5-hectare land to inspect feasibility. The department helped with the construction of a working shed and procured a rolling machine as part of its support to the small farmers. The activity,



however, was slower than anticipated, but 14 years later, in 2016, Jelume returned from the expo and the workshop determined to put into practice his new-found knowledge. A year later, the profit margins had finally started accruing.

Today, the activity is flourishing. 500 grams of his green tea sells at the rate of Rs. 250 while his black tea of 250 grams sells at Rs. 100. Customers can find his products at Marak Store near the petrol pump in Baghmara and Rural Mart inside the Super Market Building. He also sells directly to departments and customers from Tura and Shillong.

Jelume R. Marak
Green Tea Farmer

SNIPPETS

FROM ACROSS MEGHALAYA

In the South West Garo Hills district of Meghalaya are local entrepreneurs and artisans who have for generations been creating handicraft as a means of livelihood. A number of them have opted to make use of the lesser-known water hyacinth plant for creating products that in the last few years have become synonymous with the district.

Scientifically known as *Eichhornia Crassipes*, the aquatic plant exists in abundance in the region and can be seen growing in ponds and other water bodies, or in areas where paddy cultivation has been abandoned. The case of the water hyacinth is unique in that not too long ago, they were only viewed as nuisances that are often found blocking drainage systems and that encroach into the territory of other plants, affecting the biodiversity of the local ecosystems. Today, however, water hyacinths have a new calling in livelihood creation as it has been found that the sturdy nature of these plants makes them perfect for crafting beautiful, innovative, and complex handicraft items – bags, baskets, purses, and many other accessories that are high in demand and popular across the State. Henritha A. Sangma is one of these artisans.

Henritha has been supported by the Meghalaya Basin Management Agency (MBMA) with various activities handholding support and capacity building to help develop skill, visibility, marketability, and income. She makes and sells water hyacinth handicraft items at Ma-desa Handicraft, an enterprise formed jointly in 2015 with Smt. Porbelly G Sangma, a fellow community member who had since passed away. The enterprise is registered with the DCIC, Ampati. Since 2019, Henritha has been recruited as a Resource Person by District Commerce & Industries Centre (DCIC), Ampati for imparting training to other aspiring community members under MBMA's Promotion and Incubation of Market-Driven Enterprises (PRIME) program.

Henritha did not receive any prior training and the activity stemmed solely from her own interest to be innovative and contribute to the development of her community's economy. She engages local people to scout for ponds that have water hyacinth plants so that they can be harvested and delivered to her workplace in exchange for a fee. MBMA supports in promoting her products and connecting her to buyers.



Henritha A. Sangma

The Unique Water Hyacinth Handicraft

Henritha's unique products have slowly gained popularity with shoppers from across the state. In the past two years, customers have approached her directly with customized designs and ideas as the demand continues to rise, so much so that the niche product is showing big potential to become a pioneering trend in the current and future landscapes of the fashion industry. Her work has shown that there is tremendous potential for water hyacinth as a source of livelihood, for the development of the local economy, and even to become a serious contender in the global fight to reduce dependence on plastic.

SNIPPETS FROM ACROSS MEGHALAYA



In the last few years, the farmers of Meghalaya have been compelled to depend on power tillers owned by private owners who charge high rates of hiring, making farming activities demanding. In Umwang Them Village in Ri Bhoi District, the farmers were faced with equally challenging conditions. The rate of hiring for the much-demanded power tiller was just as high and fixed at a non-negotiable Rs. 400 per hour, irrespective of the state or the performance of the machine. This had become a big issue as the cost of land preparation per 10,000 sq. ft was approximately Rs. 2350. But this was not the only challenge.

Since the time to start land preparation for paddy cultivation in the village is in the same week for all cultivators, farmers who needed the machine would have to wait for their turn to get them, which led to delays in the completion of work. Many are forced to venture far from the village in search of these tools, which led to further losses because of transportation, labour, and fuel costs.

But since 2020, the IFAD-supported Meghalaya Livelihoods and Access to Markets Project (Megha-LAMP) has been able to help address these conditions and help the small and marginal farmers maximize the returns of their lands. Established are Custom Hiring Centres (CHC) in 72 locations across the State to counter challenges that include the dearth of human labour and the escalation of costs

of cultivation. CHCs are centres that provide fee-based custom hiring of modern agricultural machinery and tools at subsidized rates. Ownership and management reside with the project's Integrated Village Cooperative Societies (IVCS) in a social enterprise mode.

The farmers of Umwang Them are now assisted with access to a range of modern machinery and farm tools such as the power tiller, rotary tiller, brush cutter, knapsack sprayer, foot sprayer, and fruit harvester, which has resulted in higher productivity, better returns in shorter time frames, and improved farming development. Plans include applications for the purchase of more power tillers from the Agriculture Department and a water pump for the irrigation of the rabi crop.

Umwang Them Village

Custom Hiring Services

SNIPPETS

FROM ACROSS MEGHALAYA

A most striking difference that every visitor will first notice in Moolamyliang is how clean the village is despite the unnatural, contaminated coal landscapes that envelop the surrounding regions. The reason is that the village dorbar had acted proactively to promote the preservation and conservation of the environment declaring that it is equally as important as earning a livelihood. While narrating the journey of the village from what it was to what it has become now, the headman Rapmon Pachiang stated that about 15 years back, the landscapes of Moolamyliang were barren and wore a deserted look as the community was not yet awake to the adverse effects of environmental degradation. It was then that the dorbar made the bold decision to ban all coal mining activities in the village despite them being important sources of livelihood. It strongly felt that the reclamation of the village's deteriorating natural resources and the ramifications of ignoring the rapid spread were more pressing concerns. The decision, however, was widely welcomed by the farsighted community.

The Biodiversity Management Committee (BMC) was formed soon after which constituted 12 members. Its first action was spreading awareness of the best practices of preservation methods and ensuring the protection of the village's rich biodiversity. The village has since been carrying out regular tree plantation drives in and around its vicinity. A nearby land that was once barren now bears a resemblance to a woodland, informed Rapmon.

The BMC has recently doubled down on its mission to maintain the green in Moolamyliang. Cleaning drives are now a weekly routine. There are waste bins to be found in all corners of the village and every member is given the responsibility to not dirty their surroundings. The most recent development is the ban on single-use plastic. Every shop in the village is instructed to stop using plastic. Further, stringent laws have been put in place to ensure that all



residents dump their garbage only in the designated waste bins. Before these village laws were enacted, the village was excessively polluted, and every open space was a dump. Today, these dumping grounds have turned into natural lawns with lush green grasses and flowers, and structures such as bamboo huts with thatched rooms have been put up so that the people who now frequently visit Moolamyliang can bask in its nature.

The BMC with time aims to convert the local community forest “Khlaw Kwai” into a bird sanctuary for the many indigenous birds of the area. Further, with support from the Community-Led Landscape Management Project (CLLMP), the village has introduced and is upholding the values of “Cleanliness, Sustainability, and Environmental Conservation.” Moolamyliang is today being spotlighted as a model village on NRM in the State and the cleanest village across the Jaintia Hills.

Moolamyliang

The Cleanest Village in Jaintia Hills

SNIPPETS

FROM ACROSS MEGHALAYA

The children of Sasatgre Village love Dharmen Momin for his avid storytelling. They would often visit his home just to listen to him animatedly narrate folk tales and amusing stories of his grandparents. Others in the village and across Rongram Block know him because of Karitchi – one of the Garo Hills’s oldest indigenous soda– which he has been making for a long time but started selling only in 2020 after availing support from the Community-Led Landscape Management Project (CLLMP) as part of an initiative to promote the State’s grassroots innovations.

The father of three grew up wanting to be engaged in the slow food industry. In particular, the goal was to revive and promote the organic Karitchi soda. Doing so would fulfil a long-time personal dream, which is to help boost the region’s rich cultural heritage – local cuisines and ingredients, local handicrafts such as bamboo baskets, folktales etc. which Dharmen regards as important sources of the identity of the Garo people and an expression of their unique individuality.

The idea of making Karitchi materialized after he noticed that many people in Garo Hills were not leveraging the massive banana plantations in the region to produce local soda. Instead, they would rely on synthetic soda in various local cuisines which he felt is not ideal for such indigenous cuisines nor for the health of the people eating it. Traditionally, Katrichi is made by burning banana stems and is stored in powder form. However, Dharmen wanted to make a liquid concentrate version as this would make it easier to package, sell, store, and use in the kitchen. A grand platform was presented to him in 2015 when he was able to promote the product during the “Indigenous Terra Madre” event at Shillong.

In 2016, while working as a participatory video maker for the North East Slow Food & Agrobiodiversity Society (NESFAS), a Society that promotes the importance of local slow food and the role it plays in environment conservation, he was afforded the chance to go to Italy to introduce Katrichi. Dharmen reported that the reception was unexpectedly strong as slow food lovers in Italy gathered around to hear



him explain the process of making the indigenous soda, and many bought the product. Upon returning, Dharmen finally embraced his calling to revive, produce and promote his innovative liquid Karitchi.

Commercial sales officially began in mid-2020 following CLLMP’s initiative. Through the project, Dharmen has been able to expand his business and is currently engaged in championing the promotion and preservation of other rich indigenous practices from the Garo Hills such as Karitchi. As of 2022, Dharmen has produced more than 500 litres of Katrichi, selling across the Garo Hills region of Meghalaya and even parts of the neighbouring state of Assam. He is also actively engaged in spreading awareness of this traditional heritage, even working with local researchers to bring out more information on Katrichi.

Dharmen Sangma

Promoting an Indigenous Soda

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