In Conversation with People of Meghalaya

Mission Organic

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Misson Organic in Meghalaya

Source - Department of Horticulture

Introduction

Farming in Meghalaya is organic by tradition and has been practiced by the farmers and the farming community for ages. It has been carried out across many generations in the form of shifting cultivation or slash and burn agriculture, which is commonly known as *Jhum cultivation or Rep Shyrti (in Khasi) and A.ba oa (in Garo)*. This has an in-built mechanism of sustenance, conservation and renewable system of resource management.

The practice of organic farming is primarily important to prevent depletion of the natural resource base and allow replenishment instead, thus leading to sustainable farming in the long term. This is done through careful management of farming processes, from judicious use of water to methods that allow soil nutrients to be renewed, to eliminating the use of most chemical pesticides and chemical fertilizers that are the usual feature of conventional agriculture. Organic farming practices try to address concerns about environmental pollution, human health (both farmer and consumer) and the balance between ecological and agricultural sustainability. Since farming in Meghalaya is 'organic' by tradition, it provides ample scope for moving into the expanding organic market and allowing Meghalaya's farmers to take advantage of these new and growing market opportunities.

The state's "Mission Organic" emphasizes a dual goal. The first is to spread awareness among farmers and the general public about the benefits of farming and eating organic produce and to build farmers' capacity to make the transition to organic farming from both traditional and conventional agriculture. In keeping with the vision of the Integrated Basin Development and Livelihoods Promotion (IBDLP) programme, the second goal is to build the entrepreneurial capacity of these farmers, enabling them to understand the process of organic certification as well as marketing, and to strategically link their farm-based businesses to this high value market sector. To support this second goal, the "Organic Certification Programme" under Mission Organic helps to link organic farmers and their products with organic markets at local, regional, and national levels, further aligning the certification standards with national and international standards.

The Mission

Mission Organic aims to serve stakeholders along the entire organic products value chain, from organic producers to consumers. Its goal is to inform producers and consumers about certification and standards, to ensure that these standards are met, to help create a statewide movement toward viable and sustainable agriculture that meets the highest standards.

To support market integration of Meghalaya's sustainable and organic farmers, the State Government aims to take forward the foundation laid by Mission Organic and build the brand 'Organic Meghalaya'. This brand will promote an organic agricultural economy and and support production of certified organic products. Further, by building consumer awareness about local organic products, organic agriculture can also be linked to sustainable, 'eco' tourism. Finally, the mission aims to lower the carbon footprint of the state, decrease the use of environmentally harmful chemicals, and help maintain a clean and green Meghalaya.

Vision Statement

Mission Organic envisions bringing two lakh hectares under organic production and certification by 2020 and making organic agriculture, organic food processing and associated tourism a driving force for Meghalaya's rural communities.

Mission Organic Objectives

- Promote environment-friendly and scientifically-rigorous farming systems that are economically viable, scalable, energy efficient, and support conservation of the environment and the socioeconomic empowerment of rural communities;
- Respect indigenous and traditional knowledge, skills and practice in the domain of environmentally sustainable agriculture and collect this knowledge to further build upon it with the participation of traditional farming communities;
- Enable organic farmers to create the necessary institutions and infrastructure to select, save and exchange seeds and rootstock of various crops with each other in situ and ex situ;
- Develop institutions for ongoing training and education on organic farming, certification and standards;
- Educate children from farming communities - the next generation of 'Organic Farmers' - on the benefits and opportunities in the area of organic agriculture;
- Assist farmers engaged in transitioning from conventional or traditional agriculture to organic farming, help them access practical knowledge from experienced farmers through organizing large scale workshops, structure these training/informational workshops around the demands and questions of the farmers themselves;
- Create awareness among all sections of consumers about the health, safety and environmental benefits of organically produced foods;
- Formalize and operate credible, scientific and publicly trusted systems for the recognition and registration of organic farms;
- Collaborate with other organic farming associations in India and strengthen the organic farming movement, create networks between farmers and exchange ideas for more efficient organic farming;
- Undertake programmes to increase farmers' awareness of their rights related to protecting the organic characteristics of their firms, including quality of the water that is used as a farming input.

Organic agriculture has the potential to significantly change farmers' lives for the better, as organic practices can be blended into traditional agricultural practices and also increase the value of their produce. Through the Mission Organic, the Government aims to usher in new development policies that will help the smallholder and family farmers eradicate hunger, reduce rural poverty and continue to play a major role as stewards who manage and protect natural resources. The Organic Mission sees farmers in Meghalaya as powerful drivers of sustainable development through their small-scale, locally adapted and ecologically smart agricultural practices.

Implementation Strategy

Source - Department of Horticulture

State Level Empowered Committee

There is a strong need to converge relevant schemes under different departments to promote organic farming in the state in an integrated manner. For the monitoring and implementation of this mission a State Level Empowered Committee under the chairmanship of the Additional Chief Secretary has been constituted to ensure co-ordination among relevant departments and organizations. This committee will also manage the budget allocation for organic farming.

Mini Mission- State Level Co-ordination Committee

The Mini Mission Co-ordination Committee on Organic farming will act as an advisory body to the State Level Empowered Committee in framing technical guidelines, approval of projects, monitoring of programmes etc. Headed by the Director of Horticulture, the other team members of Mini Mission are drawn from among representatives of the line departments including senior / sector officers of both Directorate of Agriculture and Horticulture.

For the purpose of better co-ordination in the implementation of the Mission the government will constitute the following Site-Specific Committees

1. District Level Committee for promotion of Organic farming – will formulate action plan and supervise the implementation of the Organic projects in the district

2. Block / Cluster Level Organic farming Implementation Committee – will take initiative to implement / translate the Organic farming Policy into a reality

Mini Mission on Organic Farming

To ensure smooth functioning of Mission Organic, implementation is further divided into 4 Mini Missions:

Mini Mission - I: Facilitation and Convergence

- Facilitate formation of Farmer Interest Groups (FIGs) / Farmer Producer Organisations, Farmers Co-operatives, Farmer's Company (FC);
- Formation of these groups would be based on geographic area and specific crop or commodity.
- Promote bio-mass production, conservation of bio-diversity, mixed-farming, soil and water conservation, rain water harvesting
- Train farmers on land regeneration, building up of soil fertility, creating bio-diversity in the farm, inter cropping , mixed farming practices
- Provide support to farmers for agricultural inputs, assistance for accessing subsidy under schemes, installation of renewable energy sources and plant quarantine mechanism

Mini Mission - II : Post Production Facilitation

- Provide assistance to farmers for processing, value addition and storage
- Provide assistance to entrepreneurs for creation of organic produce processing units
- Link farmers and enterpreneurs to financial institutions for access to credit
- Facilitate a special line of credit to Farmers' Associations and Farmers Clubs

Mission Organic

Mini Mission - III : Certification and Market Linkages

- Provide farmers with assistance for organic adoption, conversion and certification
- Facilitate the creation of a State Organic Certifying Agency
- Train farmers on marketing and branding of organic produce
- Assist farmers with linkage to domestic and international markets
- Assist farmers with exports of organic produce

Mini Mission - IV: Research and Development

- Research into best practices for organic farming across different agro-climatic zones
- Provide systematic training and education to farmers to create awareness on organic farming, including study tours for farmers to Model Farms within and outside the state
- Create publicity around the benefits of eating organic produce so that consumers are encouraged to buy organic items
- Integrate the concepts of organic farming into the syllabi of primary and secondary education
- Create Eco-tourism initiatives around organic and sustainable agriculture
- Promote the creation of chemical fertilizer and pesticide free zones in the state

Implementation Process

Source - Department of Horticulture

The action plan for implementation of Mission Organic calls for optimum management of three main stages of the farming process - pre-production, production and post-production - with the entire process tailored to meet requirements of NPOP organic standards. During implementation, the utmost care is being taken to include each village within a target area. In each such identified village, a cluster of farmers will be formed and a team of experts will provide these farmers with training and handholding support to achieve the desired organic standards. Keeping local environmental conditions in mind, farmers will be advised about which crops are most suited to their specific agro-climatic conditions. Crops that are better adapted to local soil conditions, better at maintaining soil nutrients, which help sustain the optimum local micro-climate and which are resistant to locally prevalent diseases and pests even without much chemical input, shall be progressively introduced. There will be similar stepwise support provided to the farmers for ensuring that organic standards are maintained even after harvesting the crops (to prevent contamination), as well as provision of technical information on food processing methods that preserve the organic characteristics and quality of the produce. Importantly, the implementation plan integrates market development into the initiative by providing training to producer groups on promotion, branding and value chain linkages.

Key Implementation Activities

Research, Identification and Registration

- Identification and documentation of current gaps in allocation of financial and human resources toward the required organic standards
- Identification and selection of the suitable area and target villages
- Analysis of soil samples from fields registered under the project with soil health reports provided to farmers
- Selection of high value crops most suited to local soil type and agro-climatic conditions
- Short-listing of farmers who are already using low amounts of chemical fertilizers and pesticides and who also have a basic understanding of the concept of organic farming
- Registration of farmers' fields with relevant documents provided to registered farmers
- Formation of clusters in areas of 50 hectares each; grouping of farmers according to geographic proximity and crop selection
- Collection of data on the essential details of farmers' land and crops
- Verification and recording of collected data

Training and Capacity Building

- Building capacity of field level officers to support the organic farming process
- Training of farmers for adopting organic farming
- Training of farmers on the paperwork required for getting certified by an accredited certification agency
- Training and handholding of farmers for building appropriate infrastructure as required for producing organic inputs on their own farms
- Training and handholding of farmers on crop rotation and green manuring toward balanced crop nutrition and increased biological activity of soil microbes
- Ongoing training of farmers in pest and weeds control as well as disease management
- Training of farmers on post-harvest management of produce
- Training of farmers on market linkage and brand development for domestic and export markets

Farm Management

- Provision of support during the conversion phase and subsequent organic production when the farmers have to use organic or untreated seeds
- Support with seed treatment, with appropriate organic products being prepared at a farmer's field itself
- Support with on-farm input management: preparation of compost with all available agricultural waste and cow dung, NADEP compost, Cow Pat Pit compost (cow manure), vermi compost, vermi wash, beejamrit, liquid bio-fertilizer-cum-pesticide, green manuring and crop rotation
- Support with preparation of herbal pesticides using plants like Neem, Lantana, Ipomoea, Cannabis, Turmeric, Chilli, Garlic and so on
- Dissemination of knowledge about prevention of pest build up, for example deep ploughing to expose pests to predators, using pheromones and repellents like neem
- Support to farmers with maintenance of records regarding full details of inputs purchased/used
- Certification and traceability of the organic farming system adopted by a given farmer; cross verification done by designated staff
- Relevant measure for minimiszing contamination from outside and within the farm

Internal Control System(ICS) and Risk Management

- Internal Control System (ICS) is a system by which every organic farmer has to ensure compliance to organic standards by maintaining records of agricultural system, farmers' land, training, crop cultivation, annual inspection details, etc.
- Development of a core team within clusters to supervise and monitor all project activities
- Putting in place systems to ensure separation between organic and conventional production, regular monitoring of systems by field team
- Internal inspection of registered farmers and their fields, house and storage units; inspections conducted at least twice annually by the ICS
- Preparation of maps for each registered field by the cluster in-charge, with maps showing location of the cluster and all neighbouring fields
- Maintaining an electronic ICS with data made available to all consumers and buyers through a web portal
- Comprehensive reporting of activities under the full sequence of events (land preparation, sowing, transplanting, crop management and so on) and uploading to the website for traceability
- Ensuring safety, quality and authenticity of organic foods through full traceability
- Maintenance of traceability systems to track product distribution and thus better coordinate recall activities if needed, ensuring consumer health and limiting damage and liability

Verification and Certification

- A committee of certification experts to scrutinize the field data on internal inspections, prepare a final list of eligible farmers [Approved Farmers List (AFL)], and submission to the certification body engaged
- Farmers non-compliant with organic certification standards (NPOP/NSOP) to be sanctioned via removal from the programme
- Farmers sanctioned for the first time during conversion period to be re-included provided he/she appeals to abide by guidelines in the future
- Engagement of an APEDA accredited certification body for external inspections and certification
- Certification body to conduct annual ICS audit and field audit for 3 consecutive years
- Upon fulfilment of requirements for compliance with NPOP and EU regulations, certification body to issue C-1 (in conversion) certificates in favour of ICS after 1st external inspections
- Post 2nd and 3rd external inspections, certification body to issue C-2 (in conversion) and C3 (organic) certificates respectively in favour of ICS

Interview with Mr. M. Syiem,

Director of Horticulture, Government of Meghalaya

Mr. M. Syiem
Director of Horticulture,
Government of Meghalaya

Organic Mission has been launched, recently. How is the Agriculture Department planning to implement it?

Meghalaya has a long tradition of organic practice which is embedded in its agrarian practice since time immemorial. Majority of our farmers traditionally practice agriculture/ horticulture production which is by and large organic by default. As a matter of fact, 4673 hectares of areas in the State is already under organic certification process and about 100 hectares of area under tea cultivation have already been certified as organic.

The strategy for implementation of Mission Organic are as follows:

- Partnership with 8 empanelled Service Providers for organic adoption and certification programs to cover all 11 districts of the State
- Identification of key organic strengths/crops
- Delineation of special organic clusters and organic zones
- Phase out use of inorganic inputs and promotion of biologicals
- Setting up certified organic stores and outlets

What are the key benefits that Organic Mission would bring for the farmers of Meghalaya?

Meghalaya Mission Organic is a mission mode program that aims to formalise this traditional agriculture practice based on traditions to a legally, environmentally and internationally recognised system of production, certification and marketing. This in turn will improve rural livelihood through better market access, protect and preservation of the environment and biological system and promote sustainable agriculture practice through lower cost and input use.

Farmers in Meghalaya generally follow traditional practices of farming. How different is traditional farming from Organic Farming?

In principle, there is not much difference between traditional practice of farming (shifting cultivation etc.) with organic practice. The difference is while the former is based on trust, the latter is based on a body of knowledge which is codified and is based on standardised processes and internationally accepted protocols.

Conversion from traditional/conventional agriculture to organic agriculture is a long and laborious process. How is the Directorate of Agriculture facilitating this process?

Meghalaya Mission Organic is the program which is designed to facilitate this process of transitioning from traditional agriculture practice to the program of organic certification based on the National Program of Organic Production(NPOP). The mission document outlines the roadmap, measurable indicators and outcome of the program.

What are the key activities that the Agriculture Department is undertaking to promote Organic farming in the state?

Meghalaya Mission Organic has 4 key pillars which comprise of the following mini missions:

Mini Mission 1- Facilitation and Convergence
Mini Mission 2 – Post Production Facilitation
Mini Mission 3- Certification and Market Linkages
Mini Mission 4- Research and Development (R&D)

Under each of these mini missions, several key activities have been designed and incorporated with the goal of building brand Meghalaya as a source of certified organic produce, organic food as well as projecting the State as a destination for eco-tourism.

What are the existing challenges that the Agriculture Department is facing in widespread implementation of Organic Mission in the state?

Some of the key challenges faced by the department are in managing and reorienting the department's transitioning from a green revolution approach towards a sustainable agriculture framework, which is more in tune with the growing concern for adaptation to climate change, protection of environment, preservation of agro-biodiversity, ensuring sustainable rural livelihoods and ensuring safe and healthy food. The second challenge is to bring sceptic farmers and stakeholders on board and convince them to switch to organic system. The third challenge is how to minimise the risk faced by farmers in order to ensure that their investment is climate smart.

How are the existing schemes of the Department being interlinked with the Mission Organic of the IBDLP Programme?

The District Level Committee for Promotion of Mission Organic under the Chairmanship of the respective Deputy Commissioner were constituted to ensure co-ordination among different line Departments/ sectors and agencies involved in organic farming. The Committee will formulate the Comprehensive District Action Plan (CDAP) in convergence with the schemes/assistance available under State Plan Schemes & Centrally Sponsored Schemes of the Line Departments and other agencies.

Creating Enabling Institutions for Farmers to Practice Organic Farming is another key challenge for the Agriculture Department. What is being done in this aspect?

The Mini Mission 1 is the main pillar which address the creation of enabling institutions for setting up Farmer Interest Group (FIG), Farmer Producer Organisation (FPO) for production of organic inputs like seeds, planting materials, organic fertilisers, plant protection materials etc., required for powering the mission. Formation and Farmer's Co-operatives, and Farmer's Companies for organised production and marketing are the next step in the value chain. Thirdly, conversion to "Organic Village" concept and certified "Organic Farms" will further strengthen the institutional framework.

Convergence of various schemes and missions is one of the key aspects of the IBDLP programme. In what ways is the Agriculture department converging with other missions and schemes to make Organic mission a success?

Mission Organic requires a multi-disciplinary and multi sectoral approach as there is interlinking of activities. For instance, inputs like manure from animal sources also needs to conform to laid down standards.

Convergence with other line departments/schemes Allied Sectors, NREGA, Meghalaya Green Mission, Non-conventional energy sources are vital for the success of the mission. Further, District level and Block level Implementation Committee comprising representatives from various stakeholders will be formed to ensure convergence during planning and implementation.

Building the capacity of farmers to practice organic farming would be the most important aspect of the mission. What is being done in this direction?

The Department has signed an MOU with 8 organic Service Providers (SP's) who are conducting baseline village level surveys, identification of commercially viable crops for organic certification, implement capacity building, training and handholding of farmers and crop clusters. Currently, the work is at various stages of progress.

Organic Products have a niche market, so how does the department intend to create market linkages to sell the produce in these niche markets?

The MOU signed with the SP's also has provision for facilitation of market access and market linkages with national and international buyers/markets.

Organic produce also has a huge export potential especially to Europe and Australia. Are there any long term plans to export organic produce from Meghalaya in these markets? What steps are being taken in this direction?

Mini Mission III aims to address this aspect, recognising the growth in demand for organic certified food and food products. This mini mission will help plug the gaps that exist in tapping the international market. The Department is also facilitating buyers cum sellers meet with neighbouring countries like Bangladesh, Myanmar, Thailand, Bhutan etc. The Department is also taking the assistance of professional trade bodies like CII, ASSOCHAM, BIOFACH, Chamber Of Commerce for trade facilitation and promotion.

Facilitating the farmers and the farming communities to organize into groups or producer organizations to take forward the objective of the organic mission is the key objective under the mission. How is this facilitation process being taken forward?

The Department has institution at the District level called Agriculture Technology Management Agency (ATMA) under a Project Director, who work closely with farmers to empower and organise them into different commodity groups. This institutional grassroots development mechanism works upto block level in the form of Block Technology Team (BTM's) Farmer's interest Group (FIG) and Farmer's Friend(FF)

Any successful Government Scheme has to be people centric in its approach. What are the foreseeable benefits that the people of the state would gain from the success of the Organic Mission?

First and foremost, the health of the citizen, availability of safe food, sustainable agriculture production and livelihood practices through eco-friendly methods of production, harvesting and packaging are the desirable outcome of a people centric intervention. I am sure that the vision of the Hon'ble Chief Minister and Minister Incharge of Agriculture to lead Meghalaya towards a production system which enhances and sustains the health of the soil, plant, animal and human will translate into reality by 2020.








Role of Organic Service Providers

Source - Maywakit Lyngdoh, MBDA Knowledge Team
Supported by - Abhijit Sharma & Victorjoy Najiar,
School of Livelihood and Rural Delopment

The Organic Service Providers play a very important role in the implementation and monitoring of Mission Organic in the state of Meghalaya. Presently, there are 6 Organic Service Providers who are empanelled by the Department of Agriculture, Government of Meghalaya. They have been assigned specific areas or zones across the state and are appropriately engaging with the farmer communities in their respective area of operation.

The key responsibilities of these service providers are to motivate the farmers to adopt organic farming, help in registration of growers, help farmers in maintaining and verifying records, and build farmer capacity through training.

Additionally these organic service providers are also assisting in the management of Internal Control Systems (ISC), internal and external inspections and verification, helping growers in the certification process.

The Organic Service Providers are also tasked with supporting the growers for post harvest management activities like packaging, storing, processing etc. They are also facilitating the growers to link to the markets.

A day with an Organic Service Provider

To better understand the role of these Organic Service Providers, the MBDA Knowledge Team engaged in discussion with one of the Service Providers, School of Livelihood & Rural Development (SLRD). The MBDA Knowledge Team members also undertook a field visit along with the field team of the service provider to Mawkynrew Block in the East Khasi Hills District of Meghalaya to speak to the local farmers. The SLRD field team was conducting a small awareness camp to inform the local villagers about Mission Organic. The camp was organized in a local tea shop to engage the villagers in a familiar environment. After the awareness camp the MBDA Knowledge Team engaged a few farmers in conversation. Following are the excerpts of these interactions.

Interaction with Farmers after Mission Organic Awareness Meeting

Name: Dli Kshyir
Age: 40
Village: Umblai (Mawkynrew Block)

Tell us a bit about what are you currently growing in your farm?

We generally grow all kinds of crops in our field but what really brings in the revenue for us is betel leaf and broom grass. The nearest market for selling our produce is either Smit Market or Shillong Market.

You were part of the meeting with organic service providers. What can you tell us about organic farming?

Around here we have always been farming our land without using any fertilizers and pesticides, so to my mind we are already organic farmers. But as explained in the meeting, if we are linked to government organic farming programmes we will be able to increase our livelihoods. If this is the case, then we are happy to do so.

As explained in the meeting, there will be an agreement that we will have to sign stating that we will be organic farmers and not use any chemicals during the production. Our land will be tested periodically for the use of any such products.

Are you willing to sign that agreement?

Yes, I am willing to do so. Although, I had some questions earlier about the terms of this agreement but the meeting has cleared all my doubts. To be clear, I am more than happy to co-operate as required for a better livelihood and for the progress of our village.

Mixterwell Tangsang
Age: 30
Village: Mawlat (Mawkynrew block)

What is your major produce?

People from my village are generally Betel leaf farmers and we also cultivate broom grass.

We also grow potatoes and other vegetables but the production for these is not on a large scale so that we can sell it in the market.

Our nearest markets are the Smit and Shillong Market.

You were part of the meeting with the organic service providers. What can you tell us about organic farming?

To me organic farming is a means by which we can sell our produce for a premium and increase our livelihoods. As far as the use of chemicals and fertilisers goes, we have never used it in our farming process and we never intend to in future.

As explained in the meeting, there will be an agreement that we will have to sign stating that we will be organic farmers and not use any chemicals on our produce and land. Our land will be tested periodically for the use of any such products.

Are you willing to sign that agreement?

Yes, I am willing to sign the agreement. As my friend said earlier, we are willing to cooperate with the government in this regard. Anything that will help increase our income is a good initiative, so we will work closely with the government to make this effort a success.

Urlong Tea, Mawlyngot

Source - Maywakit Lyngdoh, MBDA Knowledge Team

About 2 hours away from Shillong, in the Mawkynrew C&RD Block of East Khasi Hills district, lies the sleepy picturesque village of Mawlyngot. For the last 5 years, this village is increasingly getting attention from tea lovers around the state and from the entire NE region. Urlong Tea is produced by the people of this village under the banner of their Integrated Village Co-operative Society (IVCS).

Using the platform of their IVCS, the producers in the village have been able to collectively act not just to sell their produce at premium prices but actually produce a high quality product that is much in demand.

The chairman of this IVCS - Bah Nongspung - was instrumental in rallying the people of the village to first form the society and then take the tea production activities forward. Seeing that he and many other tea growers of his village were suffering because of lack of market linkages, he initially gathered just a few people together so that they could sell their produce for a higher profit. Soon, this small group turned to a thriving co-operative society.

To find out more, we sat down with Bah Nongspung over a cup of Urlong Tea:

What led you to think of creating this co-operative society in your village?

Tea has been grown in our area for generations now and yet this has never been done on a big scale. Seeing how favourable our climate is for growing tea we decided as a community to form an integrated village co-operative society so that we could produce and sell our tea in a better way.

How does this society help the tea producers of Mawlyngot village?

Earlier most farmers here would just sell their products in the local market for a minimal price, despite their tea being a high quality product. Ever since we formed this society and acted collectively, farmers have been getting a fair price for their produce. Overall this has encouraged the community as a whole and thus had a positive impact.

What made the society decide to become one of the few organic tea producers in the state?

We have always been organic! Everything that we have produced using traditional practices has always been more or less organic. Initially we lacked an organic certification but with the help of the Agriculture

Department, we got our organic certification in the year 2011. Since then we have maintained the standard as per government norms.

Secondly, we could neither fulfil the demand for tea in the market nor could we compete with the massive tea production in states such as Assam. So we thought of focusing on quality instead of quantity. Right now there is a high market demand for everything organic, so we decided to focus on that niche market also.

It has been 5 years since IVCS launched our product in the market, and it has been a good 5 years for us. Our tea has had a very positive response in the market and we have also been able to showcase our tea in various trade fairs in the region and across the country.

What more can the government do when it comes to organic production?

I think what we need is an Organic Cell. The state government should be looking for ways to act upon the promise of making Meghalaya an organic state. An Organic Cell would make life easier for organic farmers as we would not have to run from pillar to post for organic certification.

You said that traditional tea cultivation practices in your village have always been organic. So how would you explain the difference between traditional and organic?

Actually, there is no difference between traditional and organic. Our soil has never been treated with any fertilizers or chemicals and we have never used pesticides. So the only difference is our official certification as organic producers.

Right now, the certification process is long and too complicated for most farmers. That is where I think the government can help farmers, with the organic certification procedures.

What are your co-operative society's future plans?

We really want to increase the scale of our production. Even with almost 90% of families from our village cultivating tea, we just cannot meet the demand for our tea in the market.

Hence as a community we have thought of one solution. We can contact tea growers from other nearby villages who also grow their tea organically and collaborate with them to scale up. Participating in more trade fairs is also important as we need exposure to new markets all over the country and around the world.

Litchi, Umsyiem

Source - Evanylla Marbaniang & Maywakit Lyngdoh, MBDA Knowledge Team

Name: Sylvinus Synskai
Head man of Umsyiem Village
Occupation: Farmer and school teacher
Age 44

Tell us about your livelihood?

There are five people in our household. In addition to Litchi we grow Areca nut and few other types of fruits. However, most farmers from our village grow litchi during litchi season.

How long have you been farming litchi in your village and how did it start?

Farmers in our village have been farming litchi for more than 60 or even 70 years now. I don't know how it all started but my parents told me that it all began when an Englishman brought litchi to our village.

What is the total size of your farm area dedicated to litchi production?

I grow litchi in an area of about 6-7 acres of my farm. In addition to this every household of the village grows atleast 3-4 lichi trees in their garden.

> *"But as a community we decided not to go ahead with the option of using such strong pesticides and will continue killing these bugs manually."*

Where do you market your produce?

Typically, traders from Assam and Jowai come to our village and buy our produce directly from us. But there are few people in the village who go to the local market in Dawki to sell their produce.

How much do you earn annually out of Litchi Production?

Litchi cultivation gives each household or farmer about 50,000/- to 1,00,000/- a year depending on how much they are able to produce. However, recently there has been a dip in our production because of a pest infestation.

What are the major hardships that you face as a litchi farmer?

Litchi farming is not very difficult, so we have not faced many hardships typically. Although for the past three years we have been quite pestered with Stink-Bug infestation. These insects were there earlier, but recently we have had an outbreak of these bugs that has nearly destroyed our litchi crops.

You mentioned the Agriculture department. How did they help you?

To deal with this crisis we approached the Agriculture Department and ICAR for help. Scientist from ICAR came and studied these bugs and explained to us why they are becoming a menace. They said that it was due to climate change.

With the help of ICAR and Agriculture Department we came to know the importance of vitamins for the trees. Further, we avoided pesticides, as we typically do not like to use any chemicals on our farm.

How did you get rid of these pests or stink-bugs?

We organised an initiative in our village to kill these stink-bugs. The whole community decided to get together and remove these pests manually. In one day we managed to kill almost 1,50,000 stink-bugs! Thus, as a community we decided to get together periodically to kill these stink-bugs manually rather than using pesticides.

What is the situation of these pests now?

Frankly, we are fighting a losing battle with these pests. Although we keep killing them they multiply really quickly. Like I said, this pest problem has affected us for the last 3 years . This has caused a drastic reduction in our income since there has been about a 80-90 % drop in our production of litchi.

How do you plan to combat this situation?

The Agriculture Department has advised us to use a strong pesticide that will kill all these stink bugs. We were instructed that when we use this pesticide we need to leave our houses - and actually leave the village - for at least 6-8 hours. But as a community we decided not to go ahead with the option of using such strong pesticides and will continue killing these bugs manually. We hope that nature will change for the better or we will be able to find a better option.

The story of how Litchi came to Umsyiem

During the 1930s when the Syllhet - Dawki road was being built, an Englishman had come here to survey the land to build the road. My father took him in as a tenant and he was with us for the duration of his stay. We called him Sahib Don, I think his actual name was J. D. Duncan. I was a little girl at that time, so it is hard to recall. But I think the English gentleman stayed with us as a tenant for 4 to 5 years.

When Sahib Don left the house he gifted us two things - a wrist watch and a sapling of Soh Manir or Litchi. So all these litchi trees you see around have come from this very litchi plant.

My father was a farmer too, but was also one of the village elders. Someone had suggested that the Englishman, to stay with us on his visit to Dawki, thus we met him in the Dawki market and brought him home to stay with us.

Since I was a little girl back then I didn't interact much with him. But I remember being very excited about having an Englishman living with us and used to boast about it to my friends . He was a very decent man and gave me sweets and biscuits whenever he saw me.

Name: Kong Blissimai Lamin
Age 70
(Father's Name : P Karkonknor)

Looking back, the gift of Sahib Don turned out to be a blessing not only to our family but to our entire village. Even our neighbouring villages are full of litchi farmers now! I feel really happy when I see that my friends and fellow community members have benefited from litchi production. Unfortunately for the past 3-4 years the stink-bugs have badly affected our productivity. But I believe that these Litchi trees will continue to be a blessing for all of us.

Tomato, Laitkynsew

Source - Maywakit Lyngdoh, MBDA Knowledge Team

We travelled with the IBDLP Natural Resource Management (NRM) team led by Mr. E. Shanpru (OSD, MBDA) to Sohra, where under the Sohra subdivision, lies the village of Lumwahkrem (Laitkynsew) which is famed for its tomatoes. People of Shillong have sworn by Laitkynsew Tomatoes for years, and rush to buy these tomatoes during their annual season.

About an hour away from Sohra, lies a small idyllic hamlet of about 35 odd households overlooking the plains of Bangladesh. On our arrival, a congregation of tomato farmers of the village greeted us. We sat with them to discuss what makes the tomatoes of their village so special.

The discussions revealed that the farmers follow cultivation practices that have been handed down as tradition across generations of tomato farmers. The IBDLP - NRM team was curious to know whether the seeds of these tomatoes have been altered or compromised in any form and hence keen to analyse seed samples. The farmers however categorically stated that the seeds have remained nearly unaltered for almost a hundred and fifty years. This was a significant finding in this age when genetically modified crops and hybrid varieties are coming to predominate agriculture even among small farmers, often taking precedence over traditionally grown indigenous varieties.

For their part, the IBDLP - NRM team shall be processing the seed samples that they have collected. They shall check for cross-pollination, and run different kinds of tests to get these tomatoes certified and patented as “Lumwahkrem tomatoes”. Their goal is to ensure that this village does not lose the patent for their famous indigenous tomato variety, which has traditionally been grown organically.

We were surprised to learn that this community has long carried out its agriculture entirely through its own initiative, without subsidies or support from the government. While a jalkund (water reservoir) has been set up, there is no other infrastructure set up to help them with their farming. Despite their produce being so famous, they actually have limited linkages with local or regional markets and also limited access to suitable transportation for their produce. During our discussion, farmers complained that almost 30-40% of their produce went to sheer waste even before reaching the market; the remainder was sold by the kilo in polythene bags.

There are countless other such examples of villages like Lumwahkrem , which grow delicious, unique, and sustainably grown indigenous varieties of fruits and vegetables. Their significant market potential however, remains unexplored and untapped.

This field visit represented the first phase of activities under IBDLP’s many natural resource management activities to reach out to this and other similar communities who do both, practice and guard, Meghalaya’s rich ecologically sustainable agricultural traditions and unique agricultural varieties. Bringing Lumwahkrem and other such traditional communities under Mission Organic also makes the farmers gradually more confident of the fact that their produce is unquestionably a prime commodity, that the demand for their produce is high, that they can both conserve their traditions and also earn a higher livelihood through these organic-compatible traditions, and that it is valuable for them to retain ownership (and a sense of pride) of their authentic seed variety.

Lumwahkrem presents yet another example of a community in Meghalaya that has thrived because of its self-belief, hard work, and adherence to natural traditions. It is such communities that are being targeted by IBDLP and Mission Organic for a variety of handholding and market linkage support activities, and it is such communities that can help Mission Organic take the agriculture sector of Meghalaya forward.

Larsing Khyllep
Age: 50
Village: Lumwahkrem (Laitkynsew)

How long have you been farming tomatoes in your village?

I don't really remember anymore but this is something that has been handed down to me from my father. So it has been a long time! It may have been more than fifty years now.

Besides tomatoes, what other crops do you plant?

We also grow Kwai (Areca nut), Synsar (Broom grass), Soh Marit (Pepper) and Sla Tyrpad (Curry Leaves) on our farms.

Why do you grow your tomatoes here around your houses and not on your farms?

Tomatoes need to be watered and taken care of on a daily basis. Other crops don't, so we plant them in our farms. Also, tomatoes need a fairly even land to grow, that is why we grow them around our houses here in the village itself.

What is your annual production of tomatoes?

We generally get about 20 -30 quintals of tomatoes per year.

How much do you sell it for in the market?

It depends. The first few harvests fetch us a premium price of up to Rs. 120 per kilo but then the price falls to about Rs. 60 per kilo.

How much do you make in a year just from tomatoes?

That of course depends on the quantity of our produce, but if all goes well we can make almost Rs. 50,000-60,000 (fifty to sixty thousand) a year from our tomatoes.

What makes your tomatoes special?

Our tomatoes look better! And they also taste much better because we do not use any fertilizers or inorganic manure. They have a thinner skin which also adds to their taste. That is why when our tomatoes come into the market, people rush to buy them.

How long have you been cultivating tomatoes?

We have been growing tomatoes for generations now. My father and also his father before him were all tomato farmers. We are just following the practices that have been laid down by our forefathers. Not much has changed in the way we cultivate our tomatoes.

What are your nearest markets where you sell your produce to?

We generally send our produce to the Sohra market. Recently however, we have started to send our produce to Shillong Market as well, since we see that there is a lot of demand for our produce.

Ity Wahlang
Age : 72
Village: Lumwahkrem (Laitkynsew)

How long have you been a tomato farmer?

I have been cultivating tomatoes for more than 50 years now.

Besides tomatoes what else do you cultivate?

We grow beans, cabbage, broom grass, pepper and a lot of other vegetables.

What is the reason that the tomatoes from your village are so popular?

I think it is because our tomatoes are purely organic. We have maintained the organic standards of these tomatoes as much as we can. That makes our tomatoes very soft and juicy.

How much do you sell your tomatoes for in the market?

When the first batch fruits, we sell it for Rs. 120 per kilo. But after that the price falls to Rs. 60 per kilo.

Which markets do you sell your produce to?

To Sohra and Shillong markets. Actually it has always been mainly sold at the Sohra market, but recently we are sending more produce to Shillong.

How is the demand for these tomatoes in the Shillong market?

I think it is too early to say anything about that since we have just started supplying to the Shillong market. Still, the response so far has been very favourable.

How much is your annual tomato production?

Generally we produce 30 to 50 quintals a year. But it definitely depends on individual farmers' capacity and also cultivation area.

How much do you make annually out of tomatoes alone?

Our income depends on the size and quantity of our produce, and it varies from year to year. On an average, I would say we make up to Rs. 50,000-60,000 (fifty to sixty thousand) a year.

Have you ever received any kind of help or assistance from the government?

Not really. Although a lot of people, including government officials do come to see and inspect our tomatoes. We have not taken any direct assistance for the cultivation of tomatoes, except for assistance with setting up the jalkund (water reservoir). That really helps us have a consistent water supply for our produce.

From Bureaucrat to Farmer

Source - Athou Phemu & Maywakit Lyngdoh, MBDA Knowledge Team

Mr. Jlan Singh Lyngdoh

> *...many local fruits are vanishing from the markets. Earlier these local fruits were also available in the market for a longer duration as they were grown in different agro-climatic zones of the state. Some would ripen early and some would ripen late due to the different climatic conditions, leading to a longer seasonal availability of these local fruits.This is no more the case.*

Mr. Jlan Singh Lyngdoh was the Director of Agriculture, Government of Meghalaya, from October 2008 to March 2010. He steered the department with a lot of zeal and enthusiasm and provided a holistic approach to the development of the state's agriculture sector. After his retirement, he is today settled in the Sadew Village in the Upper Shillong area. He has a small farm and grows many types of fruits and vegetable and also rears livestock. He also serves the local community by guiding them through the experience he has accumulated as Agricultural Scientist. Being a humble and down to earth person he took time off from his busy schedule to share his thoughts with the MBDA Knowledge team.

What change has taken place in the Horticulture sector in Meghalaya, especially from the perspective of local produce?

Meghalaya is primarily a horticultural state. The environmental conditions are very favourable for horticulture and many varieties of horticulture crops can be grown. Today, in Meghalaya new varieties of temperate fruits are being grown successfully. At the same time many local fruits are vanishing from the markets. Earlier these local fruits were also available in the market for a longer duration as they were grown in different agro-climatic zones of the state. Some would ripen early and some would ripen late due to the different climatic conditions, leading to a longer seasonal availability of these local fruits. This is no more the case. Even the quality of these local produce have gone down, earlier during my childhood I remember these local fruits to a big, juicy and delicious.

What kind of fruits and vegetables are grown in and around Sadew area? Are these produce grown in traditional way or in a modern way using fertilizers and pesticides?

This is a major betel growing area. Other major produce grown here are cauliflower, potato, radish, cabbage, beat, carrot, squash (piskot) and turnip.

Prior to 1970's farmers here did not know about chemical based fertilizers and pesticides, they used to practice the traditional way of farming. Fertilizers were introduced here in early 70's, if I am not mistaken, sometime in 1972 the farmers gradually started using them. But, even till now they use only a small amount of chemical fertilizer and pesticides.

In the 70's when chemical based fertilizers and pesticides were introduced, the farmers were very reluctant to use them. Only after a lot of convincing they started to use these fertilizers and pesticides. To use fertilizers and pesticides the farmers were given subsidy, sometimes these were also provided for free.

Initially, the farmers found these fertilizers and pesticides to be very effective since it helped them increase the yield manifold. They started using these on a regular basis, though not in huge quantities. But over a period of time the farmers realized that the continuous use of these chemical based fertilizers and pesticides is degrading the soil. Gradually they found that the soil is not as productive as before, that they had degraded the soil. So they had to shift they had to shift from one crop to another crop.

Say, for example, if they grow cauliflower in the same plot of land then after 2 to 3 years, the productivity decreases. Also, these farmers have found that even with the regular use of pesticides there are more and more pest infestations that are taking place. These pests and insects were affecting the crops even before the use of chemical based pesticides were introduced here. Then the effect was not as damaging but today the effects have been exacerbated.

How much chemical based fertilizers and pesticides are being used in crop production in Sadew area?

Actually, not much. These farmers do use chemical based fertilizers and pesticides, but not in large quantities. They probably understand the bad effect of it on the soil and the crop if used in huge quantities. They have realised this through their own experience and therefore today, use a lot of natural fertilizers like cow dung and other types of natural manure etc. Some farmers also use vermi-compost but its use is not yet prevalent in large scale.

What percentage of farmers in Sadew area produce organic crops?

Right now the percentage is very negligible. Take me for example, if I am growing for my household consumption, then I don't use any chemical based fertilizer of pesticide at-all. Similarly, most farmers for their own consumption do not use any chemical fertilizer or pesticides, but at the same time if they are producing for the market they use chemical fertilizers but in very small quantities.

How easy or difficult would it be for farmers in this area to convert to organic certified farming? How should the government encourage the farmers to convert to organic farming?

The farmers want to change as well. Sometime back there was a meeting with the farmers to create awareness on organic farming. But the farmers are still afraid that if they convert to organic farming, they may not be able to support the needs of their family. The farmers believe that if they practice only organic certified farming then the production would be low which would not get them enough price in the market. Therefore, it is very important to create the requisite awareness and provide them with the correct information regarding organic farming.

To encourage these farmers, frequent awareness meetings as well as training sessions are required. Also, some kind of incentive should be provided to these farmers so that they attend the meetings and trainings. The farmers are sometimes reluctant to attend such meetings as they need to invest their money and time in these sessions. So, the government should think of giving him some incentive, maybe travel allowance or free organic seeds or organic manure etc.

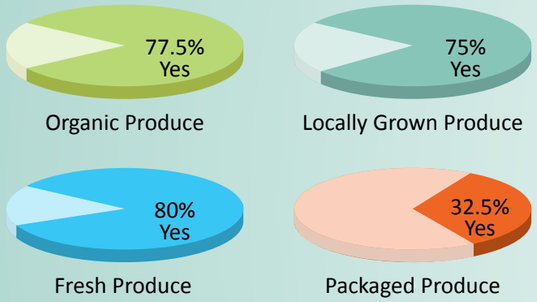
Consumer Survey at Shillong Market

Source - MBDA Knowledge Team

A small exploratory survey was conducted by the MBDA Knowledge Team at the local Shillong Market to understand the buying behavior of the consumer. The consumers were asked a variety of questions on organic produce, local fruits, vegetables and the factors that influence their decision making. 40 respondents took part in the survey.

The survey provided the insight that consumers in Shillong are inclined to buy local produce and support the efforts of local producers. While this was just a small exploratory survey, it does indicate that there is good market potential for locally produced organic fruits & vegetables in Shillong itself. If efforts are made to increase consumer awareness about the benefits of eating organic and sustainably grown local produce and if such produce is made more available, then it is likely that local organic produce will be enthusiastically accepted by a large segment of consumers.

Are consumers willing to pay an extra amount of Rs. 10 to Rs. 50 for...?



How do consumers choose fruits and vegetables?

Local Produce	40.50%
Freshness	37.90%
Local Produce & Freshness	17.10%
Other	4.50%

What would make consumers buy organic food?

Lower Price	42.5%
Scientific Information	77.5%
Availability	72.5%
Influence of Family/Friends	52.5%

80%

Consumers believed that by buying organic produce, they could (and would) support local farmers/local agriculture

40%

Consumers believed that organic produce tasted better than non-organic produce

57.5%

Consumers believed that organic produce is completely pesticide-free

87.5%

Consumers believed that organic produce is healthier

MBDA Knowledge team conducting consumer survey

Notes

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