

# MEGHALAYA

REPORT TO CITIZENS 2016

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## THE IBDLP APPROACH

The Integrated Basin Development and Livelihood Promotion (IBDLP) Programme was launched by the Government of Meghalaya as its flagship programme in 2012 in order to create a statewide institutional ecosystem for ecologically sustainable and economically inclusive development in Meghalaya. The Programme aims to put Meghalaya on a higher growth trajectory and improve the quality of life and well being of all its citizens. It seeks to redefine the relationship between the citizen and state and to bring about a paradigm shift in the way development is viewed and administered by moving from the current supply driven beneficiary model of development to a demand driven partnership model of development.

Thus IBDLP is a strongly citizen-centric programme that emphasizes entrepreneurship and intellectual development of the people of Meghalaya as the pathway to its vision for sustainable development: individuals' entrepreneurial capacity to start successful enterprises, communities' leadership capacity to take action on ecological and economic issues that are critical to them, citizens' capacity to identify their own development aspirations and make these aspirations a reality.

The IBDLP programme is not prescriptive in nature and leaves space for the choices regarding planning and implementation of demand side initiatives by the citizens and entrepreneurs. Rather, IBDLP focuses on building a systematic, inclusive framework within which sustainable, inclusive, people-centred development can occur. Key features of the IBDLP framework are:

- strengthen statewide institutions for good governance that respond to the needs and demands of the people, and that enable collaboration between citizens and the government;
- facilitate convergence across government departments so that cross-cutting sectors can be addressed and public service delivery becomes effective and responsive to on-ground realities;
- reconceptualise citizens as active "partners" and not as passive "beneficiaries", thus catalysing people's aspirations and creating in them the spirit of enterprise;
- ensure that the twin goals of natural resource management and livelihoods are simultaneously integrated into every initiative to enable wholistic sustainable development;
- catalyze, support and invest in the entire sustainable development value chain

   from skills and resources for community partners, to market infrastructure of regional markets, to state level institutions for policy and technical knowledge;
- promote livelihoods through enterprise and entrepreneurship rather than through direct subsidies and grants;
- promote natural resource management not through top-down policies and programmes, but through community-led initiatives for sustainable use of natural resources:
- The core thrust of the programme is on creating an ecosystem for inclusive

- growth and sustainable development and not on direct benefits transfer to individuals and households to ensure systemic reforms rather than short term solutions;
- Thus the programme ensures universal access to institutional services under its interventions rather than use a targeted approach that may lead to exclusion or marginalisation;
- Where targeted investment of resources is required, investment is based on fair and transparent policies and not on arbitrary selection of individuals, interventions or regions;

### SUPPORTING GOVERNMENT FOR EFFECTIVE GOVERNANCE

The IBDLP programme does not substitute or duplicate efforts made through existing government departments and agencies. Rather, it focuses on supplementing the efforts of these agencies by way of knowledge support, viability gap funding and carrying forward any unfinished development agenda in the area of value chains development. Most of this work remains in the background and most of it focuses on the demand side, i.e. the people and communities of Meghalaya.

Where additional investments are required to support initiatives at the local level, IBDLP typically channels funds through concerned line departments. As IBDLP's goal is to build institutional capacity rather than implementing top-down, short-term interventions, funding through line departments is preceded by discussions with departments around planned interventions, and followed by technical assistance to the departments for effective deployment of the funds. This long-term vision and focus on institution-building and governance re-engineering rather than short-term project implementation makes the IBDLP a unique initiative.

### **RECOGNITIONS**

In 2015, the IBDLP Programme was awarded both the SKOCH award as well as the SKOCH Order of Merit for qualifying as India's best practice in Smart Governance, at the 41st SKOCH Summit on Transformative Government. In 2014-15, the IBDLP Programme was featured as one of India's governance best practices in the Good Practices Resource Book brought out jointly by the UNDP and Niti Aayog.

# INSTITUTIONAL STRUCTURE OF IBDLP

IBDLP being a framework programme cutting across all departments of the government, it has been essential that its implementation structure have the required authority to drive integrated action and convergence across all government departments and agencies. Thus the Apex policy body for providing overall direction and strategy to the programme is the Basin Development Council (BDC) headed by the Chief Minister of Meghalaya. The Meghalaya Basin Development Authority (MBDA), a society registered under the Societies Registration Act is responsible for the overall implementation of the program. The Chief Secretary of Meghalaya is the Chairman of MBDA and all the Principal Secretaries are part of the Governing Council of MBDA. The Principal Secretary, Planning is the Chief Executive Officer of MBDA.

At the District level, the Basin Development Units (BDU) are set up with the Deputy Commissioner as the Chairman. The BDUs are responsible for coordinating implementation of IBDLP within their district, and engaging directly with communities in their districts to conceptualise new convergence projects. Project managers and other personnel are hired by MBDA through an open recruiting process to provide implementation support to BDUs and to MBDA operation at the Shillong headquarters.

At the block level are the Enterprise Facilitation Centers (EFCs), an institutional platform to enable direct communication with communities, collect information on people's demands and needs in the livelihoods and enterprise sector, and communicate information to communities about entrepreneurship development, successful grassroots initiatives taken up by communities across the state, and the IBDLP approach.

Finally, on-ground implementation occurs through community partners. This includes community volunteers who have been mobilized across the state to spread awareness about critical natural resource challenges in Meghalaya and collect feedback from communities, to motivate communities to take up green projects or collective water resource management, and to help initiate local development projects that can be supported by IBDLP. In this spirit, a cadre of "Green Ambassadors" have been provided with exposure to workshops and training on various natural resource management issues. Similarly, a cadre of rural "media" volunteers across every district has been trained to document and report rural ground realities and challenges faced by farmer-entrepreneurs. This is a youth network, and efforts going forward are focused on leveraging its potential to become a "Citizen Journalists" network who can lead both communication and advocacy efforts across critical development areas. Mostly comprising youth, this larger network has worked within IBDLP on a range of initiatives, from mapping ecological resources to help create a statewide Geographic Information System (GIS), to conduct dialogues on natural resource management, to spreading awareness of critical issues such as water resource conservation, reaching out to rural farmers in remote areas to communicate the concept of entrepreneurship, and helping IBDLP document and disseminate information about its interventions. A core aspiration under IBDLP going forward is to strengthen the capacity and leverage the transformative power of this statewide grassroots community partner network.

### **Institutional structure of IBDLP: List View**

### STATE LEVEL

Meghalaya Basin Development Authority Meghalaya Basin Management Agency

### DISTRICT LEVEL

**District Basin Development Units** 

### **BLOCK LEVEL**

**Enterprise Facilitation Centres** 

### VILLAGE LEVEL

NRM Groups
Integrated Village Co-operative Societies (IVCS)
Community Volunteers
Specialized Sector wise Resource Persons
Local NGOs

### **EXTERNAL PARTNERSHIPS**

The work done by MBDA under IBDLP involves the participation of a number of external partners, some for knowledge management, some for financial assistance and some for implementation extension activities. For example, skill training for self employment based livelihoods is occurring through the Asian Development Bank assisted Supporting Human Capital Development Project. The partnership with the International Centre for Integrated Mountain Development (ICIMOD) allows for studies, capacity building and practices relating to natural resource management and livelihoods development within the context of strategies for climate change adaptation and environment management in mountainous regions. The World Bank is providing technical assistance in governance and for financial inclusion, working closely with the Meghalaya Institute for Entrepreneurship. The partnership with GIZ (Deutsche Gesellschaftfür Internationale Zusammenarbeit), Germany's agency for international co-operation, has helped establish a Centre for Adaptation to Climate Change under the Meghalaya Institute for Natural Resources, take forward action on product development of Eri silk, evolve a State Water Policy and do land use modelling around the Umiam river.

The IDFC Foundation has been a key partner in improving documentation and understanding of markets, capacity building of MBDA's programme staff especially at EFCs, and in conceptualising renewable energy solutions. The National Bureau of Soil Survey and Land Use Planning is helping map soil data on 1:5000 scale in Ri-Bhoi district to support interventions on soil and water conservation. Collaboration between the Bio Resources Development Centre (BRDC) and the National Botanical Research Institute (NBRI) has resulted in work on bio fertilizers and dried flower craft, with training and provision of solar dryers provided to women in targeted villages for taking up this craft as a supplementary livelihood activity. The Institute of Livelihood Research and Training (ILRT) from the BASIX group, has been working on a continuous basis to build the capacity of EFC staff and all project staff within MBDA (particularly at MIE and MIG) to enhance their ability to work within the rural livelihood sector, and to make their outreach to communities more effective.

Another area of external partnerships is that of statewide mapping. Partnerships with the North East Space Applications Centre (NESAC) and with the North East Centre for Technology and Applied Research (NECTAR) have allowed extensive satellite imagery and remote imagery using Unmanned Aerial Vehicles (UAV) to map natural resource distribution, land use and soil, water and topographical features across the entire state. Together with extensive, village-level on-ground tracking using GPS and social participatory methods, these mapping initiatives have created a unique and tremendously rich source of statewide data that can be used to develop sustainable development programmes and policies at every level in Meghalaya.

A key initiative launched under IBDLP in 2015 is assisted by the International Fund for Agricultural Development (IFAD) and is called the Meghalaya Livelihoods and Access to Markets Projects (Megha-LAMP). This project specifically focuses on livelihoods promotion, market access – infrastructure development, cluster development, value chain development, and knowledge management – and community-led enterprise development initiatives, all of which are adapted to the geographical context and to the effects of climate change. It is being implemented under IBDLP by the Meghalaya Basin Management Agency (MBMA). The project budget is USD 174 million; USD 50 million as loan assistance along with technical assistance comes from the International Fund for Agricultural Development (IFAD).

## **EXTERNAL PARTNERS**

Leveraging on the expertise and support of a wide range of National and **International Partners** 



















Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH













### PARTNERSHIPS FOR LIVELIHOODS & ENTREPRENEURSHIP DEVELOPMENT

In order to facilitate rapid economic transformation through entrepreneurship education and promotion of micro enterprises involving the youth, women and other critical target groups in the State, a number of key linkages and partnerships with a varied cross section of public and private institutions has been established. These partnerships are taken forward by the Meghalaya Institute of Entrepreneurship (MIE).

### **Institute of Livelihood Research & Training (ILRT):**

The ILRT, Shillong, is the leading institution with which the MIE has partnered with to provide capacity building and accompaniment support to the personnel of IBDLP right down to the grassroots. The ILRT takes livelihood promotion knowledge from the field and develops it into structured lessons that can be disseminated to livelihood promotion practitioners in the form of training programs, value chain assessments, livelihoods mapping exercises and so on. The current focus is on strengthening livelihood promotion skills of IBDLP personnel, including those in the BDUs, the EFCs, and the empaneled 8 local NGOs who act as the last mile outreach arms for delivery of services under IBDLP.

### AFC India Pvt. Ltd, Department of Commerce & Industry, Meghalaya Khadi & Village Industries **Board:**

MIE has partnered with AFC India Pvt. Ltd. to train beekeepers and to assist the MIE in its role as a Technical Advisory institution for the Department of Commerce & Industries (DCI) which is the Nodal Department for Apiculture and to the MKVIB which is the marketing wing of the DCI. Under this partnership the focus over the last two years has been on building up the capacity of the department to own and run the Apiculture Mission and to train beekeepers and entrepreneurs identified both by the BDUs and the Deptt. in scientific beekeeping with the ultimate objective of leveraging the rich natural resources of the state to catalyze the growth of Apiculture as an enterprise. The combined efforts of the 4 entities has resulted in the skill upgradation of 3793 beekeepers, activation of 6 carpentry and 2 SSI units, training of 32 departmental officers, 15 entrepreneurs and 195 master beekeepers, standardization of scientific Meghalaya Type B bee hives, mapping of 2000+ beekeeping households, activation of 3 honey processing plants, reactivation of 3 DCIC workshops, development of customized training & IEC materials and the establishment of 3 apiculture training centers in the State.

### **University of Agricultural Sciences, Bangalore:**

MIE has partnered with the University of Agricultural Sciences (UAS), Bangalore and more specifically with the Division of Apiculture as a technical and knowledge backstopping resource institution for the Apiculture Mission. Progressive beekeepers, master carpenters, processors and officials have been trained and exposed to the apiculture industry by the UAS. MIE has also partnered with the Department of Biotechnology, UAS, for training and capacity building in jack fruit processing for 22 entrepreneurs especially those from the Garo Hills.

### **Home Science College, Central Agriculture University, Tura:**

MIE along with the BDU, West Garo Hills and MIE, Tura, has partnered with the Home Science College, Tura, to train partners in jack fruit processing, cashew processing, pickle making etc. The college also serves as a common facility center to assist partners in processing of their produce for sale.

### **Central Silk Technological Research Institute (CSTRI), Bangalore:**

MIE has partnered with the CSTRI for capacity building and training of weavers in various aspects of weaving, dyeing and post cocoon technology. A total of 32 partners have graduated from the CSTRI. Master trainers who have graduated are now conducting trainings in the districts on the request of the BDUs, the most recent of which was held in Mukhap, West Jaintia Hills.

### Regional Silk Technological Research Station (RSTRS), Khanapara:

MIE has partnered with the RSTRS for training of weavers in dobby and jacquard and in the skill up gradation of partners especially those from the Garo Hills.

### **National Institute of Fashion Technology (NIFT), Shillong:**

NIFT has been associated with the MIE in the training of weavers and eri farmers in the field of textile designing and product diversification.

### **CARD-KVK, Thiruvalla:**

The CARD-KVK, Thiruvalla, has over the past one half years been associated with the MIE in the training and capacity building of partners and entrepreneurs in value addition of jack fruit. 13 officials of the Cooperation and Industries departments have also been trained by CARD-KVK. A total of 40 persons have been trained and post training 3 partners are now preparing business plans for establishment of jack fruit processing units in the state.

### **Indian Institute of Packaging (IIP), Kolkata and Mumbai:**

The IIPs of both Kolkata and Mumbai have facilitated the training of partners and officials of the Industries, Horticulture and Veterinary departments in various aspects of packaging and shelf life testing.

### **National Institute of Rural Development (NIRD), Hyderabad:**

MIE has partnered with the NIRD, Hyderabad, for exposure and training of our partners on the various SME options available through its Rural Technology Park (RTP). A total of 89 partners have been trained by the NIRD.

### **National Dairy Development Board (NDDB):**

MIE had tied up with the NDDB for training and exposure of dairy partners to the Gujarat dairy model. 32 dairy farmers and 3 officials were trained by the NDDB while the exposure visits were facilitated by the ILRT.

### **College of Veterinary Sciences, AAU, Khanapara:**

MIE had facilitated the training of potential animal feed entrepreneurs in the College of Veterinary Sciences, Khanapara, in the field of feed formulation and scientific goat management. 44 partners have been trained in livestock feed formulation while 26 partners have been trained in goat management.

### **National Research Center for Pigs (NRCP):**

In view of the large scale demand for piggery the MIE has partnered with the NRCP, Rani to train partners in the scientific slaughter of pigs and value addition of pork. 27 partners, primarily local

butchers, have been trained in NRCP and post the training have reported that they are now able to get 1.5 kgs extra meat per pig due to the training. NRCP has limited infrastructure and capacity for residential training but has indicated its willingness to conduct on-site training.

### **Central Institute of Fishery Education (CIFE), Kolkata:**

MIE had facilitated the training of 40 partners of SWKH in the CIFE, Kolkata.

# Central Institute of Fisheries Technology (CIFT), Vishakhapatnam and State Institute of Fisheries Technology (SIFT), Kakinada:

Responding to a request from the BDU, West Jaintia Hills, the MIE had initiated a tie up with the CIFT and the SIFT through the facilitation of ILRT for training of 25 smoked fish entrepreneurs and 4 officials of WJH in advanced low cost and hygienic preparation of smoked fish. Post the training a follow up program was facilitated by MIE in collaboration with the DRDA and BDU, WJH, in which scientists from CIFT participated and gifted various processing and fishing equipment to the partners. In addition the MIE also arranged for a specific training for the partners in Food Safety and Hygiene in the Indian Institute of Hotel Management (IIHM), Shillong to complete their exposure.

### **Indian Institute of Hotel Management (IIHM), Shillong:**

In order to address the issues of food safety of smoked fish and spoilage of milk reported by the Dairy Cooperative Societies, the MIE had tied up with the IIHM, Shillong, to impart training to partners in these 2 sectors. While 23 partners were trained in Food safety & hygiene, 11 partners were trained in the making of sweets, ice cream, butter and other dairy by products. Further trainings on food processing are also planned.

### **Regional Rural Training Institute (RRTC), Umran:**

The MIE in collaboration with the Department of Commerce & Industries and AFC India had partnered with the RRTC, Umran, to train traditional beekeepers in scientific beekeeping and earthen hives. A total of 2224 beekeepers have been trained by the RRTC and AFC India.

### **State Rural Employment Society (SRES):**

The SRES had partnered with the MIE in facilitating the training of piggery entrepreneurs through mobilization of interested VEC members. Trainings were conducted by MIE in collaboration with the SIRD and a total of 229 partners have been trained through this partnership.

### **Vocational Training Centers (VTCs), Kyrdemkulai and Rongkhon:**

Under a partnership with the AH&Vety Department, the MIE had facilitated the roll out of 10 days training each of 718 partners in VTC, Kyrdemkulai and 266 partners in VTC, Rongkhon in piggery, dairy and poultry enterprises. The training content of the VTCs has been modified to incorporate elements of book keeping, insurance and bank linkages in order to impart the enterprise management skill to the partners.

### **Veterinary Field Assistant Training Institute (VFA), Kyrdemkulai:**

MIE has also partnered with the VFA training institute, Kyrdemkulai to train 23 livestock Master Trainers drawn from the CLFs and shortlisted by the VTCs. These Master trainers were further trained by the NRCP and are now imparting trainings to partners in the Center of Learning Knowledge and Services (COLKS), Mylliem and Mawlai.

### Center of Learning Knowledge and Services (COLKS), Mawlai & Mylliem:

MIE has partnered with the COLKS, an institute founded by a group of entrepreneurs of the Mylliem EFC, who have established the institute from their own funds to provide an environment for capacity building and training in the field of Apiculture, Livestock and non-farm activities. A total of 153 livestock partners and 519 apiculture partners have been trained at COLKS by resource parsons drawn from departments, private entrepreneurs and in house resources.

### **Food Safety and Standards Authority of India (FSSAI):**

MIE had partnered with the FSSAI, Shillong, to impart training on food safety and standards especially to partners dealing with food products. The initial engagements with FSSAI has been in training of livestock partners at COLKS with the association expected to stretch further to cover all other food products.

### **State Institute for Rural Development (SIRD):**

MIE has a partnership with SIRD in which VEC members selected by the SRES for taking up piggery related activities were trained by the MIE and SIRD. SIRD also has facilitated the roll out of the Diploma in Entrepreneurship and Business Management (DEBM), a one year course of the Entrepreneurship Development Institute of India (EDII), Ahmedabad, for 69 ERPs of the IBDLP.

### **State Poverty Eradication Mission (SPEM), Kudumbashree:**

MIE has partnered with the NRO of the SPEM for exposure of its functionaries and officials to the Kudumbashree initiative. With the facilitation of the ILRT, 20 ERPs were taken for exposure and training to Kudumbashree and subsequently 8 Nodal Officers and 13 LIFCOM officials were trained and exposed to the Kudumbashree initiative.

### **NIRD-NERC and IIE. Guwahati:**

MIE had entered into agreements with the NIRD-NERC and the Indian Institute of Entrepreneurship (IIE) for training and capacity building of partners and officials. Trainings are to start in 2016.

### **Meghalaya State Skills Development Society (MSSDS):**

MIE is partnering with the MSSDS for enabling the skilling of its partners who are interested in self employment under the Skills Challenge Find (SCF). A list of 159 partners have been forwarded to the MSSDS for taking up their training but is yet to take off as the Phase – II of the MSSDS is yet to be activated. The MIE is also in the process of screening those partners interested in wage employment to route them through the Phase –I of the MSSDS project.

### **Meghalaya State Rural Livelihoods Society (MSRLS):**

In response to a request of the MSRLS, MIE had screened and forwarded the profiles of 66 partners across various sectors for linking and training them under the RSETIs of the MSRLS. Feedback is awaited from MSRLS.

## **GOOD GOVERNANCE THROUGH "CONVERGENCE"**

The IBDLP Programme focuses extensively on building multiple institutions at the interface of citizens and government across the areas of (i) economic development (via a focus on entrepreneurship and small-scale enterprise), (ii) natural resource management (via a focus on community-led conservation and restoration projects), and (iii) governance (via a focus on managing stakeholder relations through dialogue between the traditional community institutions of Meghalaya, individual citizens, and state and district-level government representatives).

In order to operationalise its vision and objectives across multiple cross-cutting sectors, IBDLP uses the key strategy of "Convergence." As explained in the earlier section, convergence is the effort to bring together different stakeholders of the same issue — whether government departments, funding agencies, civil society, or rural community partners — and facilitate specific ways in which convergence of objectives, schemes, funds, and ideas can occur. This is facilitated by IBDLP's institutional structure comprising representatives from all government departments in the state, and by IBDLP being embedded within district level structures as well.

### CONCEPTUALISING DIFFERENT TYPES OF CONVERGENCE

Convergence can be practically conceptualised in diverse ways, and can depend upon the issue and the relevant government departments and schemes. The following provides a quick look at the different ways in which actual existing government schemes can be converged around a cross-cutting project:

**Inter-departmental Convergence:** Convergence of programmes across ministries e.g.: MGNREGS of MoRD and programmes of Ministry of Water Resources

**Intra-departmental Convergence:** Convergence of schemes within the same ministry e.g. MGNREGS and SGSY, MGNREGS and IWDP, IWMP etc

**Functional/thematic convergence:** Convergence of similar works under different schemes e.g.: watershed/wasteland development under different schemes like NWDPRA, MGNREGS, IWDP, IWMP, JFM, WDPSCA, etc

**Institutional/ schematic convergence:** Project specific convergence of different departments working toward achieving the same objective e.g. department of fisheries and department of Tourism working together for establishing fish sanctuaries, Eco-tourism with Forests and Environment, Soil and Water Conservation, etc.

**Financial convergence:** Convergence of different financial institutions and schemes joining hands together for financing a sector or mission. E.g.: financial assistance under various schemes like RIDF of NABARD, schemes of DoNER ministry, BRGF, NEC, IWDP, IWMP, WDPSCA, NWDPRA, AIBP, RRR, etc.

**Technology convergence:** Convergence of sector-specific technologies from different technological institutions e.g.: Sourcing and inducting technologies related to water treatment from various institutions, and facilitating context-relevant adoption by farmers.

### **EXAMPLE OF CONVERGENCE IN THE WATER RESOURCES SECTOR**

Since water resources and integrated water resource management is one of the core mission areas for IBDLP – being reflected in its very name "Basin" – the water sector provides a number of examples of how convergence can be conceptualized across different departments that typically work in isolation.

Convergence within water sector occurs in the following departments and domains:

Department of Water Resources - conservation and expansion of water bodies in the state, water harvesting structures.

Department of Agriculture - expansion of irrigated agriculture, efficient use of irrigation water for integrated farming.

Department of Horticulture - poly houses and water saving irrigation devices.

**Department of Fisheries** - expansion of area under pisciculture at individual and community level, construction of fish ponds.

Department of Public Health Engineering - supply of safe drinking water.

Health and sanitation - control of water borne diseases, waste management and disposal, plastic free zones, testing quality of water.

Department of Tourism - promotion of aqua-tourism, water sports, fish sanctuaries.

Department of Soil and Water Conservation - construction of water bodies for multipurpose uses, rainwater harvesting, watershed development.

Department of Forestry - afforestation to ensure better catchment areas for rainwater conservation.

Directorate of Non-conventional Energy - Mini-hydel projects for renewable energy.

### MISSIONS FOR SECTOR-SPECIFIC CONVERGENCE

One of the biggest ways in which IBDLP carries out its mission of departmental convergence of programmes and policies toward sustainable development, is through cross-sector "Missions"; mission mode projects that involve extensive collaboration between government departments and the institutions of IBDLP. These Missions are sector-specific, and involve integrated activities with specified, precise targets to be achieved within specified deadlines.

Thus far, 9 Missions have been launched: 1) apiculture; 2) aquaculture; 3) forestry and plantation crops; 4) horticulture; 5) livestock; 6) rural energy; 7) sericulture; 8) tourism; and 9) water. The role of IBDLP is to guide the overall strategy for these missions, help create a knowledge base for effective implementation, and ensure coverage and participation of target communities; these functions are enabled via MIG, MIE, and MINR. While direct implementation of the Missions is done by a lead government department and its extension officials, IBDLP supports the department by creating a facilitating institutional framework for the Mission's operations.

In addition to these 9 targeted missions, there are 2 other missions which are broader in scope - Mission Organic and Mission Green. Mission Organic builds on the negligible use of chemical fertilizers and pesticides by local farmers and the potential for exploiting a niche high end market for organically grown produce. It involves farmers groups, crop and area specific approaches, bio mass production, input support including appropriate bio agents, soil regeneration, water conservation and value addition. Action research such as field trials for Bio Fertilizers (PSB) and Bio Pesticide (Trichoderma) are also a part of Mission Organic.

The objectives of Mission Green on the other hand are enhancing sustainable green cover, catchment protection, adoption of green technologies, building up of green movement engaging green ambassadors and encouraging clean and green villages. The key initiatives under Mission Green Community Nurseries and Seed Banks, which are both implemented in "Social Enterprise" mode in partnership with communities. The lead for these initiatives are taken by experts and field teams within MBDA itself, and details are provided in a subsequent section on Natural Resource Management within IBDLP.

### INTERVIEW WITH MRS. M. B. ROY. DIRECTOR OF COMMERCE & INDUSTRIES

Apiculture is one of the sectors in Meghalaya that has tremendous potential for ecologically sustainable and economically inclusive growth. What might be the top 3 factors that the state should focus on to drive development in this sector?

The top three factors that the state should focus on to drive development in Meghalaya's Apiculture sector is a) Marketing, b) Aggregation and supply chain logistics c) Awareness and capacity building of entrepreneurs in the Apiculture value chain

A key idea behind the Apiculture Mission was to support convergence across Industries Department, IBDLP and other stakeholders in this sector. Can you give us some examples of such convergence?

Yes the Department of commerce and Industry has converged in various fields with MIE & IBDLP to support bee keepers of the state we have undertaken various awareness building, skill up-gradation of entrepreneurs, we have provided training on manufacturing of bee boxes and various bee keeping equipments in convergent mode with MIE, we have also tied up with IIP (Indian Institute of Packaging) Kolkata and Mumbai and have sent 30 officials to be trained on various packaging solutions.

In the future, we will be tying up with SFURTI and the National Bee Board, and along with MBDA & MIE, we will look at various marketing & value chain solutions. We will also tie up with the Forest Department to enhance bee flora through social forestry and management of Natural Resources.

What has been your experience when engaging with beekeeping entrepreneurs? What are some of the demands they have expressed and how is the Apiculture Mission supporting these entrepreneurs?

My experience while engaging with the beekeeping community has been highly positive. With the introduction of scientific bee keeping, entrepreneurs' demands are mainly centered around accessing bee boxes and bee keeping equipment. Also now that awareness has been created through our training programmes, the next step is to upgrade things such as food safe containers for honey, and providing bee keepers with better access to bigger markets. Entrepreneurs who are more advanced along the value chain are in need of training on scientific methods of processing honey and also packaging. The Mission is providing these services as well.

Apiculture has been a long neglected sector in Meghalaya. With coming of the Mission we are beginning to tap the tremendous economic potential of this sector. The Mission's idea is to communicate the livelihood possibilities in this sector, catalyse entrepreneurship in this sector, and provide skills with basic bee keeping equipment to bee keepers so that they can start off mini enterprises. The condition being that they take up further expansion of their enterprises on their own. However, to expand their enterprises entrepreneurs require access to markets, finance and technology. To meet these requirements and scale up Apiculture enterprises, the Apiculture Mission is working in collaboration with IBDLP.

What is the role of the Department of Commerce & Industries Centers?

Our DCI (Department of Commerce & Industries) Centers are based at all the district headquarters of the state. There we have many functional Managers and Industrial Promotion Officers (IPOs) who go to various villages to create first level

awareness on sector specific issues and communicate the economic opportunities in Apiculture and other sectors.

Apiculture is a good example of a state government department working hand in hand with IBDLP, primarily through the Meghalaya Institute of Entrepreneurship (MIE). How did these different institutions come together to drive the Apiculture Mission forward?

Well, initially we had a meeting with all the DCI officials and General Managers from various districts to get their feedback on whether Apiculture would be a good livelihood activity for our community partners to pursue. Once a SWOT (strengths, weaknesses, opportunities and threats) analysis of the mission was completed, the Department of Commerce and Industries under the Apiculture Scheme of the Planning Department took the mandate forward with MIE, since Apiculture is one of the main missions of IBDLP. Till date the Department along with MIE has trained over 3,000 bee entrepreneurs since the mission launch on the 16th of October, 2014.

The growth of the Apiculture sector is also leading to growth of enterprises in auxiliary sectors such as manufacture of bee boxes and other bee keeping equipment. How is DCI helping in facilitating these industries?

One example is that we have training centers in almost all districts at which we are training youths in carpentry and wood work. At our district level training sessions that are facilitated by the DCI Centers we teach the carpentry trainees how to make bee boxes and tap into the demand generated by the growing numbers of bee keepers.



### **SUCCESS UNDER THE MISSION MODE APPROACH**

Within a short while of launching sector-specific convergence initiatives in 'Mission Mode' successes are already becoming apparent, particularly in areas of Water Resources. Fisheries and Apiculture. In fisheries for instance, through the Aquaculture Mission, Meghalaya is well on its way to becoming self sufficient in fish production. During the last three years, 18323 fish ponds have come into existence, far more than what was achieved since the creation of the State upto 2012. Similarly, in Water Resources, the increase in irrigation coverage under the State Water Resources Mission in the last three years has been more than the coverage in the first forty years of Statehood. Under the Apiculture Mission, 1600 bee keepers have already been trained. Additionally, 129 master bee keepers and 20 local carpenters have been identified and trained. A further 5000 bee hives are being distributed in the current period. The first honey harvests shall begin and a significant increase is projected for the next harvest season.





### TOTAL: 35,771 entrepreneurs impacted via training & handholding



550 farmers impacted 26.76 hectures covered over 11 districts 1.5 lakh temperate truit plants raised

24,000 farmers and fish-entrepreneurs impacted





- 1,366 entreprenours impacted
- 169 Dairy entrepreneurs
   191 Poultry entrepreneurs
   22 Goatery entrepreneurs
- 984 Piggery entrepreneurs

Trainings were conducted by the Vocational Training Centres (VTCs) of Kyrdemkulai / Rongkhon, VFA Kyrdemkulai, SIRD, COLKS, AAU, Khanapara, NRC-Pig. Rani,



Youth have been placed in hotels and companies in cities such as Bangalore, Delhi, Kolkata, Chennai, Goa, Ahmedabad, Coimbatore, Guwahati and Shillong 7 Home Stays and 1 Resort are being supported for setup Village getaways and Eco Tourism projects are being taken up





- ,400 entrepreneurs and traditional weavers impacted:
- a. 1100 sericulture entrepreneurs

frainings conducted at CSTRI, Bangalore, RSTRS, Khanapara and NIFT, Shillong

2 Tissue Culture Laboratories established for mass propagation of planting material

62 Community-led Nurseries across every district established;

- . Nurseries operationalised as "Social Enterprises" with both ecological impact and livelihood impact at the community level via careful local species selection Collaboration between Bio Resources Development Centre (BRDC) and NBRI to promoting local livelihoods based on local bio-resource development. Collaboration between BRDC and CIMAP for action research on medicinal plants

traditional medicines, and finked fivelihoods as well as preservation/propagation of medicinal plant species.





3,793 beekeepers trained in modern apiculture

(Training includes both Skill Upgradation and Master Beekeeping training at RRTC

2,000 traditional apiculture households mapped

(Survey of beekeeping households conducted in East Khasi Hills, Ri Bhoi and West Jaintia Hills; Garo hills to start from April 2016)

(To enable successful "Honey Clusters", community level training is being undertaken with support of Master Beekeepers. Pilot has been successfully completed at Khatarshnong village, second phase will cover further community clusters)

# **Missions under IBDLP**



















# **MISSION GREEN**

# GREEN ENTERPRISES FOR A GREEN ECONOMY

"Mission Green" is a key intervention strategy being implemented in all the 39 Blocks of the state toward sustainable development and natural resource management (NRM). In brief, the Mission Green initiative is to promote protection of catchments forests and create awareness about the need to conserve natural resources through behavioural change. It intends to do so by empowering village communities to sustain the soil cover and greenery required for protection and conservation of water and land resources while at the same time creating opportunities to address basic and livelihood needs.

The Mission Green Campaign focuses on the following areas:

- Greening Catchment Areas
- Promoting Clean/Green Villages
- Water Management.
- Green technologies

A key initiative by MBDA under Mission Green is the creation of "Community Nurseries" at the village level through the involvement of the village level groups such as Cluster Level Federation (CLFs), Co-operative Societies, SHGs, VECs, NRM Groups, JFMCs, Water Shed Committees etc. As will be detailed in the next section, this initiative is designed with the aim of ensuring ownership of the operation by communities themselves, and long-term sustenance of nurseries by communities by linking the nurseries to livelihoods.

## **COMMUNITY NURSERIES**

While conservation and protection of forests is a core part of Meghalaya's culture and tradition and the extent of forest cover is well above the national average, an emerging trend of reducing 'green cover' is being noticed. This is due to indiscriminate felling of trees and other plant species in community forests, private forests, reserves as well as severe destruction of 'green cover' along roads and catchments. Given IBDLP's guiding values, this reduction of green cover led to the realization that Community Nurseries - a means by which the demand for certain plant saplings could be addressed without necessitating deforestation – were necessary. The concept of nurseries already exists; Forest Nurseries are usually undertaken by the Social Forestry Division. However, lack of manpower, resources and funding constraints often hamper progress of activities. Thus a different model was sought for nurseries, which would allow them to be successful in the long run.



### THE SOCIAL ENTERPRISE MODEL

Community Nurseries, i.e. nurseries owned and operated by communities or community-based organizations (CBOs) in a participatory mode with the government was thus conceptualized as a possible solution to these challenges. It was planned that communities would be trained at the Cluster, Block or District Level for establishing these nurseries with technical help from concerned Line Departments and NGOs. The latter could also provide economically viable plant saplings of various species that can be easily propagated by communities/CBOs.

In addition to being community-led, these nurseries were also conceptualized as a "social enterprise". Thus under this initiative, economically viable species – including cane and bamboo – were taken to be key nursery plants. MINR also held discussions with appropriate line departments so that these departments could buy saplings from these communities for their afforestation and catchment area development activities.

An enterprise approach meant that these nurseries would support diversification of livelihood opportunities while providing a strong incentive to communities for long term environmental conservation.







### **COMMUNITY STAKEHOLDERS**

To begin with, implementation by existing and well functioning CBOs such as Cluster Level Federations (CLFs), SHGs, JFMCs, NRM Groups, Water Shed Committees, Co-operative Societies, VECs are being supported, with traditional institutions playing a vital role as guarantors of the social agreement with the CBO. Further, local individuals who are already engaged in nursery types of activities and are willing to partner with MBDA are also being motivated to participate in the role of a registered volunteer. Their role is to train CBOs and monitor field activities as assigned by MBDA; compensation for this contribution is taken up separately by MBDA.

As selection of CBOs with capacity to undertake social enterprises is vital to the success of this model for nurseries, two procedures are being used for selection of partnering CBOs from amongst those who meet the pre-selection criteria. Advertisements are being issued for wide dissemination.





### PROCEDURE FOR SELECTION OF COMMUNITY STAKEHOLDERS

### **Procedure 1: CBOs with ratings**

Certain CBOs have been rated by different agencies. CBOs rated by IIBM (CLFs), NABARD (SHGs), Soil & Water Conservation (WSCs), Forest Department (JFMCs), C & R D (VECs), RCS (Co-operative Societies) which meet defined grading benchmarks and meet pre-selection criteria shall be automatically eligible.

### Procedure 2: New CBOs/CBOs without ratings/CBOs with ratings less than the grading benchmark

### Step 1: Short listing of CBOs

Workshops are held by BDUs where CBOs interested in participating are oriented about the project and its implementation requirements. The workshop also helps analyze the capacity gaps of prospective partners. The workshops also discuss the evaluation and grading criteria for selection of the CBOs. A team from MBDA then collects relevant information about existing and functioning CBOs and shortlists a few.

### The criteria for short-listing include:

- Previous track record or assessment record, if any;
- Self-assessment checklist;
- o Feedback from the local administration;
- o Feedback from bankers, NABARD, Registrar of Co-op Societies, Director of C & RD etc.
- o Reports on the credibility whether blacklisted by Government etc.
- Capacity to invest own resources in partnership with MBDA.

### Step 2: Grading

The short-listed CBOs are then visited by the selection team and evaluated based on the criteria developed during the workshop. Each criterion would be given a predetermined score. Total scores in the grading system would be 100.

(Availability of land for nursery and for plantation in catchment area of at least 40% of the plants is an essential prerequisite for selection).

### Step 3: Selection

The grading process is clearly documented and a report submitted to the PMU at MBDA by the selection team. An MOU is then signed between the PMU and the functionaries of the selected CBO, with the Headman and Secretary of the village acting as guarantor for project implementation. This MOU clearly documents the role and responsibility of the CBOs as well as those of MBDA.

### **IMPLEMENTATION DETAILS**

Of the plants grown in the Community Nurseries, up to 60% of saplings may be sold for profit but at least 40% are to be used for greening catchment areas. For every sapling sold by the CBO Re. 1/-will be paid to MBDA which MBDA will place in a revolving fund.

The nursery is expected to only raise seedlings of indigenous species which occur naturally in the area or are naturalized plant species. A mix of species should be planted covering commercially important timber species, tree species for other income generating activities such as sericulture etc., fruit trees, bamboo and ornamental trees. MBDA/ BDU staff will work with the selected CBOs to arrive at an ideal mix.

### **Incentive Structure**

The Partnering CBO must initially identify two Catchment Areas under their area of operations for greening. They are held responsible for maintaining this Catchment Area for a period of 3 years from the last date of planting of saplings. These areas must be capable of supporting at least 10,000 saplings. An incentive of Rs. 50 per sapling will be given to the CBO maintaining the Catchment Area. However, the payment will be made only at the end of the 3 year period and after evaluation of the health of these plants by a Task Force that comprises members of the given CBOs and which is headed by an officer from MBDA. An additional incentive of Rs. 60 per sapling will be given after 6 years of planting for every surviving plant.

### **Training and additional incentives**

CBOs with expertise/experience can earn additional income by becoming training partners. Those CBOs which start providing training to other CBOs are entitled to charge training fees including rent for hall, resource fees, food and lodging etc. Of the amount collected through training, the trainer CBO will be required to pay MBDA Rs. 500 per day of training conducted. This would also be put in a revolving fund maintained by MBDA.

### **Hand Holding Support**

MBDA has engaged Programme Coordinators to handhold communities/CBOs through the process of implementation. They shall be the first point of contact for all assistance.

### **PARTICIPATING COMMUNITIES**

DISTRICT		PHASE I*				GRAND TOTAL		
	Block	CLF	Block	CLF	NaRMG	JFMC	WSC	
E.Jaintia Hills	Khliehriat-1	1		0	0	0	0	1
W.Jaintia Hills	Laskein-6	6	Thadlaskein-2	0	0	0	2	8
E. Khasi Hills	Laitkroh-2 Pynursla-2	4	Mawsynram-2 Mawkynrew-1	1	0	2	0	7
W.Khasi Hills		0	Mawthadraishan-3 Mairang-5 Nongstoin-1 Mawshynrut-1	0	7	2	1	10
S.W Khasi Hills		0	Mawkyrwat-2	0	2	2	1	5
RiBhoi	Umsning-3 Jirang-1	4	Umsning-2 Umling-1 Jirang-1	1	0	2	1	8
Sub Total K,J & RB		15		2	9	8	5	39
E.Garo Hills	Songsak-2 Samanda-2	4	Rongjeng-1	0	0	0	1	5
W.Garo Hills		0	Salsela-1 Rongram-2 Gambegre-3	0	4	1	1	6
S.W.Garo Hills		0	Betasing-5	0	4	1	0	5
S.Garo Hills	Chokpot-1 Gasupara-4	5	Baghmara-2	0	0	1	1	7
Sub Total Garo Hills		9		0	8	3	3	23
Grand Total		24		2	17	11	8	62

<sup>\*</sup> Phase (1): Well-rated Cluster Level Federations (CLFs) under the erstwhile MRDS programme were considered as partners for Community Nurseries

## **COMMUNITY SEED BANKS**

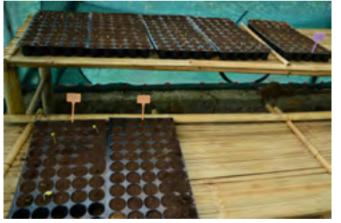
Seed banks are a facility where seeds of indigenous food crops or those of rare species of a region are stored so that they can be used in the future to protect biodiversity of that region. Meghalaya has a large variety of indigenous food crops but many of these varieties are being lost as easily available hybrid seeds are being used by farmers instead. Toward mitigating this loss and reviving the farming of indigenous crops, MBDA is partnering with ANNADANA Soil and Seeds Saver Network.

This unique intervention is being implemented through the Cluster Level Federation (CLF) that exists at the Cluster level. As with Community Nurseries, this too is being implemented via a Social Enterprise approach.

An example of a successful Seed Bank is in Khweng, in the Umsning Block of Ri-Bhoi District. Here the Lamjingshai Cluster Level Federation (started in 2008) has decided to take up the Seed Bank initiative in Enterprise Mode. This CLF comprises 21 SHGS spread over 6 villages, with a total of 204 members – primarily women. Here a 1 Acre land has been selected by the CLF and dedicated for Seed Bank purposes. Initial training has included a variety of composting methods, seed sowing and transplanting methods, as well as knowledge

sharing over traditional and modern methods of pest management and fertilizer use. Since starting initiative in 2015, about 26 indigenous seed varieties have been collected and are being grown.









<sup>\*\*</sup> Phase (2): Other than CLFs, CBOs such as JFMCs, WCs, NaRMGs as recommended by the nodal line Department/ Organisation were also considered and selected for partnership

<sup>\*\*\*</sup> In almost all cases, 1st and 2nd instalment of Rs. 30,000/- and 60,000/- has been paid (3rd instalment to be paid to community partners pending next phase of performance assessment).

### **PARTICIPATING COMMUNITIES**

Climatic Zone	Name of CLF	No. of seeds collected from the CLF	Crops grown on the 1st cycle	Crops grown on the 2nd cycle
Temperate Zone	LumlyngkienSohphie CLF, 2011 lewrynghep , Mawkynrew Block East Khasi Hills District	20		
	Pynroi Village: Mowkyndeng, Block:Laskein District: West Jaintia Hills	18	15	5
	Ryntihlang Village:Cham Cham, Block: Khliehriat District: East Jaintia	20	17	
Sub Tropical Zone	Lamijingshai CLF, 2008 Khweng, Umsning Block RiBhol District	26	15	10
	Jirang Area Servicing Village: Jirang Block: New Jirang District: Ri-Bhol	26		
	Balgito Village: Chichotcheng, Block: Resubelpara District: North Garo Hills	20	10	
Tropical Zone	Nengmandalgre Village: Nengmandalgre, Block: Samanda District: East GaroHills	10	18	7
	WegaraKucholsan Village: Panda,Block: Rongara District South Garo Hills	20		•







### INTERVIEW WITH BAREFOOT ENVIRONMENT EDUCATOR (BEE)

(Translated and edited by the Knowledge Management Unit MBDA)

In a bid to help protect the environment, Barefoot Environment Educators or BEEs were formed through-out the state of Meghalaya, they are volunteers who work with the state machinery to help spread awareness on environmental conservation and educate people on the importance of preserving nature around them. They also help track and prevent unlawful activities such as illegal felling of timber or unlawful mining, by reporting them to the village council and the concerned authorities.

The Knowledge Management Unit of MBDA sat down with one such BEE in Wah Shari, Sohra for a conversation:

Q1. What is your name? How long have you been a barefoot environment educator (BEE) for?

My name is Pynskhembor Kharmih, and I have been a BEE for close to five years now.

Q2. What is it that motivated you to become a BEE?

Well, love for nature and planting trees and plants is something that has been inculcated in me from my parents and grandparents, so when the opportunity came to be able to be a volunteer for the government to help protect nature, I was only too keen to participate. I feel that by becoming a BEE I am able to contribute to the society in my own small way.

Q3. How many BEE members are there? What is your role as a BEE?

At present, there are 10 BEE members in the region. We check to see if anyone is engaging in illegal activities like felling of trees, illegal mining etc., we try to prevent these illegal activities from happening and if we cannot prevent these activities for any reason, we report it to the Headman who then takes action accordingly.

Q4. Have you encountered any kind of resistance while trying to perform your duty as a BEE?

Not generally, because we are of the same community so most community members do not hinder or oppose our work as BEEs.

Q5.What knowledge have you gained since you have started taking care of this stream Wah-Shari?

Personally, I have gained a lot., We now realise the importance of not only the water source but also of the surrounding areas around it- the whole catchment area, we realise the importance of protecting and preserving perennial water sources.

We have also been able to help the community, by making the washing platform for washing clothes, the water we drink has become a lot cleaner because of our filtering process and we (the community) have also been able to generate income out of the wah now by selling drinking water @ Rs 100 per 1000 litres and also our bathroom also generates income, we charge Rs 10 per person.

### Q6. How do you feel as a BEE being chosen to look after the Wah Shari?

I feel privileged and proud that we have been entrusted with the responsibility of looking after the wah (stream) Now that we have fenced this dam, there is a constant flow of water and the whole community is benefiting from it otherwise it would have been a different story. The stream might have stopped flowing or it might have be diverted and used by individuals for his their own benefit and might not be like how it is now where everyone is benefiting from it.

Q7. As you have said, one of the reasons you wanted to be a BEE is because you were taught by your parents to love and take care of the environment. So do you inculcate the same values in children in your community?

Like my grandfather use to say, love for nature should be nurtured at home, so I teach my own kids the importance of our Mei Ramew (Mother Nature). We BEEs do try constantly to help the young members of our community to understand the importance of the nature around us, enjoy it, and take care of it for future generations.



# KEY INSTITUTIONS OF IBDLP

As discussed in the overview of IBDLP's institutional structure, the implementation of IBDLP as carried out by the Meghalaya Basin Development Authority (MBDA - the nodal implementing agency for IBDLP) comprises three thrust areas - enterprise, natural resource management, and governance. While IBDLP addresses these areas in a convergent manner, for better coordination yet more flexibility, each area has evolved into a separate institution for research and action:

- Meghalaya Institute for Entrepreneurship (MIE)
- Meghalaya Institute for Natural Resources (MINR)
- Meghalaya Institute for Governance (MIG)

These three institutions design convergence projects, build and disseminate issue or sector-specific knowledge, coordinate activities with civil society partners, mobilize and train community partners, and conduct joint workshops or initiatives with government representatives and communities. Further, MIE and MINR also support Basin Development Units (BDUs) and government line departments implement the Missions.

Together, MIE, MINR and MIG help build an extensive knowledge-base that can be used by policy makers and practitioners, build capacity of stakeholders to take action within the sustainable development framework, and gradually establish working relationships between village-level, district- and block-level, and state-level institutions ""





# MEGHALAYA INSTITUTE FOR ENTREPRENEURSHIP (MIE)

Inclusive growth through the promotion of natural resource based sustainable micro enterprises is seen as a definitive growth driver for the state and is one of the hallmarks of the Integrated Basin Development and Livelihood Promotion Programme (IBDLP) which is anchored on the four key pillars of Knowledge Management, Enterprise Development, Good Governance and Natural Resource Management. A paradigm shift in thinking and strategy on development is sought to be brought about under the programme by moving away from a beneficiary oriented model to an enterprise promotion model. The belief is that citizens of the state can become successful entrepreneurs through the creation of a conducive eco system for enterprise building involving a systematic engagement of Government and its various agencies with existing and aspiring entrepreneurs of the state, providing for skill building and technology up gradation, access to finance, access to markets and development of value chains.

Meghalaya has redefined entrepreneurship by choosing to view every individual of the state who produces anything for the market as an entrepreneur and has taken the bold step of kick starting the promotion of enterprises and entrepreneurs through the establishment of Entrepreneurship Facilitation Centers (EFC) in all the blocks of the state to inspire, motivate, build and catalyze enterprises across the eleven sectors under which missions have been launched - Aquaculture, Apiculture, Sericulture and Weaving, Horticulture, Forestry and plantation Crops, Livestock, Tourism, Water, Renewable Energy along with Agriculture (Farm and Non-farm) and services sectors.

Under the IBDLP and to this end, the Meghalaya Institute of Entrepreneurship (MIE) was set up to facilitate rapid economic transformation through a focus on knowledge and action for entrepreneurship development, promotion of micro and small enterprise by women, youth, and rural farmers, and fostering of an attitude of entrepreneurship, initiative and self-reliance within communities across the state.



### **OBJECTIVES OF MIE**

- To create awareness among various target groups on entrepreneurship opportunities.
- To organize vocational training for skills up-gradation including establishment of vocation
- To lead vocational training interventions toward the above objective, including taking the lead to conceptualise and establish vocational training centres;
- To encourage and facilitate the setting up of enterprises by individuals through appropriate training, capacity building, behavioral motivation, managerial competencies, selective technical skilling and assist in scaling up of such enterprises through exposure, financial and market linkages with particular focus on first generation entrepreneurs.
- To support unemployed urban and rural youth develop market relevant skills for self employment, and for greater participation in a sustainable development economy.
- To motivate and facilitate individual entrepreneurs but also, SHGs, CLFs, Cooperative Societies, FPOs, and Producer Companies
- To map the business potent ial and opportunities of the state within a sustainable framework.
- Provide knowledge support to line departments, development agencies and individuals through the encouragement and promotion of research & special studies on various aspects of entrepreneurship for small & medium enterprises, market surveys, potentiality surveys, technical feasibility, value chain studies and economic viability studies.
- To develop resource maps of Meghalaya and other client States for guidance and reference by aspiring entrepreneurs.
- Provide backend support to line departments, development agencies and entrepreneurs through leveraging help/support and affiliations with institutions/organizations in carrying out training and other entrepreneurship development related activities.
- To provide vital information and backend support to trainers, promoters and entrepreneurs by organizing research and documentation relevant to entrepreneurship development.
- To provide regional / national/ international forums for interaction and exchange of experiences helpful for policy formulation and modification at various levels.
- To create more awareness around entrepreneurship as a livelihood pathway, and integrate entrepreneurship education into schools and colleges in the state;
- To serve as an apex level regional resource institute for accelerating the process of entrepreneurship development in Meghalaya and throughout the North East.



### **ENTERPRISE FACILITATION CENTRES (EFC)**

The MIE works through the Enterprise Facilitation Centres (EFCs) which are cornerstone institutions under IBDLP, set up in every block for supporting entrepreneurship development around natural resources and agri-livelihoods. These centres are single window agencies that along with partner institutions endeavour to link community members to sustained motivation, skill development, enterprise incubation, financial assistance, supply chain linkage schemes under various government departments, market access and gap management. By establishing this convergence platform, IBDLP maximises the outreach and impact of existing and upcoming state interventions.

The EFC model is based on the following basic principle/ belief/ premise – that it is possible to promote Entrepreneurship by creating an enabling eco system for Entrepreneurship to bud, blossom and thrive. An additional strength of the model is its focus on entrepreneurs. The model identifies the needs of individual entrepreneurs and matches them with the resources they need to be successful. To this end the government / Meghalaya Basin Development Authority (MBDA) / Basin Development Units (BDU) / EFCs right down to the block level have been capacitated and oriented to strive to create such an eco system.

39 EFCs have now been established in all the block HQs of the state and are functioning as the front end of the IBDLP at the grass roots. The EFCs act as an entrepreneur-sensitive public interface for providing structured communication / guidance about Entrepreneurship and IBDLP initially and will then hand hold the entrepreneurs over a period of time through capacity building, training, exposure visits and linking them with the various missions, departments, value chains and markets.



EFCs are envisaged as focal points for all activities under the IBDLP and are manned by two Enterprise Resource Persons (ERPs), who are responsible for mobilizing, inspiring and motivating people to become stakeholders in the Basin Development Programme. These ERPs are further strengthened by empanelled local NGO personnel operating at the cluster level and by IVDP and Green volunteers at the village level. Till date a total of 1.2 lakh partners have interacted with the IBDLP through these EFCs under various sectors and for various interventions ranging from access to finance, training, capacity building and preparation of business plans.

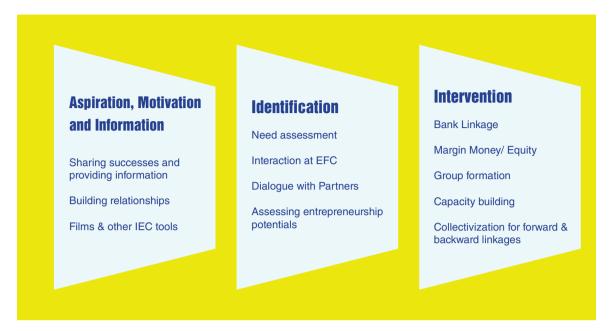
The EFC being the hub of all activity are equipped with all the facilities and aids to ensure effective communication with all citizens. One room at the EFC is dedicated for showing motivating films and documentaries of success stories made by the Knowledge Management Division of the MBDA; the second room is designated for one-to-one interaction between the Enterprise Resource Persons (ERPs) and citizens. Since the EFCs' launch, a total of 1,29,000 community members have visited the EFCs out of which 1, 01,230 have engaged in one-on-one interaction with the Enterprise Resource Persons (ERPs) and are registered under the program.

The partners' socioeconomic profile (including their livelihood profile, bank linkage details, and educational qualification) is recorded. A psychological assessment using appropriate assessment tools helps determine their entrepreneurial drive. This data along with their proposed idea is used to assess a partner's 'entrepreneurial value', and categorise them into four priority lists. These priority categories are expected to make the process of extending financial and other support to partners more efficient within the framework of the IBDLP. Thus Priority 1 partners are to receive immediate assistance, Priority 2 partners in 3 months, Priority 3 partners in approximately 6 months and Priority 4 partners above 6 months.

Currently, post the assessment of the partners and approval of their proposals, the next step generally involves providing them with the necessary support. Three types of assistance – training / capacity building, exposure visits and bank linkages - are provided. Training initiatives are aimed at upgrading skills to enable partners to undertake more profitable activities. Exposure visits to other locations where such livelihood activities have been successful are organised for partners. Support for bank linkage is through helping meet documentation requirements, dialogue with banks and leveraging of a margin money support scheme for women entrepreneurs. Additionally, departments provide various benefits under their respective programmes. For example, a farmer requesting livestock seed and feed could be provided those by the Department of Animal Husbandry and Veterinary under its schemes/ programmes. The Enterprise Resource Persons (ERPs) along with specially trained Field Business Advisers (FBAs) who accompany ERPs at the EFCs, together tackle these many individual requirements of community partners, including helping them contact the appropriate Block / District / State level institutions for their needs.



### **Roles of the EFC**



Number of Enterprise Facilitation Centres (EFCs) set up in Meghalaya	39 (one in every block, within the block head- quarters office)
Number of community partners who have visited EFCs for information/inquiries	1,29,000
Number of entrepreneurs registered at the EFCs for various business & skill development services	1, 01,230
Number of intensive interactions conducted with community partners for motivation regarding enterprise startup	52,505

"

Enterprise Facilitation Centres are a cornerstone innovation of IBDLP. Set up in every block of the state, they are a one stop shop for creating entrepreneurial aspirations, listening to entrepreneur's demands, and building entrepreneurial capacity in as many community partners as possible across the entire state..

Enterprise Facilitation Centres are a universally accessible service. There are no target criteria, anyone interested in starting or scaling an enterprise can walk in and avail of all services available at their nearest Centre \*\*\*

### RECENT IMPACTS IN LIVELIHOOD ASSISTANCE

Over the last 3 years the Meghalaya Institute of Entrepreneurship (MIE) has been able to reach out to more than 30,000 partners/people/officials/entrepreneurs across the State through various interventions like trainings, exposure visits, workshops, seminars, melas and events across various sectors like Livestock, Sericulture, Apiculture, aquaculture, handicraft, financial awareness, enterprise promotion, business development, livelihood promotion, processing and other nonfarm activities.

A number of partnerships have also been established both with national agencies like NIRD, NRCP, IIE, EDI and international agencies like ICIMOD, World Bank and IFAD. Partnerships with local entrepreneur promoted institutions have also been formalized and eight of the top developmental NGOs of the state have been empanelled and are now working in partnership with the District Basin Development Units (BDUs) and the EFCs to extend the outreach of IBDLP to the people.

The recent launch of the Prime Minister Mudra Yojana (PMMY) or MUDRA in short, has opened new opportunities for the MIE to realize a long cherished dream of the IBDLP program – that of facilitating access to finance for IBDLP partners under the MUDRA scheme through the EFCs. With the support of the MIE as a technical support institution, Line Departments like Commerce & Industries have taken great strides in the promotion of Apiculture in the State with more than 3000 beekeepers trained and in the process of upgrading their beekeeping activities. Similar interventions are in the offing for sectors like Livestock and Sericulture.

In addition to the Mission-wise entrepreneurship development initiatives outlined above, the MIE has been able to carry forward the following livelihood and enterprise promotion activities over the recent period.

### **CAPACITY BUILDING& KNOWLEDGE BACKSTOPPING**

Partnership with the following State NGOs for last mile service delivery to entrepreneurs / farmer-producer clusters: Partnerships operationalised with 8 key NGOs within the state; Extensive training and field-based handholding for NGO partners to ensure effective service delivery w.r.t. enterprise development.

- Bosco Integrated Development Society (BIDS)
- Bethany Society
- Nongstoin Social Service Society (NSSS)
- Social Service Centre (SSC)
- Mendipathar Multipurpose Cooperative Society (MMCS)
- Achik Welfare Society (AWS)
- Socio Economic Welfare Society (SEWS)
- Society for Economic and Rural Empowerment (SURE)
- Regular training for personnel of all the 39 EFCs and 11 BDUs in Business Planning, Enterprise Promotion, Achievement Motivation, Entrepreneurial Competencies and Livelihood Mapping.
- MOUs signed with the NIRD-NERC, and the Indian Institute of Entrepreneurship(IIE), Guwahati for capacity building and training.
- Development of a Partner Management and Information System (PMIS) for trackingthe progress of partners facilitated under the program and profiling and prioritization of partner entrepreneurs and their enterprises using internationally accredited toolslike the Focused Behavioral Event Interview (FBEI)
- Livelihood mapping studies for Amlarem, Selsella, Pynursla, Mawthadraishan, Betasing, Resubelpara & Gasuapara blocks through the ILRT & PRA exercise on sandmining – Laitkroh, Mawryngkneng, Mylliem & Mawphlang C&RD Blocks in partnershipwith MIG, SIRD, ILRT and the East Khasi Hills BDU.
- Establishment of working partnerships with Local, National and International level institutions like National Institute of Fashion Technology (NIFT), Shillong, IndianInstitute of Hotel Management (IIHM), Shillong, University of Agricultural Sciences (UAS), Bangalore, Central Silk Technological Research Institute (CSTRI), Bangalore, CARD-KVK, Thiruvalla, Indian Institute of Packaging (IIP), Kolkata and Mumbai, NationalDairy Development Board (NDDB), College of Veterinary Sciences, AAU, Khanapara, Central Institute of Fisheries Technology (CIFT), Vishakhapatnam, State PovertyEradication Mission (SPEM), Kudumbashree, National Research Center for Pigs (NRCP), ICIMOD, Kathmandu, World Bank, IFAD etc.

### **MISSION INTERVENTIONS – APICULTURE**

- Skill up gradation training of 3935 beekeepers across the state including 195 Master beekeepers and 20 local carpenters in collaboration with the University of Agricultural Sciences (UAS), Bangalore,
- Awareness programme in all districts outreach to 17,000 rural community partners.
- Entrepreneur profiling for apiculture sector 15 mid to top tier entrepreneurs trained in processing, aggregation, packaging and marketing of honey.
- 27 officers of the Commerce and Industries Department trained in UAS, Bangalore, exposed to the Honey industry in Punjab and presently engaged in cluster formation and mobilization.
- Standardization of quality parameters and dimensions of the modified Meghalaya Type-B bee hive.
- Localization of the manufacturing of bee hive boxes, bee stands, bee veils, bee keeping uniforms, smokers by local SSI units and activation of the workshops of the DCICs.
- Conduct of 6 State level workshops on Apiculture.
- Propagation of earthen hive technology as a low cost eco friendly alternative to modern bee boxes.
- Activation and testing of the MKVIB honey processing unit in Ri Bhoi district.
- Facilitating the activation of the West Garo Hills processing unit of the DCIC with a processing capacity of 100 kgs honey per day.
- Facilitating the quality testing of Meghalaya honey by internationally recognized laboratories.
- Conduct of studies on the potentiality of cement hives as an alternative rearing method in Mawthawtieng and Mawpran.
- Publication of bee keeping manuals, pocket manuals (Z-cards), and bee floral calendar.
- Facilitating the establishment of the Apiculture Training & Research Institute (ATRI) in collaboration with national and international agencies.
- Cluster identification and beekeeping household surveys in collaboration with the Deptt.
   Of Commerce & Industries, NGOs, and Green Volunteers covering 2322 households.
- Facilitating product development, supply chain logistics, branding and packaging of honey and other by products in collaboration with Commerce & Industries Department and local entrepreneurs









### **MISSION INTERVENTIONS - LIVESTOCK**

- 1,686 partners trained and exposed to enterprises in the piggery, poultry, goatery and dairy sector in collaboration with SIRD, MIE Tura, Vocational Training Centers (Rongkhon & Kyrdemkulai), the Veterinary Field Assistant Institute (Kyrdemkulai), Bethany Society (Shillong), NRC-Pig (Assam), Birsa Agricultural University, Ranchi, ICAR, NDDB (Gujarat), AAU (Khanapara), NDRI (Karnal) and Indian Institute of Packaging (Mumbai & Kolkata).
- Refresher trainings for 36 Animal Husbandry& Veterinary Officers, at CRS (Pune), BAU (Ranchi), NDDB (Anand), and NCCD –DANFOSS (Chennai).
- 3 State level workshops conducted in collaboration with the Department of AH & Veterinary.
- Facilitating the establishment of 2 large scale private pig breeding farms.
- Publication of pocket manuals (Pocket Z-Cards) on piggery breeding / fattening, poultry and dairy.
- Conduct of sample surveys of meat retailers and dairy demand and supply Shillong, Jowai, Tura, Williamnagar, Garobadha, Ampati, Mendipathar, Resubelpara.







### **MISSION INTERVENTIONS - SERICULTURE**

- A total of 375 partners and officials trained and exposed to weaving technology, textile design, dobby and Jacquard designing etc in collaboration with CSTRI (Bangalore), RSTRS (Khanapara), EDI (Gujarat), Directorate of Oilseeds Research (Hyderabad) and NIFT (Shillong).
- Technical collaboration with MEGHALOOM, Cooperation Department and the office of the Registrar of Cooperative Societies in strengthening of the value chains from cocoon to fabric and building up the supply chain and marketing linkages.





### **FOOD PROCESSING INTERVENTIONS**

- Awareness campaigns, exposure and training in the value addition of Jackfruit in collaboration with Home Science College (Tura), CARD-KVK (Kerala) and the University of Agricultural Sciences (UAS), GKVK, Bangalore for 50 partners.
- Conduct of State level workshops in Shillong and Tura in collaboration with CARD-KVK, Kerala, Home Science College (Tura) and UAS, Bangalore for 400 partners.

### **RURAL FINANCIAL INCLUSION**

A critical gap in the area of enterprise development in Meghalaya, particularly when it comes to rural enterprise and the MSME sector, is the access to finance by rural entrepreneurs and community partners and also the extent of financial awareness. Under the IBDLP, important steps have been taken to address this gap.

Intervention	Outputs & Impact
Financial Access for Rural Women Entrepreneurs for Starting up Micro Enterprises under Women's Economic Empowerment through Financial Inclusion (WEEFI) Scheme** of Finance Department.	23,714 women have been facilitated under WEEFI and are being linked to the EFCs to take them forward.  Funds mobilized under WEEFI = Rs. 11.85 crore (Rs. 11,85,70,000)
Financial Access for Rural Entrepreneurs via MUDRA Scheme	Entrepreneur partners handheld to access bank loans under MUDRA;  492 enterprise loan applications submitted via the EFCs.  Rs. 1,70,42,500 sanctioned already (Rs. 3.07 crore requisitioned).
Enhancing Financial Literacy in Rural Communities	Financial Literacy trainings in partnership with World Bank and Institute of Livelihood Research & Training (ILRT) in 45 villages across the state reaching out to 1780 community partners  Phase – II of Financial Literacy training in partnership with World Bank under discussions.

<sup>\*\*</sup>WEEFI Scheme: To empower women, a special scheme known as "Women's Economic Empowerment Entrepreneur Scheme" was started to provide women with margin money of Rs. 5000. All women over 18 years of age are eligible for the scheme, provided they submit a sound business plan to the bank in the form of a project report. Capacity of the Meghalaya Trade Promotion Organisation (MTPO) is being built so it can facilitate marketing of products via identifying markets, creating forward and backward linkages, and carrying out branding, packaging, and promotion.

### **MARKET ASSISTANCE**

A number of accompanying measures have been initiated by the Meghalaya Basin Development Authority (MBDA) in order to support enterprise development via Enterprise Facilitation Centres (EFCs) and the Meghalaya Institute of Entrepreneurship (MIE). These include investment in upgradation of market infrastructure and market access roads, training and collaboration with NGOs and Community-based Organisations (CBOs) for last mile service delivery to entrepreneurs, and various kinds of action research and partnerships with research institutions.

Extensive analysis of key sub-sectors: 6 Sub-Sector studies completed covering entire state:

- Poultry
- Piggery
- Cashew Nut
- Areca Nut
- Oranges
- Bay Leaf

Institutional partnerships for market facilitation and brand building measures: Partnerships operationalised with NECTAR, Indian Chambers of Commerce, FICCI and CII

# INTEGRATED VILLAGE COOPERATIVE SOCIETIES (IVCS) FOR RURAL FINANCIAL INCLUSION

The Meghalaya Basin Development Authority, under its Integrated Basin Development and Livelihoods Programme has envisaged the setting up of home-grown institutions in the villages to deliver access to financial services in the different parts of the State. Such institutions would address the critical need as apparent from extensive surveys and ground-level discussions which reveal a lack of access to finance across villages throughout the state, particularly those regions where the topography is challenging for connectivity, where population is sparse, and where there is limited transport and communication infrastructure.

The institutions created are called Integrated Village Cooperative Societies (IVCS), which are local level collective institutions. They build upon the natural bonding that traditionally exists in Meghalaya between village communities and community organizations of different types that may have been set up for traditional purposes and under various project-specific government programmes. The IVCSs have been registered as a Cooperative Society under the Meghalaya Cooperative Societies Act with joint liability of all its members, and the objective is to provide its members with financial services such as loans, deposits, as well as mobilization, intermediation and facilitating bank linkages. The goal is to provide each IVCS unit with share capital assistance by the government which can be used as a seed corpus or revolving fund and which will be managed by an elected committee. A concept paper on the setting up Integrated Village Cooperative Societies was prepared, and substantive discussions held with the government officials and also the Meghalaya Cooperative Apex Bank in order to conceptualise these village-level institutions for rural financial inclusion.

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The key aspect of an IVCS is that it is a community institution belonging to the people themselves, not a government institution. Thus the focus under Megha-LAMP is to help community members strengthen their own institution for long term social and financial sustainability, ensure equity investment by members, and adequate fair representation by all community households \*\*\*

### **Integrated Village Cooperative Society (IVCS)**

An IVCS is a primary society at the village level that supports community members with multiple key services:

- Access to financial services savings and credit
- Activities around aggregation of crops/products of members and marketing the same to improve prices realized by village community producers
- Gateway services for external service providers (such as insurance, various financial services etc) who would like to reach village households
- Extension support and service provision to NGOs and government entities for delivery of their technical and non-technical services.
- Support to the village community for receiving funds/payments under different programmes, such as NRLM, MGNREGS, etc.

### **IVCS UNDER MEGHA-LAMP**

Under the recently launched Meghalaya Livelihoods and Access to Markets Project (Megh-LAMP), a central thrust is on creating and strengthening IVCSs in the village communities of Meghalaya. This will be done through working with existing village level cooperative societies, converting existing Cluster Level Federations (CLFs) that have been formed under previous state government and externally aided projects, and by helping communities to form new societies in locations where such groups and cooperatives do not already exist.

### **TARGETS:**

Under Megh-LAMP, the target is to form and support at least 300 IVCS across Meghalaya, covering about 1350 villages and 1,50,000 households as members.

### **SUPPORT UNDER MEGHA-LAMP:**

Through the combined endeavours of the Cooperative Department, MCAB, and Megha-LAMP implementation teams, extensive initial mobilisation in villages will be done through community volunteers, and training and capacity building activities will be carried out for IVCS members, management committees and society secretaries.

Training will include modules on business development and operations, guidance on use of loan funds from MCAB, development of operational manuals and systems, community outreach and membership management, support with developing community projects and accessing Viability Gap Funding, support with processes for provision and management of loans to members for enterprise, agricultural production, emergency services, and finally support with a variety of other functions as the IVCS may carry out over time (such as marketing and sales for village producers).

# MEGHALAYA INSTITUTE FOR NATURAL RESOURCES (MINR)

The Meghalaya Institute of Natural Resource seeks to address the issues regarding sustainable natural resources use by strengthening and empowering the capacity of particularly those stakeholders who are from farming communities, and entrepreneurs who depend on natural resources to meet their livelihoods needs. This Institute takes the lead in creating a deep knowledge base about natural resource management, and then planning activities in partnership with communities. Knowledge is managed through the Centre for Bio-Resources, Centre for Water Resources, Centre for Land Resources, Centre for Climate Change and Centre for Real Time Monitoring of Weather under the following institutional structure.



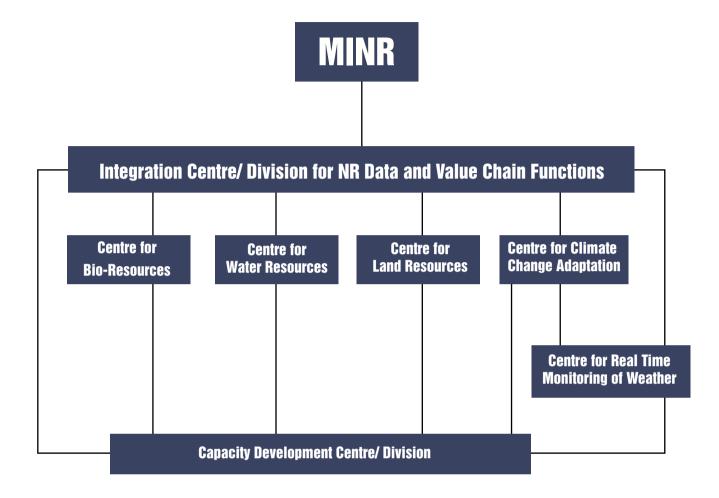








### **INSTITUTIONAL STRUCTURE OF MINR - SCHEMATIC**



### **OBJECTIVES**

- 1. Facilitating information and knowledge support on Bio-Resources, Water Resources, Land (Soil) Resources and Climate Change Management for Stakeholders and Natural Resources Users.
- 2. Entering into partnership with Universities, Research & Development Institutions, Centres of Excellence, Stakeholders, etc for providing resource support (as Knowledge Partners) in the field of Bio-Resources, Management for addressing sustainable basic and livelihood needs of the Users.
- 3. Taking up studies and action/adaptive research for enhanced productivity of bio-resources, water resources, land (soil) resources within the sustainable development framework.
- 4. Building Knowledge repository on Biological, Water, Land (Soil) Resources, natural disaster preparedness and climate change adaptation.

### **Activities & Outputs under Meghalaya Institute of Natural Resources**

### I. SPRING SHED INITIATIVE

### **Springs Mapping Initiative**

Conducted to determine and validate the location and status of springs across the state which will be used to create a Springs Atlas of Meghalaya under the Meghalaya Springs Protection Initiative. Around 1,260 Springs mapped as on 06-04-2016

### TRAINING & CAPACITY BUILDING

Training of Trainers (TOT) on Spring Protection Initiative, in collaboration with ACWADAM, ARGHYAM, PSI, KEYSTONE and India Water Portal.

Sensitization programme with District Heads on IBDLP initiatives including Community Nursery, Seed Bank, Springs Protection Initiatives, involving line Departments, BDOs, BDUs, and NGOs amongst others.

### **AWARENESS PROGRAMME**

Comic Strip Workshop with young development partners on spring protection initiative, participated by Shillong. College Students and Green Volunteers.

Radio programme to create awareness on the initiative taken up by MINR. The institute also delivered a radio talk on spring protection initiative at All India Radio (AIR), Shillong.

On-going distribution of Flyers & Pamphlets on Meghalaya Spring Protection Initiative (published on Jan, 2016) to various Districts.

### WORKSHOP

Half day sensitization on hydrological monitoring and water budgeting. Officers and staffs from Soil & Water Conservation, Fisheries, Water Resources, Public Health Engineering (PHE) and together with MBDA participated.

100 nos of Master Trainers trained in Spring Mapping to date. 50 more to be trained in Mar,2016.

On-going Action Research Project on Spring shed Development in the catchment area of Shillong Peak and Umtyngar

Development of Block level Spring Atlas for East Khasi Hills District and Preparation of Atlas for other remaining District under progress

### II. GREEN INITIATIVE

### **Green Ambassador Conclave**

for sensitization of green initiatives of IBDLP attended by Watershed Volunteers, Watershed Committee Members, JFMC and NARM-G members.

### **Awareness Programme**

Green Mission Campaign on the occasion of Swachh Abhiyaan: Cleaning drive and pollution check of about 200 vehicles in collaboration with Meghalaya State Pollution Control Board, Forest and Environment Department, World view Impact Foundation and Young Indians.

Green Pages and Information Series: MINR is launching its first Information Series on Spring Shed Development and Weather Data in Meghalaya. MINR also publishes a quarterly newsletter The Green Pages which is a compilation of all the green initiatives of MBDA.

Sensitization on earthian wipro's sustainability education programme in collaboration with Earthian Wipro's Sustainability Programme, World View Impact Foundation and Eco Concept, Guwahati. Participants include school teachers and MBDA staff. 13 Schools of Shillong area were visited and sensitized on different Green initiatives that the school can take up along with provision of assistance in developing DPR on Earthian Wipro's Sustainability Programme.

School outreach programme on Green Mission of IBDLP in collaboration with Bethany Society, Janailang, IYCN and World Wide Vision.97 students from Rama Krishna Mission Hr. Sec School, Sohra participated.

### **Proiect**

Green Energy Initiative started at Mawlynnong and Mawlyngbna. 30 and 40 solar streetlights and Solar Pump respectively installed. The initiative was supported by CSR funding of IDFC Foundation with the active support of C&RD Department and the local community.

Preparation of a Project Feasibility Report for submission to IDFC for availing funds under their CSR programme, to support the Mawlyngbna Micro Hydel Power Project

### III. LECTURE SERIES

Half day media meet on spring protection initiative jointly with India Water Portal of ARGHYAM. Participants include Shillong Press Club and Meghalaya Publishers and Editors Association members.

Half day Programme with the Traditional healers of Meghalaya in collaboration with the Central Institute of Medicinal & Aromatic Plants (CIMAP). Participants include Local health practitioners.

Training Workshop on Application and Uses of Hydro-Geo-morphological Map (HGMs) for Groundwater Perceptions organised in collaboration with India Water Foundation

### I. OTHER INITIATIVES:

- Participatory Rural Appraisal (PRA)
- Preparation of DPR for Roof Top Rain Water Harvesting at Raj Bhavan, in collaboration with Water Resources and Soil & Water Conservation Department
- Seismic Vulnerabilty Study in Shillong City in collaboration with CSIR-North East Institute of Science and Technology Jorhat
- Water quality monitoring of wards lake, Hyderi Park Lake and Umshing river in collaboration with water Resources Department, Forest and Environment Department and the Meghalaya Pollution Control Board supported technically by Clover Organics Dehradun.
- Compilation of Meteorological Data for Real Time Weather Forecasting in collaboration with Water Resources, Agriculture, IMD, NESAC and MeECL.
- Support in preparation of Detailed Project Report of Mawphanlur Drinking Water Supply Project using Energy Efficient Pump
- Support to the state's FE&CC for preparation of State Action Plan On Climate Change

- Mandate For Collection And Compilation Of Data From NEHU, IMD, BSI, ZSI, GSI, ASI And Forest Deptt For Preparing A UNESCO WHS Proposal For World Heritage Site For Meghalaya
- Compilation of data relating to WUA's, Jalkunds, MR's etc with attributes created by Water Resources, Soil and Water Conservation Department in GIS layers
- Sensitization with District Heads on IBDLP initiatives like Community Nursery, Seed Bank, Springs Protection Initiatives involving line Departments, BDOs, BDUs, NGOs and others
- Preparation of Geo-Park sites at Sohra East Khasi Hills and Lumshnong East Jaintia Hills.
- Inventorisation of existing weather stations and identification of gaps for real time weather monitoring.

### STATEWIDE RESOURCE MAPPING: A PRIORITY AREA

Under IBDLP, MINR has undertaken extensive mapping of the state of Meghalaya, primarily under the Integrated Village Development Plan (IVDP) (which is described in detail in a subsequent sub-section). In addition to IVDP, MINR also has started extensive Spring mapping in the period 2014-2015, as shall also be described in a subsequent sub-section. The IVDP is a detailed process and includes a number of innovative areas of survey-based inquiry, however numerous other mapping and survey exercises are also being done by MINR toward designing better systems for natural resource management. These include a compilation of traditional knowledge systems across the state, from traditional agriculture, to water/soil/forest management, to traditional medicine and healing practices.

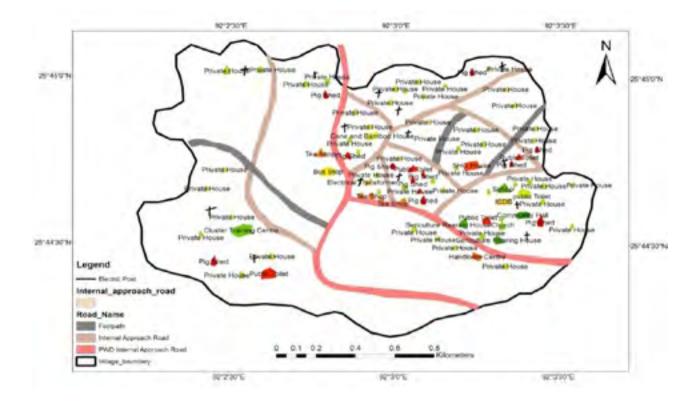
The key approach to these mapping and survey-based activities involves participatory knowledge creation, where systematic PRA exercises are carried out with individual village communities. These participatory methods have led to unique repositories of information from across the state, from perceptions and methods of local-level adaptation to climate change, to written compilations of village histories that have typically only been verbally recorded and passed down across generations thus far.

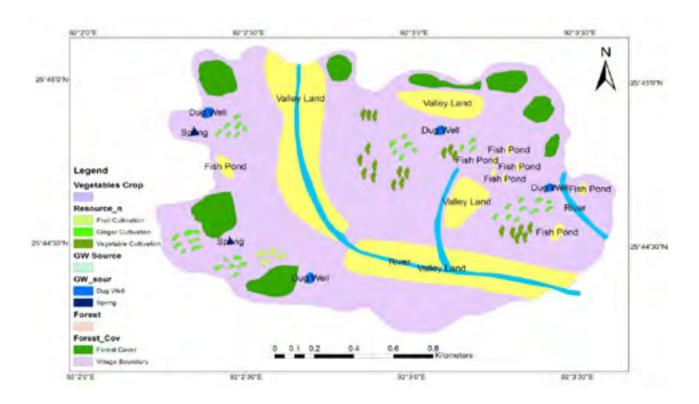
### INTEGRATED VILLAGE DEVELOPMENT PLANS – INNOVATIVE MAPPING

The Integrated Village Development Plan (IVDP) initiative is an attempt by MBDA toward baseline documentation of villages throughout the state of Meghalaya. This documentation covers a number of areas that require intensive participation by village community members themselves: the village's history, its social institutions and natural resources, calendar of seasonality, livelihood portfolios, inflow and outflow of commodities and services to/from the village, local-level changes in climate and the coping and adaptation strategy of the villagers, the vision and mission of the primary stakeholder of different age groups and gender, and the list of entrepreneur-farmers who are successfully marketing their products (or those who have attempted but failed). The goal is to share these village-level insights at the cluster, block, district, and state level in order to ensure uniformity of understanding by all governance stakeholders on how best to intervene, or how best to build the capacity of the village so that it can participate in plans for its sustainable development. About 450 villages have been covered under IVDP so far.

### **MAPPING A VILLAGE**

Field experiences in the state have generally shown that villages do not maintain a map of village boundaries and are not fully aware of the geographical area of their village. Thus one of the initial exercises undertaken by the IVDP team is to locate the G.P.S. coordinates of all important landmarks in and around the village, and use the PRA exercise in the village to map the extreme North, South, East and West boundaries of the village as far as feasible. The GPS tracking itself has been done from the inception of the IVDP work, with the help of community volunteers themselves who are trained to handle GPS equipment and understand this mapping technique. Nearly 600 community volunteers have been mobilised under IVDP, and trained and deployed in GPS based data collection, data analysis and report writing.

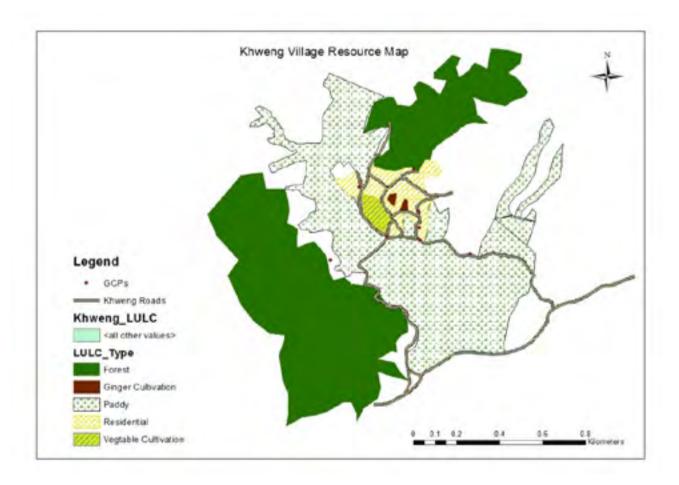




### **OUTCOME OF IVDP MAPPING & PLANNING**

A key outcome of the IVDP exercise is that it facilitates community based natural resource management (NRM). For example, IVDP has resulted in deep social knowledge on village-level natural resource issues such as people's recollection of the reduction in number of oranges or bees over a period of time, current shortages in drinking water or water for irrigation and possible reasons for the same, and so on.

This participatory exercise also catalyses careful thinking by community members around the natural resource problems and management solutions that may be critical for their village. Further, it allows MBDA to create a natural resource database with in-depth qualitative information in addition to quantitative data; both sources will be available on a single platform. This comprehensive natural resource database can then be used to create NRM and climate change adaptation plans at the local and at the state level.





### **FURTHER MAPPING UNDER MEGHA-LAMP**

As noted earlier, the IFAD assisted Meghalaya Livelihoods & Access to Markets Project (or 'Megha-LAMP') is the key state wide project under IBDLP launched in 2015. Different kinds of mapping initiatives contribute a core knowledge base for this project.

The key mapping activities under Megha-LAMP are outlined below:

- Maps for each village will be created using satellite data available from the North East Space Applications Centre or alternatively, via remote imagery from Unmanned Aerial Vehicles (UAV) operated by NECTAR (North East Centre for Technology and Applied Research).
- Information from the satellite / remote imagery mapping will be stored in GIS databases, with information about soil, drainage etc. being stored in different layers.
- GPS equipment will be used to map the centre of the target village, and key features such as houses with numbers assigned to each and other buildings, pathways, drinking water sources, springs, wells, streams, hills and land uses, such as agriculture, grazing area, forest, etc.
- Data from the satellite maps can also be used to identify potential locations for specific crop-based enterprises, and for development of water resources. Recording features such as extent of soil erosion, problem soils, distance from water sources, etc. can contribute toward identifying such locations.

In addition to project implementation team leading NRM activities under IBDLP, a full-time GIS unit has been established in MBDA for database and knowledge management related to these extensive mapping initiatives. Their role is to input the numerous kinds of information about each village as data layers into the master GIS database, facilitate database queries to produce insights about villages, natural resources, watersheds and overall regions of the state, and to work with the communications team within MBDA to share these insights with MBDA project team stakeholders, and with the communities themselves.

## **INTERVIEW WITH AN IVDP MEDIA VOLUNTEER**

(Edited by the Knowledge Management Unit MBDA)

The Knowledge Management Unit of MBDA sat down with Ibanshandor Myrthong, a media volunteer of IVDP, who has been with the organisation for the past Seven months and has helped in documentation of various programmes of IVDP

Question: As a media volunteer, what are your roles & responsibilities within IVDP?

As a media volunteer under IVDP, my role & responsibility is to document stories from the field, challenges encountered by people, and to capture other qualitative information through pictures and videos. I feel visual documentation is very useful. It is an effective way of communicating information to rural communities which can eventually lead to their knowledge.

Question: In August 2015, you and other media volunteers have been given training in photography by the well known photographer Mr. Rohit Suri. Then in January 2016, you had been given field training by the Knowledge Management Unit of MBDA. How has the training benefited you?

Yes MBDA had organised a four day media workshop for us with Mr. Rohit Suri, on August 2015. Again in January 2016, the Knowledge Management Team of MBDA had taken us to East and West Jaintia Hills for field exercises in documentary making and photography. These trainings have provided us with valuable tips on how to better frame our pictures and video clips for more compelling story telling. We also learnt how to better engage with the community so we are able to truly understand and capture people's true stories.

Question: What is your approach when engaging with communities in the field to collect your stories?

Whenever I go to the field, I first interact with the local people to understand their community and their needs. This way, we also get to learn about their difficulties and problems. We then capture all this information either through photos or videos so we could share with the relevant authority for their intervention. These could be either successful initiatives taken or failures that should be highlighted. Sometimes we even guide community members to the Block Office so they can seek further guidance on how to move forward.

Question: How important is the role of Media Volunteers in overall development of the community and the state?

There is a saying that "Seeing is believing." The same applies here. By documenting success and failures from the field, we act as the eyes for concerned authorities so they can take better decisions when planning activities for development in villages.





### **SPRINGSHEDS INITIATIVE**



Meghalaya receives very high rainfall, higher than most parts of India. The rainfall varies from 12000 mm in the southern slopes to 2000 mm in the northern slopes. However, rainfall is only for 6-7 months in a year, causing water scarcity during the dry months in the absence of appropriate mitigating interventions. Due to the distinct topographical conditions of the state, there is high surface run off to neighbouring plains. Thus approximately 11, 667 sq km of the State drains into the Brahmaputra basin and the remaining 10,650 sq km into the Barak Basin. Especially worrisome is the fact that springs – a key drinking water source – are drying up, and that many water bodies across the state are getting increasingly polluted, thus severely impacting people's health.

Spring-sheds are extremely important in the context of Meghalaya. They are the source of "springs," while springs are a window to the ground water flow. When the openings are large, spring flow may become the source of rivers. Unfortunately, deforestation, impervious surfaces such as roads, and sand mining and stone quarrying have a strong negative impact on watersheds. Over the years, people who live near springs and visit springs have seen them degrade, whether in the amount of water discharged or in the form of algae overgrowth. With rampant deforestation, the once perennial streams are no longer perennial and springs - traditional sources of domestic water supply for many local communities - are also drying up.

It is in this context that the Springsheds Initiative has been launched under IBDLP in the 2014-15 period. The lead implementing agencies are MINR, Soil and Water Conservation Department, Water Resources Department, MeWDA, GIZ, Meghalaya Water Foundation, Meghalaya Institute of Governance (MIG), and Community & Rural Development Department. Additional technical and programmatic support is being provided from Arghyam via their National Springs Initiative Network.

1,260 springsheds across Meghalaya have been mapped so far.









### **SPECIALIZED R&D CENTRES UNDER MINR**

A number of independent centres have been set up under MINR to tackle research and innovations in specific NRM sectors, including broad cross-cutting areas such as Climate Change Adaptation. Brief overviews of each of these centres are provided in these next sub-sections.

### **CENTRE FOR ADAPTATION TO CLIMATE CHANGE (CACC)**

The Centre for Adaptation to Climate Change (CACC) has been mandated to facilitate sustainable data collection/generation, data management and storage, creation & sharing of knowledge pertaining to Natural Resource Management and Climate Change for wider use by different stakeholders. The centre is expected to be a repository of research and knowledge on climate change effects in Meghalaya, and natural resource management methods pertaining to climate change adaptation. The CACC is also expected to create synergies between leading research institutions in this sector, government agencies that can feasibly use this knowledge in their own activities, and the communities and NGOs focused on climate change adapted sustainable livelihood activities.

### **BIO-RESOURCE DEVELOPMENT CENTRE (BRDC)**

The Bio Resources Development Centre (BRDC) is a registered institution under the Societies Registration Act XII of 1983, Meghalaya within the ambit of Science & Technology Cell of the Department of Planning, Govt. of Meghalaya. It became operational during the year 2003. The BRDC is one of the associates of the Meghalaya Institute of Natural Resources under the aegis of the State Flagship Programme – "Integrated Basin Development and Livelihood Promotion Programme"

The Centre has a Governing Council with the Chief Secretary as the Chairman and the Principal Secretary/ Commissioner & Secretary (Planning) as the Vice Chairman. The Project Director of the Science & Technology Cell is the Member Secretary of the Governing Council



The research activities of the Centre are primarily based on promoting the conservation and sustainable utilisation of bio-resources of the State through biotechnological approaches. Currently, the Centre focuses on plant resources which include medicinal, ornamental, aromatic and wild edibles. Conservation of these resources has been initiated through Documentation, Collection, Propagation and Development of Agro-technologies; tissue—culture technique has been employed as the major propagation strategy. Through systematically combining science and technology with the rich biodiversity and traditional knowledge around plant resources in the state, BRDC contributes significant knowledge to the sustainable economic utilization of the rich bio-resources in the state.





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### **INNOVATIVE ACTIVITIES UNDER BRDC**

### **SUSTAINABLE AGRICULTURE**

This involves focused interventions in agriculture (such as use of bio-inoculants), in horticulture (such as floriculture, and medicinal & aromatic plants), in plantation crops (such as betel vine).

### **BIODIVERSITY PROSPECTION AND PRODUCT DEVELOPMENT**

This involves assessment of natural resources available within the different basins and catchment areas across Meghalaya, and support with planning sustainable utilisation of these resources. Utilisation of these resources may include food production, pest control, and development of new drugs, aroma compounds, natural dyes and products useful for biotechnological applications. Toward these actions, CSIR-NBRI also provides the help of its knowledge base and research infrastructure.

### **KNOWLEDGE SHARING WITH FARMERS ON AFFORDABLE GREEN TECHNOLOGIES**

Beginning 2015, BRDC has undertaken extensive hands-on demonstration for farmers on Vermi Composting, NADEP Composting, Non - Soil Composting and Catalysed Non - Soil Composting utilizing commonly available biomass such as agricultural and plant wastes, cowdung etc. BRDC has helped farmers make composting units with locally available materials like bamboo, clay, etc. In collaboration with District Basin Development Units & EFCs, as many as 100 farmers have been covered via long-term field partnerships.

### **DOCUMENTATION OF LOCAL KNOWLEDGE AND PRACTICES**

A key focus under BRDC is to document traditional farming practices, study their benefits from a modern scientific perspective, and share the indigenous best practices across communities.

### Examples include:

- Indigenous Air Layering Method Practised For Litchi, Umsylem Village
- Indigenous Air Layering Method Practised For Citrus, Nongkwai Village
- Indigenous method of propagating Tree tomato (sohbaingondieng), Jongksha Village
- Indigenous Method of Banana Propagation, Rasong Village

### **CENTRE FOR WATER RESOURCES**

The Centre for Water Resources has been established as the primary resource institute in Meghalaya for the water sector. The centre will act as a convergence point for various line departments, academic institutions and NGOs. The centre's main activity would be the development of Water User Associations(WUAs). These WUAs are expected to become the hub of grassroots consultations, outreach, activities and capacity building.

The Centre will also serve as a convergence platform for data and knowledge management in the water sector. Supplementary activities shall include continuous capacity building and training of stakeholders, extensive surveys and documentation to address critical knowledge gaps in the water sector, knowledge dissemination across the stakeholder community, and promotion of funded research in the water sector. The Centre itself is expected to host workshops, seminars and conferences. Engagement with think tanks, academia and similar resource organisations both at the national and international levels are also expected, in order to allow the Centre to conceptualise innovative programmes and policies in the water sector.

### **CENTRE FOR LAND RESOURCES**

The Centre for Land Resources is being established as a key resource institute on the subject of land resources within the state. The established centre will act as a convergence point for different line departments, academic institutions, Non-Governmental organizations, Grassroot level organizations and will cover various kinds of activities. It is expected that the centre will be governed by a high level board chaired by the chief secretary; other members are being determined. There will be a steering committee comprising of notable academics and other figures prominent in the sector to work on action research, and monitoring and evaluation.

# MEGHALAYA STATE NATURAL DISASTER MONITORING CENTRE (MSNDMC) & SUB-WATERSHED LEVEL AUTOMATIC WEATHER STATIONS (AWS)

Due to its unique geo-topographical set up, Meghalaya is extremely prone to climate change and natural calamities. The State is located in the most sensitive seismological zone leading to expectations of high intensity earthquakes. The State is also located in one of the heaviest rainfall regions on the planet, which results in massive soil erosion and landslides on its hill slopes. The plains area of the State bordering Assam & Bangladesh experiences floods every year, resulting in large scale destruction of agriculture crops, animals and even human life. With this environmental context in mind, MBDA in active collaboration with NESAC and the Meghalaya State Information Technology Society (MSITS) have proposed the idea of establishing the Meghalaya State Natural Disaster Monitoring Centre (MSNDMC) in Shillong.

The MSNDMC is expected to collaborate with existing R&D institutions in the region on one hand, and with local institutions that understand local needs and capacity on the other. MSNDMC will develop research and technical tools that are "demand-driven" and which can help address highly contextual issues of climate change adaptation and environmental risk management. The institutional platform will have technical and infrastructural support from the NESAC, MSITS, IMD, GSI, the State Seismological Observatory and the Meteorological Department. It will also have strategic partnerships with all the other departments that deal with areas which can be affected by climate change and changes in natural resource patterns (for example, Agriculture, Horticulture, Soil & Water, Water Resources, Livestock, Forest &Environment etc).

# MEGHALAYA INSTITUTE FOR GOVERNANCE (MIG)

As discussed in the introduction to IBDLP, good governance and re-engineering the current top-down systems of governance are a critical area of work for this initiative. To take forward governance related objectives of IBDLP, including furthering knowledge and research in the state around issues of governance, citizen participation, public administration and public policy, an independent institution called the Meghalaya Institute for Governance (MIG) was set up. Thus MIG is the third institutional pillar of IBDLP along with MIE and MINR. As with MIE and MINR, the following sub-sections only provide a brief snapshot of the work done by MIG and its vision as an institution. For further information, the institute may be directly contacted.

### **OBJECTIVES OF MIG**

To serve as the apex level institute for development of democratic governance within the state and for ensuring impact across the different strata of the society, and in both rural and urban communities.

- To work with government departments and other stakeholders to analyse key issues in governance, identify solutions, help develop action plans, and support implementation of these plans.
- To act as a think tank and help translate government's goals, objectives and policy priorities and reform agenda into tangible reforms actions with focus on principles and practices of good governance.
- To create a repository of best practices, methodologies and tools in governance reforms including successful e-governance applications.
- To support change management and management development programmes in government to effectively carry forward governance reforms and to develop a reform communication strategy.
- To undertake capacity building of stakeholders (Government and non-Government) including local governance institutions and community based organizations.
- To conduct awareness building programme on the importance of good governance as the cornerstone of peace and progress in the society.
- To provide support for conflict resolutions for the community institutions.



### **AREAS OF WORK**

A wide variety of activities are carried out under MIG, with many activities focusing on strengthening platforms for knowledge sharing and dialogue between government entities, civil society organisations, and individual citizens. These activities typically revolve around a core talking point, key environmental or social issue that is critical to tackle, or round table discussions to understand the problems affecting stakeholders who are active in different sectors associated with governance and sustainable development.

A thrust area for MIG is systematic engagement with the traditional authorities and institutions in Meghalaya, and efforts to create dialogue between traditional systems of governance and the state government, from the state to the local levels "





### **RECENT ACTIVITIES UNDER MIG**

Type of Intervention	Details
Awareness Programmes	Awareness Programme on IBDLP for Traditional heads and leaders
	Consultative workshop on road map for development of Mawlongbna village
	Panel discussion on role and responsibility of community leaders: "The Road Ahead in collaboration with SSSS"
	Awareness programme on alternative livelihoods with communities in sand quarrying areas of East Khasi Hills district
	Awareness on solid and liquid waste management in Shillong and Diengpasoh in collaboration with India Green Service, Vellore.
Formation of Multi- Stakeholder Working Groups across Issue Areas	Citizens' Conference on Environmental Governance for TI and other NGOs; organized in partnership with ICARE
	Facilitation of Japanese International Cooperation Agency (JICA) programs for Water sector related interventions in the state
Research & Documentation of Stakeholder Workshops	Organizing and documenting outcomes of the first ever Retreat on Water at Cherrapunjee; organizing one day water retreat with MFW
	Organizing Water Conclave at Shillong
	Engagement with faculty & students at IIM, Shillong for Market Survey
	Co-organized and participated in Workshop on Innovation in Public Systems with CIPS, Hyderabad
	Project under Non Technical Lending Assistance (NLTA) with World Bank to conduct research on "Improving service delivery and mapping the Autonomous District Councils" and build research capacity within MIG for scaling up research on governance issues within the state
Training & Consultative Workshops	Workshop on Ethics in Governance and Public Services in collaboration with Initiatives of Change Panchgani
	Symposium on Governance with participation from IIPA, NGOs, Government officials, and Traditional governance institutions

	Stakeholders Consultative Workshops on the following issues	Mission Green Meghalaya	
		Sexual and Reproductive Health Rights	
		Public-Private Partnerships and Procurement	
		Convergence in State Aquaculture Mission	
		Springshed Development in Meghalaya	
		Meghalaya Water Act	
		Policy Dialogue on Economic and Transport Development in Border Areas in Eastern South Asia (in partnership with the Commerce and Industries Department)	
Social Impact A s s e s s m e n t (SIA) on thematic areas	double lane, West Jaintia Hills District		
	Land Acquisition for constructions IB complex cum residential.		
	Land Acquisition for construction facilitation entry and exit points at Khanduli		
	Social impact assessment study for the Forest & Environment Dept for acquisition of land for compensatory afforestation in Saipung reserve forest in Jaintia Hills for non-forest purposes		

A research study was done by MIG in collaboration with the world Bank under their Non Technical Lending Assistance (NLTA) programme to understand governance and local service delivery issues in traditional rural communities of Meghalaya as well as to build the research skills of the MIG team to conduct further research on governance issues such as these in the state.

### **Exploring Governance and Local Service Delivery in Meghalaya, India**

### **Rationale and Objectives**

the objectives of this study are two-fold: (i) to build the capacity of the MIG in undertaking governance analysis and identifying reform options; and, (ii) to develop and pilot a 'bottom-up' framework for better understanding the governance of service delivery in Meghalaya.

In the context of a World Bank-GoM NLTA, the study was conceived as a means of building MIG capacity – via action-research 'learning by doing' – and in developing and piloting an approach to filling important knowledge gaps. Specifically, the objective of this analysis is to explore how governance factors manifest themselves in, and shape, the delivery of selected services in rural Meghalaya.





# **MEGHA-LAMP**

### BACKGROUND OVERVIEW OF MEGHA-LAMP

The Meghalaya Livelihoods and Access to Markets Project (Megha-LAMP) is a key statewide initiative launched by the Government of Meghalaya. Its objective is to improve family incomes and quality of life in rural Meghalaya through a specific focus on developing markets and value chains for sustainable livelihoods, and ensuring that these livelihoods are adapted to Meghalaya's geographical context and to the effects of climate change.

Megha-LAMP is being implemented as a part of the Integrated Basin Development and Livelihoods Programme (IBDLP), and assisted by the International Fund for Agricultural Development (IFAD). Project budget is USD 174 million; USD 50 million as loan assistance with technical assistance comes from IFAD, USD 50 million comes from the Government of Meghalaya, and the remainder comes from bank loans, convergence funds, and some contribution from the participating households themselves.

### **TARGETS UNDER MEGHA-LAMP**

Megha-LAMP will develop 47,000 enterprises set up by rural community partners across all 39 blocks, and set up 54 value chain and livelihood clusters across at least 18 blocks. Thus Megha-LAMP will aim to reach a total of 140,000 households out of 420,000 rural households in Meghalaya, with a special effort to include poorer households, women and the socially excluded.

### **MEGHA-LAMP: NATURAL RESOURCE MANAGEMENT AND FOOD SECURITY**

There are three component areas under Megha-LAMP around which all project activities will converge. The first of these component areas is "Natural Resource Management and Food Security". This will build on the extensive statewide initiative called 'Integrated Village Development Plans' (IVDP) that has already been carried out in more than 400 villages across Meghalaya. The goal of IVDP is to work in participation with village communities to comprehensively map the natural resources available or being used by the village – land resources, water bodies, soil and water quality characteristics, green cover and forests, and so on. Additionally under Megha-LAMP, remote imagery of each village shall be carried out in partnership with the North East Centre for Technology and Applied Research (NECTAR) by using Unmanned Aerial Vehicles (UAV), in order to gather detailed data on topography, climate, larger scale spatial distribution of soil, water and forest resources, and patterns of land use.

With the help of project implementation, the village communities shall then prepare Integrated Natural Resource Management (INRM) plans which can be supported for implementation by the state government. These plans will include initiatives for soil and water conservation and various other natural resource interventions at the village level, and also interventions for

increasing food security in the village. These activities shall be carried out in the targeted 18 blocks, 75 villages within each block, and at least 75 households within each village for a total of 1,01,000 households.

### **MEGHA-LAMP: ENTERPRISE AND LIVELIHOODS DEVELOPMENT**

The second component area that Megha-LAMP will focus on is 'Enterprise Development'. One critical sub-component of enterprise development under Megha-LAMP will primarily occur through the EFCs which have been set up in all 39 blocks of the state. The EFCs will be provided support in the form of access to banks, convergence and project funding, and technical support to reach entrepreneurs even in remote rural communities. The objective is to develop the 47,000 enterprises set up by rural entrepreneurs and registered at the EFCs thus far.

### **VALUE CHAIN CLUSTERS**

The next sub-component under enterprise development will focus on establishing livelihood and value chain clusters, and making them viable. Thus for each village cluster, at least one sub-sector with potential for scaling up and having commercial production will be identified. Service providers will be engaged to to prepare and implement sub-sector plans. Through this sub-component of activities, Megha-LAMP aims to reach 20,000 households across 540 villages.

### LIVESTOCK DEVELOPMENT

The third sub-component of enterprise development under Megha-LAMP focuses on Livestock sector Development. A key activity shall be to set up 120 Livestock Development Centres (LDCs), primarily for pigs, and additionally for goats and maybe cattle. This sub-component directly responds to the overwhelming demand expressed by rural entrepreneurs at EFCs for support with establishing and scaling up piggeries. At each LDG a Community Livestock Facilitator would cover about six villages to extensively address the pig farming needs and gaps at the village level. Further, the capacity of a Village Livestock Resource Person within each village would be built to advise the rural piggery entrepreneurs, and to provide preventive animal health care. These activities will cover 32,400 households across 720 villages in the state.

### **MARKET INFRASTRUCTURE DEVELOPMENT**

The fourth sub-component of enterprise development under Megha-LAMP involves creating infrastructure for about 55 primary markets across Meghalaya, with interventions for improved market management. In addition to the market infrastructure itself, Megha-LAMP aims to enhance rural connectivity for village clusters and producers through creating 250 km of ecofriendly village roads, 20 submersible bridges, and 10 ropeways across the target areas.

### **RURAL FINANCE**

The final sub-component of enterprise development under Megha-LAMP involves a focus on enhancing rural finance and financial inclusion, with the key activity being to establish and strengthen 300 Integrated Village Cooperative Societies (IVCS) across rural Meghalaya. The

IVCS groups would be supported to engage in savings and credit services, get involved in value chains and aggregation of produce for marketing, and will be linked to the Meghalaya Cooperative Apex Bank. This initiative would cover all 1,350 villages in the Megha-LAMP village clusters.

Information from Megha-LAMP shall be extensively communicated with rural communities and with government stakeholders, so that the people of Meghalaya and the government of Meghalaya can collaborate for the greater development of the entire state.

### **OBJECTIVE**

IFAD is a specialized agency of the United Nations (UN) established to finance rural agricultural development projects primarily for food production in developing countries. As part of the startup process for Megha-LAMP, IFAD in participation with the Government of Meghalaya through the IBDLP programme, conducted a 5 day Supervisory Mission followed by a 4 day Startup Workshop.

The objective of the Supervisory Mission is to understand the implementation strategies and capacities of the implementation teams, and to identify potential challenges and likely solutions for various implementation scenarios.

The objective of the Startup Workshop is to familiarize and mobilize various stakeholders that will be part of the project implementation process.

### **ACTIVITIES COMPLETED UNDER LAMP**

### **STATE-WIDELAUNCH OF MEGHA-LAMP**

Megha-LAMP was formally launched by the Honourable Chief Minister of Meghalaya, ShriDr.Mukul M. Sangma, at the YojanaBhavan, Main Secretariat Building, Shillong. Other dignitaries who graced the event included, Shri. Clement Marak, Minister of Power (Govt. Of Meghalaya), Shri Kennedy C. Khriem, Parliamentary Secretary (Govt. Of Meghalaya), Shri. P.B.O. Warjri, IAS, Chief Secretary (Govt. of Meghalaya, Shri. R.M. Mishra, IAS, State Development Commissioner, Dept. of Planning (Govt. Of Meghalaya), CEO - MBDA and Project Director of Megha-LAMP, Shri. Pankaj Jain, IAS, Principal Secretary, Dept. of Planning (Govt. Of Meghalaya) and Deputy CEO – MBDA, and Shri Edward Mallorie, Mission Leader IFAD. Highlight of the speech given by the Honourable Chief Minister of Meghalaya, Dr.MukulM. Sangma

Dr.Sangma emphasized on the importance of economic empowerment of people so they can take care of their own needs. He also highlighted that the goal of IBDLP is to reach out to people all over the state, promoting sustainable livelihood through judicious and sustainable use of the State's natural resources. He highlighted that there is huge demand for livelihood activities in Meghalaya which will require supporting infrastructure and financial linkages. There are a number of other programmes that could be integrated with Megha-LAMP and IBDLP, and social mobilization would be critical to raise people's awareness of these opportunities. The programme, he explained, would work towards meeting this demand by working together with the people through effective partnerships.



### **LAUNCH OF MEGHA-LAMP AT THE DISTRICT**

Megha-LAMP was officially launched in South West Khasi Hills District (SWKHD) by the Basin Development Unit (BDU) of that district on the 7th of October, 2015. On the occasion, the project was inaugurated by Shri. Hadrian Lyngdoh, MDC, Mawkyrwat constituency, who was also the Chief Guest, in the presence of ofShri. ReniktonLyngdoh, Smt. R. Lyngdoh, Deputy Commissioner (SWKHD), Shri.(Paiem) N. Syiemiong, the Syiem of HimaMaharam, Smt. R. langrai, DPO (SWKHD) and Secretary of the BDU (SWKHD). During his speech, Shri.Lyngdoh emphasised on the need for people to work hard together with MBDA to help build sustainable and meaningful livelihoods for themselves and others around.









### **INTEGRATED VILLAGE DEVELOPMENT PLAN (IVDP)**

Till date the IVDP exercise has been completed in 450 villages. The remaining villages of the state will be covered in a phased manner. Digitalizing and analysing of the information generated about the 450 villages covered so far is in progress. The analysis will be shared with the village communities, line departments at the district level, the Deputy Commissioner (DC) as the chairman, and with MBDA itself for further planning.

A full-fledged GIS Unit has been set up at the Meghalaya Basin Development Authority headquarters in Shillong, to create and manage GIS databases and provide strategic insights for IBDLP and its community partners. An initial exercise undertaken by the IVDP team was to locate the GPS coordinates of the village centre and important landmarks in and around the village through community participation, and draw a village map showing community members' houses and village structures such as roads, wells, rivers, community halls etc. This entire GPS tracking process was with the help of Community volunteers who have been trained to understand GPS techniques and how to handle GPS equipment. Nearly 600 community volunteers have been mobilised under IVDP, and trained and deployed in GPS based data collection, data analysis and report writing.





### **RAPID ASSESSMENT STUDY**

A rapid assessment study covering all major regions of Meghalaya including Khasi, Garo and Jaintia Hills was conducted by the Monitoring and Evaluation unit under MBDA. The objective of the survey was to assess ground realities and validate indicators suggested by IFAD, and to adapt them or identify alternative indicators relevant to the local context. The study will act as a precursor to the upcoming state-wide baseline study. The study used quantitative as well as qualitative approaches including sample surveys, case studies and focus group discussions. 100 samples across 4 blocks were included in the survey. 1-2 case studies were conducted per block. 4 focus group discussions were conducted per block.

### RAPID APPRAISAL SURVEY TO SELECT PRODUCT CLUSTERS AND VILLAGES

Rapid appraisal survey of all 6,522 villages across all Districts in the State of Meghalaya has been conducted to identify priority crops and livestock products, markets available and linkages, for development under the Megha-LAMP project. The information has been collected through IVDP exercises with potential crops and livestock clusters triangulated by IVDP volunteers using field data collected from various sources. The data collected is currently under processing to identify product clusters for selection of villages under each cluster, for intervention under Megha-LAMP.

### **MARKET SURVEY BY DPMs**

As part of Megha-LAMP project, District Project Managers conducted market surveys across selected markets to identify the types of products, product sources, market participants, connectivity and distance to production areas as well as buyers' locations, available infrastructure, and key challenges and opportunities. To date, five major markets across three districts have been covered under the surveys. These include Sonsak market in East Garo Hills District, Mairang market in West Khasi Hills district, and Byrnihat, Nongpoh and Umsning market under RiBhoi districts. Surveys of the remaining markets are currently underway.

### **LAUNCH OF LAMP NEWSLETTER**

As part of our strategy to enhance internal communications across the organization, the Knowledge Management unit recently launched a new LAMP newsletter. The purpose of the newsletter is to provide key updates on project activities across districts, highlight key learnings and observations, highlight insights and key takeaways from researches and studies, communicate technical information to support project implementation, and to provide contact information of key project authorities and resource persons for coordination and support.

The first issue of the newsletter provided an introduction to Megha-LAMP and the key components under it. It also provided an overview of broad objectives and approach with highlight of key concepts within the



overall project framework. This newsletter is the second issue.

Recipients of the newsletter include Management of MBDA, District Commissioners (DCs), District Nodal Officers, officers on special duty (OSDs), Basin Development Units (BDUs), District Project Managers (DPMs), Enterprise Facilitation Centres (EFCs), Enterprise Resource Persons (ERPs), and all field and non-field staff of MBDA.

### TRAINING OF PROJECT STAFF AND PARTNER NGOS BY ILRT (Phase 1 &2)

ILRT has completed 2 phases of training and capacity building for MBDA personnel, project staff and partner NGOs. In the first phase, 224 personnel were trained over 7 training sessions. Each session ranged between 1 to 6 days in duration and is designed to build capacity of MBDA staff and partner NGOs which would facilitate scaling up of EFCs.

In the second phase, 214 personnel were trained over 9 training sessions. Each session is of 5 days duration and is designed to provide capacity building support to MBMA staff and associate agencies at the EFCs.

Additionally, the training sessions have also been designed to sensitise participants on the concepts of livelihood and livelihood promotion and to equip them with technical knowhow for field implementation.





### **LAUNCH OF RADIO PROGRAMME**

A radio programme titled Basin Development was launched in October 2015. The objective of the programme is to highlight inspiring stories form the grass root and explore opportunities in livelihood development and social enterprises. The aim is to use such stories to inspire and motivate people, especially in rural areas, to make an effort towards creating sustainable livelihoods for themselves. Further, the programme provides important information on various opportunities and support available under IBDLP and LAMP along with information how people can connect with the programmes.

The programme is targeted primarily at rural audience and serves as one of the channels for community communication. The radio programme is aired twice weekly – once on the AM frequency band and a repeated broadcast on the FM frequency band. This way, the programme will have wider coverage of target audience.

To date, 6 episodes have been completed. These episodes covered broad themes including an overview of IBDLP and LAMP, entrepreneurship and the enterprise approach, opportunities in natural resource management, livelihood development through participatory approach, and community driven initiatives. The Radio Programme is aired by All India Radio, Shillong.

## STAKEHOLDER WORKSHOP ON FOOD RESILIENCE THROUGH ROOT AND TUBER CROPS IN UPLAND AND COASTAL COMMUNITIES OF THE ASIA PACIFIC: FOODSTART+

### Background on FoodSTART+

FoodSTART+ is a three year project led by the International Centre for Potato (CIP) and funded by the International Fund For Agricultural development (IFAD) which will work in five core countries in Asia and additional side in the Pacific. The project aims at assessing food vulnerabilities among poor households with a production and consumption dependence on root and tuber crops (RTCs), and to identify and promote RTC innovations that enhance food resilience. To achieve this goal, FoodSTART+ will develop and validate effective partnership strategies with IFAD investment projects to promote RTCs for Food Security.

Centro International De La Papa (CIP) implemented FoodSTART - Food Security in Asia through Roots and Tuber during 2011-2015 in Five countries including - China, Bangladesh, Philippines, Indonesia and India. In India it was implemented at two focus sites - Odisha in collaboration with CTCRI, Trivandrum, and in Meghalaya in collaboration with ICAR RC, Umiam. Under this, a study on food security by Roots and Tubers assessment study and value chain study of Taro was done in Meghalaya along with capacity Building activities on Roots and Tubers.

### Brief Background of MBDA Partnership with CIP and FoodSTART+

On completion of the study in the first phase, CIP proposed a project FoodSTART+ (Food Resilience Through Roots and Tubers in Upland and Coastal Communities of the Asia and Pacific) in five countries, China, Philippines, Indonesia, Vietnam and India and was approved by IFAD as grant projects.

Dr. Gordon Prain, P.I, Resilient Food Systems-Asia, CIP had a meeting with the Dy.CEO, MBDA Shri. Pankaj Jain on 12th June, 2015. A ToR on potatoes was proposed from MBDA. As a part of FoodSTART+, a scoping study on RTCs in Meghalaya was agreed upon and Dr. M. Anantharaman, Former Head Extension and social Sciences, CTCRI, Trivandrum was entrusted by CIP to carry out the study with the help of Shri. E. Shanpru, OSD, MBDA. The Scoping Study started on 20th November 2015. MBDA collaborated on this work through secondary data collection. Key informants interview and Focus Discussion Group were organised in two districts viz East Khasi Hills at Smit village and West Garo Hills at Asanang/Rongram.

The main objective of the scoping study is to document the role of roots and tubers in livelihoods and nutritional security of people of Meghalaya, especially to enhance food resilience among poor households by introducing RTC innovations.

- To collect, collate and analyse existing secondary information on root and tuber crop production, processing, marketing and consumption in the target districts covered by the IFAD investment project partner, and also the wider province/state.
- To collect, collate and analyse relevant information on diets, food consumption habits, and nutritional status of rural and urban people (men, women and children) in target areas.
- To collect, collate and analyse additional information from the target area related to the development of climate change scenarios for RTCs.
- To identify key actors and stakeholders across public, private sectors and civil society, with whom FoodSTART+ can engage in both action research and policy inputs to improve the contribution of RTCs to food security.

To identify key problems and opportunities for attention by FoodSTART+ in the context
of partnership with IFAD investment projects, and information gaps where further
assessments on specific topics are justified.

The Scoping Study was completed in time and formed the basis for the Stakeholders Meeting and Workshop.

Food resilience through Root and Tuber crops in Upland and Coastal communities of Asia Pacific (FoodSTART+) was formally launched in Manilla, Philippines, during a five days meeting held from January 28th to February 2nd 2016.

# Meghalaya Scoping Study Stakeholder Feedback Workshop OnFoodstart+ held On 8th March 2016 At Mebada Hall

The Stakeholders workshop was organised with an aimed to highlight key objectives of FoodSTART+ and to share the findings of the scoping study on RTCs conducted in the two districts of Meghalaya and to discussed the action points with the stakeholders and get their views and opinions.

### ORIENTATION WORKSHOP ON THE COLLABORATION BETWEEN MBDA, ICIMOD & GRASSROOT

The initiative Improving Livelihoods and Enhancing Resilience of the Rural Poor in the Hindu Kush Himalayas to Environmental and Socio-Economic Changes (AdaptHimal) is part of Regional Programme of ICIMOD on "Adaptation to Change." It is based on the notion that mountains offer a unique context for development interventions where specific opportunities exist alongside serious challenges. The initiative is implemented in collaboration with IFAD. The main aims of the initiative is to support and improve impacts on rural poor and disadvantaged in mountain areas by an improved understanding on the extent and drivers of change, provide sufficient learnings from the pilots to contribute to designing effective programmes that help the mountain poor, and generate knowledge that provide evidences for refining policies and practices that strengthen adaptation to change by the mountain poor. An important component of the Initiative is the promotion of innovative livelihood strategies. ICIMOD has tied up with Pan Himalayan Grassroots Development Foundation (here after referred to as Grassroot) to implement "Diversification of Livelihood options by enhancing capacities of small producers (particularly women) and their organizations to benefit from market opportunities" in Meghalaya. To kick start the initiative, ICIMOD and Grassroot, along with MahilaUmang Producers Company Ltd., a collective of women's Self Help Group (SHGs) and women producer groups, setup by Grassroot in 2001, visited Meghalaya from 22nd to 24th February, 2016, to conduct field visits and an Orientation Workshop for MBDA/ LAMP, UGVS Project staff on importance of developing federations using business model, key concepts and framework, proposed Training of Trainers (TOT) plan.





### TRAINING PROGRAMME ON THE USE OFPLASTIC CELL TECHNOLOGY FOR CONRETE ROADS

One of the key objectives under the Megha-LAMP initiative is the construction of roads to help improve accessibility of markets to the rural farmers and producers. In this regards, the Meghalaya Infrastructure Development Finance Corporation (MIDFC) conducted a Training Programme on "The Use of Plastic Cell Technology for Concrete Roads." The training was held on 10th March, 2016 at Mebada Hall, Bishop Cotton Road Shillong and was attended by Shri. P Sampath Kumar (IAS), Dy. CEO – MBDA as the chief guest, Shri. Vijay Kumar Mantri (IAS), Addn. Project Director – Megha-LAMP and Executive Director – MBDA, Shri B. M. Syiem, OSD – MIDFC & Executive Engineer – PWD, Shri. J. Lyndem, Assistant Executive Engineer - PWD, Shri. Mukhim Junior Engineer – PWD, engineers of PWD representing all districts in the state, and other officials of MBDA. The training programme aimed at highlighting the benefits of using plastic cell concrete for construction of roads in the villages.





### **VALUE CHAIN CLUSTERSUNDER MEGHA-LAMP**

LAMP will support clusters to produce specific products for local and external markets, along with supportive investment in natural resource management and market access infrastructure. Clusters will be selected on the basis of their capacity and potential for development of marketable crops and other products. This approach will help ensure that vibrant livelihood opportunities really do develop, and it could be expected that these will then spread to other villages in the same region. LAMP will make efforts to ensure that women and poorer households within its clusters do participate in project activities and benefits.

Under Megha-LAMP, a total of 54 clusters for development of marketable products is planned to be established in 18 blocks, with about 75 villages in each block. About 47,400 enterprises will be supported, covering 100,000 households in 1,350 villages.

In line with IBDLP's policy, interventions will be implemented on a universal approach, covering all villages in a cluster and all households in a village. Selection of clusters is currently underway.

### TRAINING OF PROJECT STAFF AND PARTNER NGOS

Two training exercises are being conducted by the Institute of Livelihood Research and Training (ILRT) for scaling up the capacity of MBDA / MBMA staff as well as local NGOs that facilitate the implementation of IBDLP and Megha-LAMP. The trainings started in early December and as of date, 7 batches have been trained. A summary of the training activities is given below.



### Training 1 Scaling up of EFCs through Capacity

Participant Composition

### 28 Males – 21 Females

representing 3 NGOs from Garo Hills, 5 NGOs from Khasi-Jaintia Hills

No. of Batches Trained

Batch 1 - 4th - 6th January 2016 Batch 2 – 7th - 9th January 2016 Batch 3 – 11th -16th January 2016

Total trained 140personnel in 7 batches

**Participant Composition** 

### 44 Males – 47 Females

Personnel of MBDA ranging from Program Associates to Senior Managers

No. of Batches Trained

4

Batch 1 - 30th Nov - 4th December 2015

Batch 2 - 19th - 23rd January 2016

Batch 3 - 22nd - 26th February 2016

Batch 4 - 29th February- 4th March 2016

### **Training 2** Capacity Building Support to Personnel of MBDA / MBMA and its associates agencies in the EFCs



## **KNOWLEDGE MANAGEMENT SERVICES**

In the period 2014 – 2015, a full-fledged Knowledge Management Unit (KMU) was set up within the Meghalaya Basin Development Authority to plan and develop research, communications, outreach and advocacy in areas of work under IBDLP. The KMU is expected to engage with three sets of stakeholders – communities and community partners in Meghalaya, government departments and agencies in Meghalaya, and the general public and civil society at the state, regional and national level.

In its engagement with communities and community partners, the KMU is tasked with creating communications and outreach platforms to help communities understand IBDLP activities and potential livelihood opportunities, critical issues of natural resource management, and to voice their demands and their challenges so that the IBDLP programme can be more responsive to their needs. Toward this, in 2014 and 2015, the Knowledge Management team prepared IEC material, publications and videos on livelihood activities and natural resource management (NRM) initiatives that shall be distributed through systematic rural community engagement. A key outreach initiative planned for 2016 is called "Community Movie Nights". During this evening long engagement, video documentaries made by the KMU in participation with community volunteers will be shown to start a dialogue with community members around their ideas for local development projects and their vision for their communities. Prominent persons from state and national level eco-tourism and media sectors will be invited to facilitate exposure for the community and act as resource persons for any community development projects going forward.

In 2015, the KMU launched a weekly radio programme in partnership with All India Radio Shillong to be aired across the Khasi Hills region. The radio programme focused on sharing inspiring stories of entrepreneurs from across the state who have been able to breakthrough tremendous socio-economic barriers and create sustainable livelihoods based enterprises for themselves. Many of the episodes also focused on community elders who shared valuable insights based on traditional knowledge and shared aspects of local indigenous culture that are less well known. The KMU is hopeful of launching a similar programme for the Garo Hills region in 2016.

The KMU also focuses on internal communications. It supports IBDLP's programme implementation teams by collecting and disseminating information about implementation best practices, lessons learnt from the field, challenges faced when initiating certain activities, and successful innovations undertaken by community partners or government officials in different regions of the state. Frequently, these insights are compiled into strategy briefs or concept notes that are then shared with policy decision makers within the programme.

Finally, the KMU is making efforts to mobilize community youth from every district in the state and build their capacity as "Citizen Journalists". By creating this network of eyes and ears on the ground, the Knowledge Management team hopes to find genuine stories of success, failure, challenges and solutions from the grassroots and extensively communicate these stories to state policy makers, MBDA and the general public across the state.

To communicate this knowledge to a wider public outside the state, the KMU is developing a comprehensive online Knowledge Portal to be housed on the Meghalaya Basin Development Authority website. In addition to videos, photographs and media material submitted by community volunteers themselves, the portal will also host downloadable versions of print publications and video documentaries that the KMU has produced.

### **Knowledge products for external stakeholders**















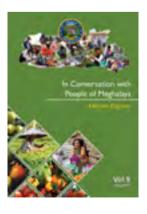


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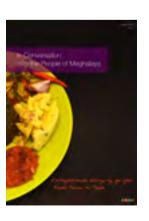
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