



nesfas

ANNUAL REPORT  
2018-2019



Year of

**“REC-URGENCE”**

No One Shall Be Left Behind!



# About NESFAS



**NESFAS** is a platform that connects people to the pleasure and importance of local foods and in the process links them to its journey from farm to fork. A journey that generates awareness towards our responsibility towards the environment and the preservation of the indigenous cultures and traditions.

**NESFAS** works towards offering a singular platform for traditional knowledge systems and modern science as equal partners to charter the course of the 'Future We Want' for the well-being of indigenous communities.

The journey of **NESFAS** and its young team, guided by global and local experts, was shaped by the priorities that emerged with the engagement with its communities in the rich biodiversity of the hills of Meghalaya and Nagaland. The festivals that brought together the indigenous peoples of the region, formation of networks based on the richness of their agrobiodiversity, research studies that were carried out and strong discoveries of well-being, nutrition, matriarchal societies, have undoubtedly been the driving force behind all of **NESFAS** activities. These activities fall within domains that are pertinent to securing a sustainable future, food being at the centre, with the aspects of landscape and culture holding just as important a place in their interrelatedness. **NESFAS** networks, projects and initiatives fall within these domains and, more often than not, connect all three.





# CONTENTS



## 01

### BACKGROUND

About NESFAS	03
Letter from the Chairman	06
NESFAS Board	09
NESFAS Frameworks & Units	10
NESFAS Team	13
REC Grant: Proposal & Presentation	14



## 02

### Laying the Foundation

Quarter 1: Partnerships	16
Quarter 2: Activation	22
Quarter 3: Mobilisation	28
Quarter 4: Follow-ups	36



# ANNUAL REPORT 2018-2019



## 03

### Snowballing into 2019

PGS & Allied Initiatives	38
Soi & Seed Health	42
Pests & Composting	46
Indigeneous Food Systems	52



## 04

### Innovations & Festivals

Pungzm Millet Festival	50
Catering lunch at North East Innovators Meet and TIE Expo	60
Mei-Ramew Rice Festival	62

## 05

### FINANCIAL OVER VIEW



Letter  
from



# CHAIRMAN

**NESFAS** believes that the future wellbeing of the indigenous peoples of North East India must be based on their self-determined choices and their age-old role as guardians of the biocultural diversity around them which is so inextricably linked to their landscapes, languages, culture and identity. **NESFAS** still draws inspiration from the success of the Indigenous Terra Madre 2015 (ITM 2015), which was organised together with the 41 co-hosting villages of Meghalaya and Nagaland, with support from The Indigenous Partnership for Agrobiodiversity and Food Sovereignty (TIP) and Slow Food International. The delegates of 169 indigenous communities, in the presence of a local gathering of 70,000 people, agreed on the Shillong Declaration which provided **NESFAS** with a framework and a road map for ensuring that “agrobiodiversity and agroecological practices are maintained for current and future generations”. The consultations during ITM 2015 brought up several ideas for improving the future wellbeing of the indigenous peoples. Unfortunately, post ITM 2015, **NESFAS** could not scale up all this momentum gained from ITM 2015 because of funding constraints. Notwithstanding this financial deficit **NESFAS** continued its work with a small compact team of youth localizing the initiatives and ideas that had been generated for the next two years.

A boost came with the interest and support in 2018 from Dr. P.V. Ramesh IAS, Chairman, Rural Electrification Corporation Foundation of India (REC) who encouraged **NESFAS** to develop a cutting edge programme based on the Shillong Declaration framework. We are deeply grateful to this grant funding **NESFAS** received from REC which certainly led to the resurgence and scaling up of the ideas.

This Annual Report gives a summary account of how the REC Grant led to the translation of ideas into a programming across communities. It enabled **NESFAS** along with the 41 communities who co-hosted ITM



**We hope that this Annual Report will be a small and humble contribution to engage a new generation of supporters and help them cultivate successful social movements on their own or with like-minded partners like us.**

**PHRANG ROY**

Chairman, NESFAS

2015 to develop the Project "No One Shall Be Left Behind". This Project gave **NESFAS** an opportunity and the needed resources to develop local collaboration with other partners who have been motivated by the same themes and who are based in different parts of Meghalaya and Nagaland. This collaboration and partnership has helped all the partners to share best practices in team building, capacity building and community training and empowerment. The foundations of the efforts have been the log frame created on the cycles of production, consumption, nutrition, livelihoods and Innovation which could holistically bring about change.

**NESFAS** is very conscious of the matriarchal values of its two main indigenous communities: the Khasi-Jaintia and the Garos. Some of its work in supporting women farmers as gatekeepers of indigenous local food and of intergenerational learning is also highlighted in this Annual Report. TIP, as an international partner of **NESFAS** is very committed to develop an international cadre of Indigenous Youth as Fellows who will serve their own and other indigenous communities. This Annual Report also gives a glimpse of the participation of **NESFAS** in this Fellowship Programme. It is our hope and aspirations that these Fellows will become the future Beacons of Hope of our indigenous communities. In doing so we carry the value system of the past to nourish the valuable future.

**Phrang Roy**

# The Board

April 2018-March 2019



**Mr. Phrang Roy**  
Coordinator, TIP;  
Chairman, NESFAS



**Dr. G. P. Wahlang**  
IAS (Retd.), Former  
Chief Information  
Commissioner,  
Meghalaya Information  
Commission.



**Dr. Carl O. Rangad**  
Vice Chairman  
(Operations), NESFAS;  
(Retd.) Director  
of Horticulture,  
Government of  
Meghalaya.



**Ms. Anita Roy**  
Former Teacher, AMBRIT,  
International School,  
Rome; interior designer,  
resource mobilisation  
campaigner, creative cook,  
and Slow Food member.



**Dr. Glenn C Kharkongor**  
Chancellor, Martin Luther  
Christian University



**Mr. H.H. Morhmen**  
Environmentalist and  
Social Activist and  
President of Society  
of Urban and Rural  
Empowerment



**Ms. Patricia Mukhim**  
Editor, Shillong Times;  
Journalist and promoter  
of local food



**Ms. Rikynti Syiem**  
Eri Weaver and  
Custodian Farmer from  
Khweng, Ri Bhoi.



**Dr. A. K. Nongkynrih**  
Professor of Sociology,  
North East Hills  
University (NEHU),  
Shillong.



**Mr. Simorin Marbaniang**  
Custodian Farmer,  
Beekeeper, and  
Knowledge Holder from  
Lyngngam, West Khasi  
Hills.



**Mr. K. C. Momin**  
(Retd.) Director of Soil  
and Water Conservation,  
Government of  
Meghalaya, Shillong.



**Ms. Seno Tsohah**  
Project Team Leader,  
NEN, Nagaland;  
Knowledge holder.



**Ms. Bibiana Rane**  
Grassroot activist and  
Custodian Farmer from  
Nongtraw Village, East  
Khasi Hills District,  
Meghalaya.



**Ms. Byllaimon Swer**  
Custodian Farmer,  
Laitsohpliah, East Khasi Hills.  
Responsible for establishing  
a School garden and  
Anganwadi kitchen garden  
in her village.



**Mr. Shaiphar Dohling**  
Farmer and Headman  
of Dewlieh, East Khasi  
Hills, Head master of SSA  
Upper Primary School,  
Dewlieh



**Dr. Melari Shisha  
Nongrum**  
Executive Director, NESFAS  
(Non member secretary)



# NESFAS FRAME- WORK & UNITS

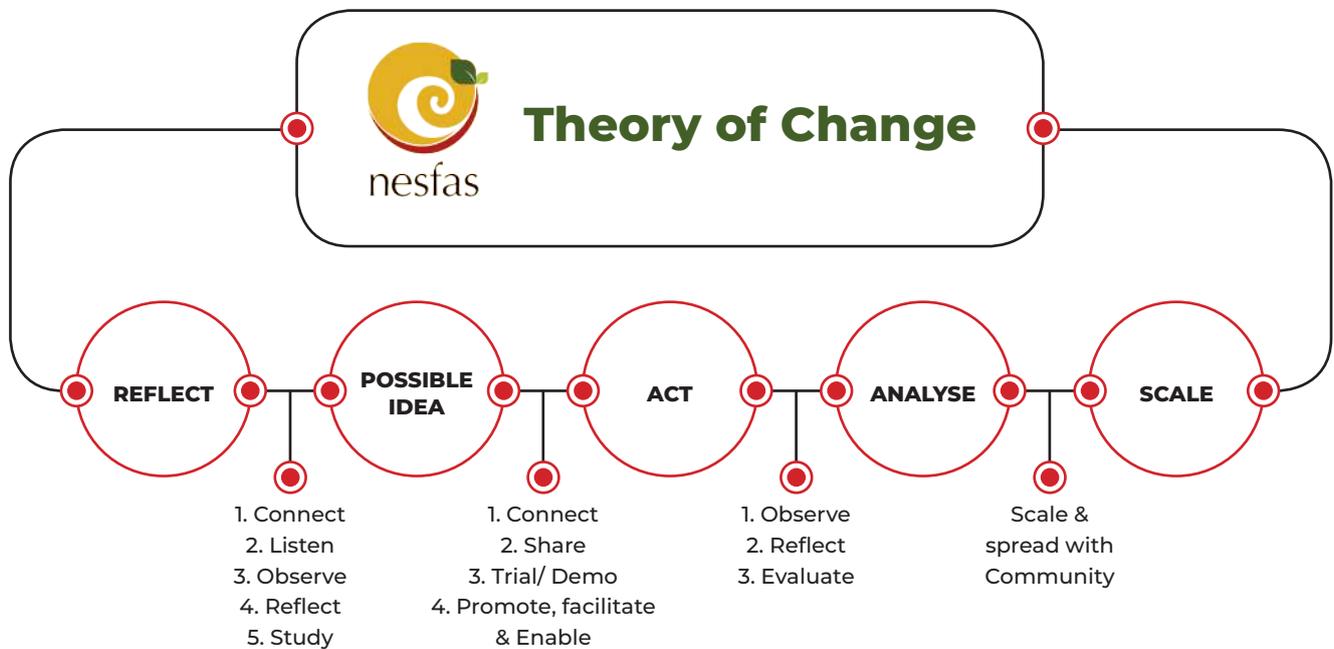


The year 2018-19 for **NESFAS** was anchored by the **REC Foundation** funded-project “No one shall be left behind”. It fuelled the advocacy work of the organisation based on agroecology and the directives of the Shillong Declaration of ITM 2015 to safeguard the cultural and biological diversity along with relevant knowledge of sustainable food systems of the indigenous communities. **NESFAS** aligned its strengths to establish a partnership with like-minded organisations to develop an understanding of how agrosystems work in relation to a community’s social fabric and local organizations. This framework offers a window of understanding soil, pest management at agronomy, social, health, sanitary, nutritional, livelihood, environmental and cultural aspects.

#### The REC framework

1. Increased Production
2. Increased Consumption
3. Increased Livelihoods
4. Innovation

This provides **NESFAS**, a guiding framework to engage with communities to create, use and transmit knowledge to future generations. The framework also allows **NESFAS** to stay connected with the communities’ needs to revise programs with CFs (community field workers) to suit these needs leading to community empowerment and progress.





# NESFAS Units



## HABITAT & INFRASTRUCTURE DEVELOPMENT

Habitat and Infrastructure Development is an experimental unit that aims to address sustainable rural planning and development within the framework of conservation of natural resources, recycling of by-products, revival and promotion of relevant traditional knowledge and appropriate modern techniques. They aim to sensitise communities to aesthetics, passive and active solar harvesting, rainwater harvesting, waste management and by-product energy management and more to be integrated into a sustainable land-use plan and offer livelihood opportunities through innovations.



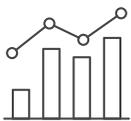
## LIVELIHOOD & INNOVATIONS

Under Livelihood Initiatives, NESFAS supports the generation of local economies that are tied to and respect agrobiodiversity. It aims to connect both producers and consumers in healthy and culturally enriching ways. It is always on the look-out for useful livelihood innovations to be shared with local communities for their consideration to enhance their capabilities like the Participatory Guarantee System (PGS) (Organic Certification for farmers), Farmer Markets and Mei-Ramew brand development for Cafes, Weaves, Festivals, Eco-Tourism and Agro-based handi/building craft.



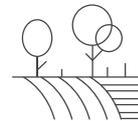
## COMMUNICATIONS UNIT

The Communications Unit acts as the mouthpiece of NESFAS and at the same time works on all documentation. The actions of this unit link the world's perception of the organisation and the communities it services. The team aims to truly translate 'local voices, global audiences' by sharing grassroots stories that could shape mindsets and play a role in advocating the organisation's focus on agroecology. NESFAS hopes to start changing the narrative of mainstream thinking by using the agroecological footprints through networking with various organisations committed to sustainable solutions. The Participatory Video program is an intrinsic part of the communications agenda which arms community youth to capture their story.



## ADMINISTRATION AND FINANCE UNIT

The Administration and Finance Unit is responsible to provide support to the other units for the planning and execution of all the activities. It monitors and evaluates all the activities of NESFAS to ensure smooth and positive outcome through disciplined management. It drives the cultural and work values of a sensitive indigenous organisation that is also a centre of excellence in providing services to all those who share its guiding principles of decency, decorum and discipline.



## RURAL DEVELOPMENT INITIATIVES

Under the Rural Development Initiatives Unit, NESFAS plays the role of a facilitator which creates a sense of ownership, accountability and responsibility within and between communities and with other stakeholders. This unit aims to address the Agrobiodiversity Networks for Millet, Pollinators, Shifting Cultivation and the Cooks' Alliance. It promotes Youth & Education initiatives like School Garden, Agrobiodiversity Walk, Workshops/ Seminars / Conferences and Indigenous Internships. The Participatory Research Advocacy and Actions for mapping of biodiversity and Ark of taste. They use local events such as Seed fair/Diversity Fair, Mei-Ramew Day (Mother Earth Day) and Eat-ins.

# NESFAS Team



**Melari Shisha Nongrum**  
Executive Director



**Pius Rane**  
Sr. Associate,  
Agroecology



**Janak P Singh**  
Sr. Associate,  
Livelihoods



**Bhogtoram Mawroh**  
Sr. Associate,  
Research



**Sujata Chettri**  
Associate,  
Finance



**Fabian M Dkhar**  
Administrative  
Assistant



**Merrysha Nongrum**  
Associate



**Alethea Kordor Lyngdoh**  
Associate, Com-  
munications



**Gratia E Dkhar**  
Associate



**Badarishisha Nongkynrih**  
Associate



**Chenxiang Marak**  
Associate



**Stefan Wann Lyngdoh**  
Research  
assistant



**Suklinshisha Paliar**  
Research  
Assistant



**Adelene Y Pyngrope**  
Research  
Assistant



**Carinthia Nengnong**  
Field  
Coordinator



**Aurilia C Tariang**  
Field  
Coordinator



**Naphishisha Nongsiej**  
Field  
Coordinator



**Bankerda Chyne**  
Field  
Coordinator



**Rejoiceful Rashir**  
Field  
Coordinator



**Ruth B Sohtun**  
Field  
Coordinator



**Simchi Sangma**  
Field  
Coordinator



**Bashisha Mary Nongbet**  
Data entry  
operator



**Jessica Rane**  
Office  
Attendant



# PROJECT BACKGROUND

**The REC (Rural Electrification Corporation) Foundation Grant Proposal Making and Visit of REC team to Meghalaya.**

'No One shall be Left Behind' is a Three-year project funded by the Rural Electrification Corporation that aims to enhance indigenous food systems with an overarching goal of improved nutrition, food security and sustainable livelihoods of about 3,000 households in 130 remote indigenous communities of Meghalaya and Nagaland. The main demographic is adolescent girls, school children, youths, women's groups and community elders. Intended to boost the landscapes of Meghalaya and Nagaland, it will offer sustainable models for change and growth to empower the natives and safeguard the ecological heritage of the northeast.

## **November 2018:**

### **No One Shall Be Left Behind Initiative Formulation**

The REC Project was formulated during the November 2018 visit of Dr. P V Ramesh, former Chairman REC to Shillong and subsequent meeting with Mr. Phrang Roy, Chairman NESFAS. The alignment of the two organisations was discussed with the possibility of working together for the benefit of the remote communities of North East India. Since then, NESFAS teams under the leadership of Mr. Phrang Roy have had several consultations with several partners in the field and they all felt that this will be a positive step. To further explore this possibility, a two-person team of Ms. Riya Singh and Ms. Andrea Kobar from the REC Foundation visited NESFAS communities as an exposure trip and weigh the development of a proposal. The duo visited three villages namely: Nongtraw, Laitsohpliah and Mustem which included them trekking at least 5000 steps up and down to understand the remote nature and possible outcomes for the collaboration. Some of the prominent issues that were raised by the communities allowed the framework to be developed which included the need for innovation and promotion of local foods in order to improve the well-being of indigenous peoples.

## **A presentation, case-making and a Grant**

**22<sup>nd</sup> March 2018, Trident Hotel:** Mr. Pius Ranee, Sr. Associate NESFAS presented the proposal "No one shall be left behind" to all the board members of REC Foundation. Mr. Phrang Roy, Chairman NESFAS and Coordinator of The Indigenous Partnership (on Video Conferencing) and Mr. Ajay Nayak, CEO EdEn (Educated Environments), the Communication & Habitat Consultant for NESFAS were also present.

## **The presentation highlighted the following**

- NESFAS had organized the global gathering of indigenous peoples called The Indigenous Terra Madre 2015 bringing together 169 indigenous communities from 64 countries and 606 international delegates.
- In preparation for The Indigenous Terra Madre 2015, NESFAS had conducted a study on Nutrition in collaboration with McGill University from Canada and the National Institute of Nutrition from Hyderabad. Through this study it was found out that even though problems like blood pressure and diabetes are not common there is a micro-nutrient deficiency. It is suggested a judicious use of the rich biodiversity that are available locally will improve nutrition and health especially of adolescent girls and children.



NESFAS Team.

- The review of the developmental work in the villages focused on modern crops resulting in a fading importance of local crops especially in terms of research or seed systems. Their nutritional value is not understood completely by the people and scientists. Processing and marketing becomes a difficulty at the community level.
  - There is a need to create spaces and platforms where people can collaborate and share their ideas for possible solutions by incorporating local and modern knowledge.
  - The proposal called for a Three-year-project period for NESFAS to promote the indigenous food systems that will significantly improve nutrition and sustainable livelihoods of indigenous communities of Meghalaya and Nagaland with special focus on youth, women and community elders.
1. To improve the food, nutrition, climate resilience and income of about 3000 households in 130 remote communities of Meghalaya and Nagaland with free prior and informed consent.
  2. Work in partnership with other partner organizations, custodian farmers, community members and knowledge holders.
  3. Target young people, adolescent girls, children, schools and work with Government Schemes to campaign for better health and nutrition.
  4. Build technical capacities of young team with the help of national and international bodies. In terms of nutrition and research, TIP which is based in Rome will be the main partner.
  5. Inculcate the habit of saving among SHGs members so that at the end of the REC First Phase, community members will have at least saved Rs. 80 lakhs in addition to their contribution.
  6. With thorough monitoring develop clear verifiable indicators with the community to check our progress. We will also institutionalize a social audit system

**To do so, 4 major strategic objectives have set in place:**

- To increase the productivity and production of micro-nutrient rich and climate-resilient species
- To increase the consumption of those selected species particularly among young children, adolescent girls.
- To increase income and livelihoods through capacity building and innovation promotion

For the long term sustainability of the project, **6 principles** were highlighted that will act as a guiding factor for the overall implementation.

The project aimed to target 2 States i.e Meghalaya and Nagaland with 8 and 3 participating districts respectively. The total number of beneficiaries would be 6000 and an outlined cost of 11 crore 10lakhs, with 80 Lakhs being the contribution from the communities.

**After a period of three hours, board members of REC foundation gave a word to NESFAS that the project has been sanctioned for ₹ 9.41 crore.**







10<sup>th</sup>

Composting workshop at Dewlieh LP/UP School.



17<sup>th</sup>

Cleanliness and Hygiene awareness program in Dewlieh Village.



18<sup>th</sup>

Bah Phrang Roy at Sirindhorn Anthropology Center.

## APRIL

### Composting Workshop at Dewlieh LP/UP School

Dewlieh LP/UP School, East Khasi Hills District, Meghalaya, organized a workshop with NESFAS on composting as a part of their academic syllabus. The compost will be used in their own school garden.

### Cleanliness and Hygiene awareness program in Dewlieh Village

NESFAS interns from Women's College, Shillong, Social Work Department organized an awareness programme on "Cleanliness and Hygiene" in Dewlieh Village, East Khasi Hills. It engaged all age-groups followed by a cleaning drive conducted in the village.

## MAY

### Bah Phrang Roy, Chairman NESFAS & Coordinator delivered a speech at a program organized by Sirindhorn Anthropology Center, Bangkok in collaboration with Pgakenyaw Association for Sustainable Development.

"Bah Phrang Roy, Chairman NESFAS & Coordinator delivered a speech at a program organized by Sirindhorn Anthropology Center, Bangkok in collaboration with Pgakenyaw Association for Sustainable Development"

- ▶ Rights of the indigenous people
- ▶ The role of the indigenous food system
- ▶ Global efforts towards food sovereignty and its link to Sustainable Development Goals.



26<sup>th</sup>

All India Millet Sisters (AIMS) Network honoured women farmers at the first Annual Convention at ICAR-NEHU.



29<sup>th</sup>-30<sup>th</sup>

Procasur event in NEHU.

### All India Millet Sisters (AIMS) Network honoured women farmers at the first Annual Convention held at ICAR-NEH Region, Meghalaya.

Ms. Jesenta Ranee from Nongtraw community and Ms. Geecy Mary Swer from Laitsohpliah were among the farmers present at the convention. Ms. Jesenta Ranee from Nongtraw, an active member of NESFAS, grows millets in her village.

### Panel discussion on "Innovations on community Forest Governance and Conservation" by Procasur in collaboration with Nercormp at NEHU.

- ▶ Panellists Carl O Rangad, Vice Chairman (Operations), NESFAS, delivered a presentation on "ITM 2015: A Glocal Innovation of the Indigenous Peoples".
- ▶ Ms. Merrysha Nongrum, Associate, NESFAS delivered a presentation on "School Learning Garden".
- ▶ Ms. Patricia Mukhim, Editor, The Shillong Times; Activist; NESFAS Board Member presented on the issue "Women and Forest Conservation and Importance of media in public education in Forest Conservation"
- ▶ A Mei-Ramew weaves stall was also available at the thematic panel session.



Awareness Program: 'Beat Plastic Pollution' To 'Save Our Soils'

## JUNE

### Awareness Program: 'Beat Plastic Pollution' To 'Save Our Soils'

Nongtraw village in the East Khasi Hills hosted delegates from various regions in India for a farmers' trip and also developed a pledge to 'Save Our Soils'. The Social Service Centre, Shillong organized an awareness programme to combat plastic pollution at the schools in Jongksha, East Khasi Hills.

**What:** A creative drawing competition

**Where:** Fr. Henry Frassy M Sec School, Chandigre, West Garo Hills.

**Theme:** 'Beat Plastic Pollution'

**What:** Upcycling, recycling.

**Where:** Students of Samanong, LP School in the West Jaintia Hills and Dewlieh LP/ UP School, East Khasi Hills

**Theme:** Turning waste plastic items into decorative items (Best out of waste).

**What:** Poem writing competition

**Where:** Students of Laitsopliah RC/ LP UP School at Laitsohpliah Village, East Khasi Hills, Meghalaya (Organised by the school)

**Theme:** 'Save Our Soils'



NESFAS stall selling millet flour and Mei-Ramew weaves.



Top: Mr. Pius Rane, Senior Associate, NESFAS gave the inaugural speech.

Bottom: Farmers' Market.

### NESFAS mentored and participated in the Indigenous Food Fest at Savio Hall, Laitumkhrach, Shillong

**Organised by:** Social Service Centre (SSC) as a part of the project Facilitating Agricultural Regeneration Measures (FARM)

**Outreach:** 9 villages under Mawkyntew and Mawryngkneng C&RD Blocks in the East Khasi Hills district + 13 stalls at the event sold local produce and handicraft + NESFAS set up a stall to sell millet flour and Mei-Ramew weaves.

The indigenous food fest featuring a farmer's market aimed to promote local foods, wild edibles with a focus on nutrition.

Mr. Pius Rane, Senior Associate, NESFAS threw light upon the role of local foods and the native indigenous ingredients to combat malnutrition. He also spoke about the relevance of traditional farming practices. Smt. Ampareen Lyngdoh, Local MLA was also present at the fest and shared, "I can see that a lot of young people now understand the value of traditional farming".



*Khneng embroidery artisans in Mustoh*



*School Garden launch and workshop at Lumstoin Lp School In Mookyniang, Khlieh Tyrshi.*

## JUNE-JULY

### **NESFAS collaborated with Khneng artisans to form the 'Khneng Embroidery Group' at Mustoh**

**Overview:** On June 21<sup>st</sup> and 22<sup>nd</sup> 2018, a team from NESFAS visited Mustoh to assist and strengthen their skills and formed the Khneng Embroidery Group.

**Aim:** To devise strategies that further the craft and enable livelihood opportunities.

#### **Challenges identified:**

- ▶ Insufficient orders deem the craft financially unviable for the artisans.
- ▶ Difficulties to teach and train the younger generation.

#### **Roadmaps and solutions identified:**

- ▶ Refining the art and amplifying the skills of the local youth who are interested in Khneng. NESFAS is working on contemporizing the colours used on the Eri fabric.
- ▶ Enabling platforms to exhibit, market and sell the merchandise.
- ▶ Alternative livelihoods – teaching and maintaining small local shops farming. Cultivation of pineapples, mangoes, soframdieng, jackfruit, litchi, wild pepper and arecanut. The produce is sold in weekly markets.

### **NESFAS launched a School Garden and conducted workshop at Lumstoin LP School In Mookyniang, Khlieh Tyrshi**

**Participants:** School teachers, Block Officials, Village Employment Council (VEC) members, community members, school children and the students of Women's College Shillong.

#### **Agendas & Activities:**

- ▶ Planned a crop-calendar.
- ▶ Formulated and implemented a work plan of manual activities to maintain the school garden.
- ▶ Spread awareness about traditional systems such as soil health, seeds, etc.



## Quarter 2 **Activation**

The Second Quarter embarked upon planning initiatives to achieve the goals outlined in the **REC** project - 'No One Shall Be Left Behind' and the third and fourth quarters executed the same. The Quarter also furthered engagements between organizations to understand prospectives for local crafts. A collaboration visit transpired at IIT Guwahati to deliberate upon contemporizing bamboo crafts of the Northeast. **NESFAS** also received students of Central University, Kerala, Dept. of Social Science, to visit and understand the biodiversity of the region. Beyond collaborations and activities like farmers' markets and events, **NESFAS** also conducted workshops to activate its **REC** project with partners. Towards the end of the second quarter, **NESFAS** and partner communities embarked upon momentous undertakings of documenting villages and signing FPICs with its 52 project villages.







Activation workshop with partners at NESFAS office



Participants and their storytelling activities

## JULY

### 'No One Shall Be Left Behind' Activation Workshop at Shillong

**By:** NESFAS & PARTNERS

To activate its 'No one shall be left behind' project supported by the REC Foundation, NESFAS organized a 3-day Partnership Workshop with its partners NEN Nagaland, SSC Shillong and SURE Jaintia Hills followed by a storytelling workshop.

- ▶ Dr. Melari Nongrum, Executive Director, NESFAS, discussed her academic research that illustrated the relevance of traditional food in the present day. She stated that an overarching goal of the project is to achieve 'health through traditional food' for the indigenous communities.
- ▶ NESFAS Associates Pius Ranee & Janakpreet Jassal shared proposal and goal details to increase the consumption of micro-nutrient rich and climate resilient species. Workshop on soils, seeds, composting, community seed fairs, centres for enhancing traditional knowledge, crafts and biodiversity management for mapping and nutritional analysis of 30 nutrient rich species were discussed.
- ▶ Mr. Phrang Roy, Chairman, NESFAS, discussed the tasks ahead to execute its goals. Mr. H H Mohrmen & Mr. A B M Shullai (SURE); Mrs. Wekoweu Tshuah & Ms. Gina Phanbuh, (NEN); Fr Bernard Laloo & Ms. A Lyngdoh (SSC); discussed work conducted by their respective organisations.

### 'Finding Our Grassroots' Storytelling Workshop

The 'No One Shall Be Left Behind' Activation Workshop at Shillong was followed by a story-telling workshop. The need for the masses to reconnect with their traditional roots in the form of cultural practices and traditional folklores were discussed and represented in innovatives formats like illustrations, movies, etc.

- ▶ Benjamin Syiem shared a sketch that captured the animated horror of "U Khoh Ramhah" - a Khasi mythological story.
- ▶ Nocy Marak explores graphic design and content writing to connect with her Garo heritage, brainstormed ideas that could engage creative minds to revive traditional culture and ways.
- ▶ Siegrid B Sangma spoke about reconnecting with culture through food. He created the Garo dish "Do'o Kap'a" that was documented by documentation team of Ridalin Shullai, Amorette Lyngwa, Abigail Nongsiej, and, Risa L Kharmawlong who also captured the essence of the dish within the Garo Tribe.
- ▶ Tenginang D Sangma, a singer and researcher mentioned the value of medicinal herbs through stories.
- ▶ Mayborn Lyngdoh, Adarsh Biswas and Subham Kumar worked to write a script for a short story, a poetry and a theatre piece respectively.



17<sup>th</sup>  
U Syiem Tirot Sing



26<sup>th</sup>  
Mei-Ramew Farmers Market



27<sup>th</sup>  
Workshop with women of Laitkor community

### Commemoration in Honour of U Syiem Tirot Sing

NESFAS organized an in-house commemoration to honour the legacy of U Syiem Tirot Sing, who defended the land and its people against the British.

Dr. Carl. O. Rangad, Vice-Chairman (Operations) NESFAS emphasised the relevance of protecting heritage against contemporary issues like pollution, loss of indigenous knowledge and other factors that are affecting the land.

He drew a parallel that Sing was defeated by his own ministers and the new generation is lured by technology which must be deployed with restraint to further their traditional knowledge and not replace the same. Lastly, he highlighted the importance of public participation, citing that Sing's contribution was made possible through the works of his supporters.

### Mei-Ramew Market by NESFAS & SSC at Savio Hall, Laitumkhrach, Shillong

#### Outreach & activities

- ▶ Food products from 7 villages
- ▶ NESFAS Kitchen with Siegfried B Sangma, Nocy R Marak and Teiskhem Lynrah who prepared modern recipes using local indigenous ingredients.
- ▶ Participants included Mrs. Emdor Khyndeit, a farmer from Khweng, Ms. Matrisha Nongspung, a young farmer, and teacher among others.
- ▶ A mid-day meal initiative presented recipes that could provide nutritious meals to young children.
- ▶ Fr. Bernard Laloo, Director, SSC highlighted the importance of such markets that enable farmers to increase livelihood opportunities and spread awareness about wild edibles and local produce.

### Programme: Food & Nutrition For Children by NESFAS, Reach Shillong Ministries (RSM) at Laitkor, Mawarliang

#### Highlights

- ▶ Revd. Reuben G. Laloo, President, Reach Shillong Ministries (RSM), gave the opening remarks about RSM. They enable development and empowerment to mainly underprivileged children- street children, school dropouts, poor children and orphans.
- ▶ Ms. Melari Nongrum shared the importance of including wild edibles in meals for the children.
- ▶ Ms. Merrysha Nongrum gave an orientation about the school garden which will be initiated at the RSM School at Laitkor.
- ▶ Ms. Anita Roy demonstrated how wild edibles and millet could be integrated in omelettes and pancakes.



**2<sup>nd</sup>**  
Collaboration visit to IIT-G

Mr. Phrang Roy (Chairman, NESFAS), Mrs. Anita Roy (Board Member, NESFAS) and Mr. Janak P Singh (Senior Associate, NESFAS).



**14<sup>th</sup>**  
Orientation by NESFAS team with Students from the Central University, Kerala



**30<sup>th</sup>**  
Mei-Ramew Farmers' Market

## AUGUST

### Collaboration visit at IIT Guwahati

Mr. Phrang Roy (Chairman, NESFAS), Mrs. Anita Roy (Board Member, NESFAS) and Mr. Janak P Singh (Senior Associate, NESFAS) visited Mr. Avinash Shinde, Department of Design, IIT Guwahati and discussed avenues for collaboration for innovations with bamboo in rural areas.

#### Goals identified

- ▶ Identify and study of the varieties of bamboo in Meghalaya.
- ▶ Study the properties of each variety and their implementations in craft, etc.
- ▶ Encourage bamboo plantation in communities.
- ▶ Innovative ideas for vertical transportation since villages like Nongtraw are located in a deep valley of the Khatarshnong hills in the East Khasi Hills and are only accessible by foot.

### Students from the Central University, Kerala, Dept. of Social Science, visit NESFAS office in Shillong

Dr. Melari Nongrum introduced the students of Central University in Kerala, Department of Social Work, School of Social Sciences, about the North East, its biodiversity and its indigenous communities.

#### Activities conducted by Mr. Janak P Singh Senior Associate, NESFAS, to illustrate the works of NESFAS include:

- ▶ School garden programme
- ▶ Agro-biodiversity walks
- ▶ Cooks alliances
- ▶ Agro-ecology: composting, research and documentation of indigenous food systems

### Mei-Ramew Farmers' Market in Savio hall, Laitumkhrah, Shillong

#### Outreach

- ▶ 480 participants
- ▶ The market showcased produce from the villages of Khweng, Laitsohpliah, Lamsain, Mawpyrshong, Laitdiengsai, Jongksha, Mawmuthoh.
- ▶ It had a Mei-Ramew weaves stall.
- ▶ It showcased food for the mid-day meal initiative.



Bamboo weaving in Wahsohra



Terra Madre Salon De Gusto, Italy

## SEPTEMBER

### **NESFAS conducted a case-study in Wahsohra village with a subsequent visit to IIT Guwahati with 16 bamboo artisans.**

**Aim:** To understand bamboo-weaving craft and the challenges faced by the artisans and enable them to further their craft.

Bamboo-weaving is an additional source of livelihood alongside agriculture in Wahsohra. They weave 12 different types of baskets, mainly used for storing vegetables, fruits, and dry fish and to gather coal. Some wares are sold. It is harvested from farms and forests. Once planted, the bamboo can be harvested in ten years.

#### **Goals identified**

- ▶ Discomfort while weaving.
- ▶ Bamboo scarcity.
- ▶ Leasing the land till the bamboo reaches maturity.
- ▶ Labour charges of carrying the bamboo baskets to Sohra village market.
- ▶ Increased use of plastics for storage.

It is hoped that the understanding of one section of bamboo artisans has cleared the misconceptions that we may have as an organization and the visit to IIT Guwahati would assist the artisans to improve their livelihood.

### **Terra Madre Salon De Gusto, Italy**

NESFAS nominated five delegates to represent the indigenous communities of North East India at the Terra Madre Salone del Gusto 2018 under the theme 'Food for Change'.

#### **Delegates**

- ▶ Neitshopeu Thopi, youth development worker and women's rights activist, NEN, Nagaland
- ▶ Pius Rane, Sr. Associate, NESFAS.
- ▶ Merrysha Nongrum, Associate, NESFAS.
- ▶ Shaiphar Dohling, farmer and headmaster of SSA UP School, Dewlieh village.
- ▶ Sengran Agitok Sangma, farmer and school teacher from Rangwalkamgre village.

**Goal:** To organize a network of food communities, small producers and processors, fishermen, cooks, academicians and youth delegates for five days with to develop small scale food production which is traditional and sustainable.

**Activities at the event:** NESFAS delegates got an opportunity to learn and share some of the good practices for the promotion of indigenous food systems of the region. They were part of a workshop that brought together an international group of experts and young fellows to brainstorm and share ideas on developing the curriculum of the Indigenous Youth Fellowship programme.



## Quarter 3 Mobilisation

Post engaging communities in the 2<sup>nd</sup> quarter, the 3<sup>rd</sup> Quarter spread awareness about REC's the 'No one shall be left behind' project and laid further groundwork in the project villages. NESFAS and partner organisations underwent training during the activation in October followed by implementing initiatives under the REC program at grassroots level. A major quantum of activity involved profiling the 52 project villages based on the parameters of soil management, water, Mei-Ramew cafes/ cook alliance, school gardens, agro-biodiversity, etc. This information enabled NESFAS and partner organisations to identify precise areas of intervention to achieve the four project components of increased production, increased consumption, livelihoods and innovation.





## SUMMARY OF THE FIRST 3 QUARTERS

### Signed the Free Prior and Informed Consent (FPIC) in 52 project villages

- a. 36 villages in August
  - b. 14 villages in September
  - c. 2 in October
1. **Awareness programs:** NESFAS conducted awareness programs in 46 villages for villages for the project No One Shall Be Left Behind.
  2. Participatory mapping was done in 33 villages from September till November
  3. NESFAS started the study of dietary diversity in 32 villages: (8 women in reproductive age; 8 elderly; 8 male youth; 8 key informants) households in 32 villages in Meghalaya and Nagaland.
  4. Community members, mainly farmers participated in an exercise to map multi-nutrient rich species (MNRS) climate-resilient species, conducted by NESFAS in 32 villages.
  5. NESFAS conducted a general awareness program in 18 villages to This was done to:
    - a. Enhance the knowledge of the project in the community.
    - b. Identify custodian farmers, local cooks, pregnant and lactating young mothers for future programmes.
    - c. Discover villages for conducting other programmes (Focus Group Discussion, Campaigns, Training workshop).
    - d. Interact with the identified groups post the programme and to develop a plan of action for the project.

### Other activities

1. Cooking demonstrations.
2. Trainings in participatory research and workshops for rural custodian cooks.
3. Monthly farmers markets.
4. Capacity building programmes.
5. Soil Health and Management programmes.
6. Value assessment of Eri silk products.
7. Community seed fairs.
8. Water Sanitation and Hygiene (WASH) Campaigns.





Participation of school children at the Mei-Ramew Farmers' Market

## OCTOBER

### Mei-Ramew Farmers' Market, conducted at NESFAS headquarters in Laitumkhrah, Shillong

#### Outreach and activities:

- ▶ School children from Kiddies Corner School participated in games to identify vegetables with the sense of touch or smell.
- ▶ As part of the Mid-Day Meal Supplementation Initiative, mini millet pancakes were distributed amongst children to spread awareness about the importance of nutrition and local foods.
- ▶ The NESFAS kitchen at the market featured indigenous recipes, and sold indigenous and fusion foods.
- ▶ The market showcased and sold produce from shifting cultivation, wild edible plants, kitchen garden, brought by two partner communities from Ri-Bhoi and West Khasi Hills District.
- ▶ Conducted workshops, awareness programmes and capacity building programmes for the community and its staff while also studying the production and consumption of food in the communities.



Workshop and demonstration on soil health and management

### Workshop on 'Holistic Approach to Soil Health and Management' at NESFAS headquarters

**Conducted by:** Dr. Carl O Rangad & Mrs. Silda Kharsati

#### Points of discussion

- ▶ Ms. Melari Nongrum, Executive Director, NESFAS gave the welcome speech.
- ▶ Dr. Carl spoke about caring for the environment which starts from the ground where soil is an infinite natural resource and healthy soils are full of life. He stressed on the eco-system functions of soil that facilitate plant growth, water-supply regulation, nutrient cycling, habitat for organisms, atmospheric modification and foundation for construction.
- ▶ Dr. Rangad discussed soil infertility. Asst. Director, fro, the Dept. of Agriculture, Kong Silda Kharsati spoke on soil testing and its process.

#### Conclusion and the way ahead

- ▶ The team discussed ways to intervene and mobilize the villages, document best practices of soil management & understand if Agricultural Department, Government of Meghalaya has conducted soil testing in those villages.
- ▶ The team will begin work on the concept of Soil Health Card.



Value Chain Study of Eri Silk at Khweng



PGS training by Himalayan Grassroot Organisation

### Value Chain Study of Eri Silk at Khweng

#### Goals

- ▶ To assess the value chain of Eri Silk.
- ▶ To determine the present value of the products, to understand the areas of intervention.
- ▶ To establish a list of value-added Eri Silk products.

#### Participants

- ▶ 25 respondents: data from 2 women from Liarsluid and 23 from Khweng were collected by Aurilia Tariang, NESFAS.
- ▶ Participants included weavers, dyers, spinners and silk producers.

#### Observations

- ▶ Women are majorly involved in the weaving while the men collect the bamboo.
- ▶ A single person, Mr. Lastnokhel Jalong had the skill to dye the yarn. The others were undergoing training.
- ▶ Two women from Liarsluid came for the training programme in Khweng.
- ▶ The information gathered were somewhat the same in Khweng and Liarsluid from the productivity of Eri silk to the consumption and to the livelihood except for the price of the raw materials like the silkworm and the cocoon.

### Three-day training on the Participatory Guarantee Scheme (PGS) was conducted by the Pan Himalayan Grassroot Organization based in Uttarakhand with NESFAS, SURE, SSC and NEN members

- ▶ 100 interested farmers were identified.
- ▶ Local groups were formed and organic certificates were granted to them.
- ▶ Another aim of the training was to identify the functioning of the existing PGS groups and recognize potential markets to connect them to.



**11<sup>th</sup>-18<sup>th</sup>**  
Community members representing Meghalaya at Andhra Pradesh



**20<sup>th</sup>-23<sup>rd</sup>**  
Seeds display and Seed Bank workshop

## NOVEMBER

**NESFAS organised a visit to the week-long training-cum-awareness international conference on handlooms called the 'Chenetha Chetikala Sambaralu' in Chirala, Andhra Pradesh.**

### Goals

- ▶ Skill development.
- ▶ Learn and experience the traditions and techniques of the Andhra weavers.
- ▶ Exposure to ideas from different parts of the country.

### End-result

Platforms for exhibition and sale were provided at the Farmers' Market and Asian Confluence.

### Community Seed Banks: Establishment & Management Training

- ▶ The training started on 20<sup>th</sup> November 2018 at Laitsohpliah village, East Khasi Hills, facilitated by Mr. Pitambar Shrestha, Sr. Programme Manager, LI-BIRD, Nepal.
- ▶ Participants: Community members, team members from North East Network (NEN) Nagaland, Social Service Centre (SSC), Society for Urban and Rural Empowerment (SURE), and NESFAS.
- ▶ The 3-day training, 20<sup>th</sup> to 23<sup>rd</sup> November, was aimed at supporting local farmers to preserve their local seeds by developing community seed banks. This will then empower them to promote indigenous knowledge of preservation of seeds through knowledge exchange and group related activities.
- ▶ At the training, 74 species and 145 varieties of crops at Laitsohpliah village were identified.
- ▶ The participants were also trained on the steps and processes for establishing and managing a Community Seed Bank.



*Training on Agroecology for project team and community members*

## DECEMBER

### “Be the Solution to Soil Pollution”- Online and radio campaign by NESFAS

- ▶ To create awareness on plastic pollution and soil health, NESFAS commemorated the World Soil Day (5<sup>th</sup> December) and encouraged one and all to take a step in reducing soil pollutants.
- ▶ NESFAS did so by doing an online campaign through social media posts and radio broadcast on Soil Health.

### Agro-ecology Training, conducted By: Dr. Francisco Rosado May at Plasha with opening remarks by Gratia Dkhar

**Outreach:** 76 participants – Farmers from 50 partner communities + project team members from NESFAS.

#### Goals identified

- ▶ Provide training and the knowledge required to preserve and sustain traditional farming systems.
- ▶ Discuss with farmers on the way forward as to how to increase production and productivity of local food crop
- ▶ Starting 2018, NESFAS alongside partners SURE, NEN & SSC have to facilitate production and productivity of micro-nutrient rich species and climate resilient species by 30%.

#### Key messages from the workshop

- ▶ Encourage diversity while working with the farmers.
- ▶ Judicious use of fertilizers with an aim to substitute it
- ▶ Connect producers to consumers. This will strengthen more if farmer's association exists.
- ▶ Problems like pests, soil, seed, and water need to be addressed.



Collecting forest foods and products from the shifting cultivation fields of Plasha, Ri-Bhoi.

## DECEMBER

### Indigenous Youths from Thailand exchange visit to Meghalaya

Nutdanai Trakansuphakon, Kanlaya Chermue and Yuttapan Phiphatmongkhonkun, Social Entrepreneurs and Indigenous youth from Northern Thailand visited Meghalaya from 10th to 13th December 2018. They are young chefs belonging to the indigenous groups of Akha and Karen,

They visited three partner communities of NESFAS namely: Tyrchiang (West Jaintia Hills), Plasha and Pahambir (Ri-Bhoi) and conducted cooking demonstration workshops with the community members.

They featured a food stall at the Mei-Ramew Farmers' Market. Their stall "Tastes of Thailand" featured Thai food incorporated with locally available ingredients. They prepared dishes like 'wild honey and coffee pork grill', 'Karen rice soup', 'Akha soup', 'pork fried with wild spring onion', and even made use of wild edibles like 'Jajew'. They went to source the ingredients in the local markets and communities prior to the event.



At their stall at the Mei Ramew Farmers' Market.

**NESFAS hosted its monthly and last Mei-Ramew Farmers’ Market for 2018 resplendent with Christmas spirit, at Laitumkrah, Shillong Outreach: 200+ visitors**

- ▶ Communities from Nongshut, Wahsohra and Nongtraw from the East Khasi Hills and Plasha from Ri-Bhoi showcased and sold indigenous food products, which included pineapple, tapioca, and varieties of beans, yams, arrowroots and wild edibles.
- ▶ ‘Flavours of Punjab’ sold a variety of parathas and kulhar chai.
- ▶ The NESFAS kitchen team headed by young entrepreneurs including the Esal team, featured local Garo cuisine and other signature dishes such as ‘Cabbage roll dumplings in chicken’ and ‘Orange beef roast orange and mustard green salad’.
- ▶ Three young Thai chefs belonging to the indigenous groups of Akha and Karen, Northern Thailand, prepared innovative dishes such as ‘Karen rice soup’, ‘Akha soup’, ‘Pork fried with wild spring onion’ and even made use of wild edibles like ‘Jajew’ which they sourced from the local markets.
- ▶ ‘You and I Arts Café’ from Shillong showcased indigenous food, games and teas.
- ▶ Innovations in the use of millet such as Xmas cakes and gluten free millet products were showcased.
- ▶ Traditional games, crafts and art space for children and stalls that showcased gift items for Christmas were also present in the market.



A stall with millet products: bread, cookies, millet-based pizza



The Stall consisting of Mid-Day Meal initiative.



Team ESAL



“Millet products”



# Quarter 4 Follow-Ups



## Snowballing into 2019

The final quarter of 2018 converted the outreach created in the former part of the year into multiple livelihood opportunities through Mei-Ramew initiatives, converted a portion of its participating villages into organic cultivation and propagated awareness for mother and child health. The first Mei-Ramew Rice festival was conducted in March, NESFAS built a rainwater tank in Laitsohpliah RCLP & UP School in March. It also catered lunch at the North East Innovators meet and Technology Innovation Entrepreneurship (TIE) Expo 2019. Multiple cooking demonstrations were conducted in schools and villages to enable the natives to cook innovative and nutritious meals.

2018 united citizens, institutions, communities and organisations through art initiatives fests, collaborative events, farmers' markets and more. This enabled NESFAS and partner organisations to identify potential participants and places to implement strategies to activate the REC-funded project 'No One Shall Be Left Behind'.

This outreach created in 2018 was systematically converted into various projects and groups in accordance with the people's professions, their interests and the knowledge they possessed. These groups were instrumental in devising strategies and activities to achieve the goals as outlined in the REC framework: Increased consumption, increased production, increased livelihood and innovation.





These groups were primarily the Participatory Guarantee Scheme (PGS), Agro-ecology (ALC) groups and the activities pertained to profiling villages, devising workplans, awareness programs and more.

**PGS (Participatory Guarantee Scheme):**

As a part of the PGS initiative, the farmer pledges that their production process is free from chemicals fertilizers, insecticides, herbicides, hormones, etc. PGS certification is free from third-party recognition as a group of 5 or more farmers self-regulate their farms and live by word of honour.

PGS certification impels farmers to follow organic methods of cultivation which brings to the fore issues of organic seeds, soil conditions, native pest control methods, etc. These were addressed through Community Seed Banks (CSBs'), 4 Cell analysis, pest control demonstrations and experimenting with native composting methods.

**ALC:**

Agroecology amalgamates ecology, sustainability, indigenous practices and technology into agricultural science for social change and sustainable food systems for well-being of communities. These circles aim to revive, bring into practice, document and innovate the indigenous agroecological knowledge. ALC is a farmer-led laboratory, a creative and collective space.

ALC facilitated discussions, innovations to further these practices. The practices, discussions and knowledge-sharing on seeds, composting and pest control fuelled initiatives like farmers' markets, school gardens, cooking demonstrations and so on. It also propelled the first Mei-Ramew Rice Festival in March; the first cycle of experimenting with traditional pest control methods; the first water tank being built in March and more.



## PGS: MEETINGS, AWARENESS AND FOLLOW-UPS

### LAITSOHPLIAH

The first meeting was held on the 22<sup>nd</sup> Jan at Laitsohpliah VEC Hall, Laitsohpliah with 19 participants, conducted by Mr Pius Raneer and Ms Ruth Sohtun. It covered the production and consumption components of the REC mandate. The previous groups were re-arranged and 4 groups of 23 farmers were formed. On 5<sup>th</sup> March, Nongkynrih, Lengbor Pynngrope and Lambinus Raliang briefed 21 attendees about farm appraisal process followed by field inspection and filling the forms. The pledge was undertaken the next day.

### UMSAWWAR

On 22<sup>nd</sup> January, the meeting was conducted by Ms Merrysha Nongrum and Ms Bankerda Chyne, 22 participants were briefed on the importance of organic farming followed by the decision to form the PGS group. To sustain and strengthen the PGS circle, they were briefed about ALC and the farmers decided to become a part of the same. Discussions and issues pertained to pest, seed preservation and composting. An ALC group was formed with 9 farmers on 30<sup>th</sup> Jan.

### MAWHIANG

Awareness program on PGS and Agro-ecology with 62 on 22<sup>nd</sup> January participants led to the formation of 4 PGS groups. They developed an action plan to tackle pests. The groups were also shortlisted for ALC.

### NONGWAH

15 farmers formed PGS groups on 29<sup>th</sup> January in the presence of Carinthia Nengnong, the Field Coordinator. NESFAS members Ms Badarishisha Nongkynrih and Mr Pius Raneer conducted a prior awareness program in Nongwah where they focussed on the livelihood component of REC by citing the health benefits of organic farming. Women were particularly interested and decided to convert their kitchen gardens for certification. Field appraisals were carried out in Feb and the pledge was undertaken. Information about organic pest control methods was also shared and the farmers expressed interest in obtaining local seeds. By 18<sup>th</sup> March, all data required for the PGS was updated. Carinthia B Nengnong met the groups on 26<sup>th</sup> March to cross-check data. She found that members had obtained rymbai kthung (beans) from PGS members in Ri-Bhoi and begun planting them in gardens which

would be PGS certified. Seed-sharing was proposed to replace inorganic seeds with organic ones and pest-management was discussed.



*A PGS meeting in progress at Iewrynghep*

### NONGMAWLONG

Conducted with the headman, village executive committee, self-help group and silk-rearers by NESFAS member Rejoiceful Mary Rashir; the objective of the PGS meeting was to spread awareness about ALC, prospects of forming silk-rearing groups and decided to implement the farmers' market and include the school garden fencing work in the work-plan.

### LIARSLUID

On 29<sup>th</sup> Jan Ms Naphishisha Nongsiej, Ms Gratia Dkhar and Mr Pius Raneer conducted a session for 55 participants for the formation of PGS and ALC Groups. Bah Pius then spoke about third party certification of organic products, trust-based PGS certification and peer reviews that will help farmers adapt to organic farming. 2 PGS groups were formed.

### IEWRYNGHEP:

Conducted by Merrysha Nongrum, the meeting had 12 female attendees and 1 PGS group was formed on 29<sup>th</sup> January. During the follow-up on 21<sup>st</sup> Feb, the documents were cross-checked and the farmers formed a consensus to not use fertilizers, pesticides and chemicals.



*A NESFAS coordinator explains the process for the PGS farm appraisal*



*A PGS meeting in progress at Lewrynghep*

## **PYRDA**

On 7<sup>th</sup> Feb, Ruth B Sohtun conducted a meeting on PGS and ALC. 3 groups of 18 farmers were formed who agreed to convert 20% of their farms for organic production in the first year and gradually consider 100% conversion in the future.

## **MAWKMA**

NESFAS member Ms Sandalyne Chyrmang discussed PGS group formation with 33 attendees, with an emphasis on certification. 4 groups were formed who agreed to switch to organic farming since they formerly practiced traditional cultivation methods.

## **DURAKANTANTAGRE**

At the PGS workshop on 8th Feb, Simchi and Tengsrang briefed the 17 participants about PGS, inspected their land and formed the PGS groups. The farmers practiced organic farming and were interested to learn natural pest management methods. The pledge was undertaken on 21st Feb.

## **NONGTRAW**

At the meeting conducted on 24th Feb, it was observed that the people of Nongtraw were enthusiastic about moving forward with the formation of the PGS groups. A follow-up meeting on the Community Seed Bank (CSB) initiative was also organized by the NESFAS team. It was confirmed that 22 varieties and 103 species of

crops were found in the village. The crops to be grown in the biodiversity patch were also discussed.

## **KHWENG**

On 6th Feb, Ms Naphishisha Nongsiej and Ms Gratia Dkhar briefed the farmers about the standard expectations, signing the pledge for induction into PGS groups. Farmers were explained benefits of organic planning and they agreed to transition to the same.

## **BORGANG MARNINGAR, RI-BHOI**

7 farmers formed a PGS groups on 23rd January. The group also functions as a learning circle.

## PGS & ALC ALLIED ACTIVITIES

### 30<sup>th</sup> Jan

NESFAS visited PGS and ALC member Kong Radalin Kharaswai's kitchen garden to observe and compare the plant beds reared with and without chemical fertilizers vs. natural manure. She shared cooking methods, treatments for common ailments using indigenous ingredients and produce.

### Bhoirybong Block, 29<sup>th</sup> Jan

The Agroecology Learning Circles of Bhoirybong Block (2 farmers from Liarsluid, 2 farmers from Khweng and 1 farmer from Khliehumstem) was established wherein the farmers exponentially increased the production of taro using traditional methods.

### Umsawwar, 30<sup>th</sup> Jan

An ALC group was formed with 9 farmers who visited Kong Tronila Lynshiang's field to understand the innovative methods of composting that she uses to minimize fertilizers.

### Mawhiang, 8<sup>th</sup> Feb:

Ms Badarishisha Nongkynrih conducted a follow-up meeting on ALC and checked the progress of controlling pests on fields. Farmer Iorial discussed

using lime to kill pests and other farmers also mentioned their experiences.

**Lummausiang Umdum:** Ms. Badarishisha Nongkynrih, Ms. Melari Nongrum, Mr. Bhogtoram Mawroh and Lukas carried a follow-up session with the agroecology trainees to assess their learnings and develop a plan of action.

### Chandigre, 13<sup>th</sup> Feb

An agroecology workshop was conducted.



Kong Tronila Lynshiang



Agroecology Learning Circles of Bhoirybong Block



Agroecology learning circle session in Chandigre.

## VILLAGE PROFILING, & MEETINGS

### **Nongbah, 22<sup>nd</sup> Jan**

On the 22nd January, Umwang Nongbah was profiled to identify areas for intervention – existing infrastructure, farming practices, soil conditions, water, self-help groups, mid-day meal and school garden.

### **Pahammardoloi, 28<sup>th</sup> Jan**

SSC, along with NESFAS members Ms. Melari Nongrum and Mr. Pius Ranee, conducted a training workshop for staff, SHGs and youth group leaders at Pahammardoloi village on 28<sup>th</sup> January. The workshop covered topics of local food consumption and its positive impact on agroecology and climate resilience. Participants from 4 villages attended the event..

### **Pyndengmawlieh, 4<sup>th</sup> Feb**

On 4<sup>th</sup> Feb, Ms. Rejoiceful Mary Rashir conducted the meeting with the headman and village committee members.

#### **The attendees were informed about:**

1. Agroecology programme to be conducted at Nongrianka village and were asked to identify a custodian farmer from their village to attend the same. Participants were identified.
2. Work-plan of activities to be conducted in March like Community Seed Bank and Wash Campaign. Primary and secondary schools would participate in the WASH campaign.

### **Porksai, 4<sup>th</sup> Feb**

#### **The meeting was conducted on similar lines as Pyndengmawlieh.**

1. The additional agenda was the formation of a cocoon-rearing group in the village. Mary Rashir met Happiness Shyrkon and discussed problems and solutions pertaining to the same.
2. The secretary agreed to select some community members to attend the agroecology programme at Nongrianka village.
3. A workplan including a cooking demonstration for mid-day meals was created.

## FARMS APPRAISALS

### **Nongtraw, 4<sup>th</sup> Feb**

Ms. Ruth B Sohtun conducted a farm appraisal. 12 attendees were briefed about processes of the same. Farms were inspected the next day and the farmers gathered to sign the pledge. Being a purely organic village, the Nongtraw farmers were fitting for certification.

### **Langshonthiang, 5<sup>th</sup> Feb**

In an informal meeting with the village headman, a workplan meeting for the village was shared, the school garden initiative, ALC activities and selling of silk products was discussed.

### **Ing Dorbar, 5<sup>th</sup> Feb**

Adelene Pyngrape conducted the session with 26 farmers. She visited farms and filled out appraisal forms the next day followed by a discussion on organic farming practices. The farmers were keen to cultivate sans fertilizer. Farmers from the ALC group were keen to obtain local coriander, carrot, cauliflower and tomato seeds.

### **Iewrynghep, 13<sup>th</sup> Feb**

Ms Bankerda Chyne conducted a farm appraisal and form filling session. 12 farmers recited the pledge.

### **Nongwah, 15<sup>th</sup> Feb**

Ms. Rejoiceful Mary Rashir conducted the farm appraisal for 7 participants and NESFAS team clarified their doubts. Farmers shared concerns over identifying good quality seeds, converting to organic farming in areas where inorganic fertilizers are used by other farmers. NESFAS team shared information on pest management solutions like 'sohpangkhlieh'.

### **Darichikgre, 28<sup>th</sup> Feb:**

NESFAS member Tengsrang carried out a farm appraisal session on a jhum field with 16 attendees who filled the farm appraisal pledge and undertook their pledges.

# SOIL AND SEED HEALTH

Soil health and seed variety is crucial as the cycle of production and consumption is directly dependent upon cultivation and crop cycles. A recurring point of discussion at PGS meetings, Agro-ecology circles and even while formulating work-plan is soil health and seed preservation. The indigenous varieties are nutrient-dense and sustaining the varieties is imperative to ensure that the production and consumption mandate of the REC project is successfully executed.

Soils & Seeds are further understood and illustrated within the purview of:

1. Community Seed Banks and Seed exchanges
2. Biodiversity Blocks
3. 4 Cell Analysis
4. Pest Management & Composting

## **Community Seed Bank (CSB)**

The community seed bank concept is globally recognized as a tool for the realization of the 'Farmers' Rights' as set out in Article 9 of the ITPGRFA (International Treaty on Plant Genetic Resources for Food and Agriculture), and food sovereignty.

Community seed banks were established to preserve indigenous seeds and traditional seed-keeping practices. Allied activities included seed exchanges, setting up biodiversity blocks (used to grow and preserve seeds on the verge of extinction), passport inventories and more.

## **Biodiversity Block:**

The community seed bank concept is globally recognized as a tool for the realization of the 'Farmers' Rights' as set out in Article 9 of the ITPGRFA (International Treaty on Plant Genetic Resources for Food and Agriculture), and food sovereignty.

Community seed banks were established to preserve indigenous seeds and traditional seed-keeping practices. Allied activities included seed exchanges, setting up biodiversity blocks (used to

grow and preserve seeds on the verge of extinction), passport inventories and more.

## **4 Cell Analysis**

Four cell analysis is a participatory method to assess on-farm diversity status. The Four cell analysis is a rapid assessment technique to assess the amount and distribution of crop diversity within farming communities. It takes into account richness and evenness aspects of inter- or intra specific diversity.

## **Pest Management & Composting**

Tackling pests and soil fertility is a major challenge while switching to or reviving organic methods. The workshops, awareness drives, PGS and ALC meetings have facilitated knowledge exchange and experimentation. Multiple experiments were conducted in the first quarter that demonstrated the advantage of organic and native methods over pesticides and chemical-laden fertilizers. NESFAS and partner organisations have successfully and systematically turned individuals, home gardens to village farms into organic cultivation through workshops and activities

# COMMUNITY SEED BANKS (CSB)

The community seed bank concept is globally recognized as a tool for the realization of the 'Farmers' Rights' as set out in Article 9 of the ITPGRFA (International Treaty on Plant Genetic Resources for Food and Agriculture), and food sovereignty.

Community seed banks were established to preserve indigenous seeds and traditional seed-keeping practices. Allied activities included seed exchanges, setting up biodiversity blocks (used to grow and preserve seeds on the verge of extinction), passport inventories and more.

## LAITSOHPLIAH

**Laitsohpliah had formerly documented around 74 species and 145 varieties of crops illustrating that the farmers had preserved diversity. This presented a strong case for the CSB at Laitsohpliah.**

**November:** The first Community Seed Bank (CSB) initiative commenced at Laitsohpliah. Mr. Pitamber Shrestha of Local Initiatives for Biodiversity, Research and Development (LIBIRD), Nepal conducted a workshop on the same. Mr. Shining Nongrum, Headman of Laitsohpliah gave the opening remark. Mr. Pius Ranee, Sr. Associate, NESFAS, gave a brief explanation of why a seed bank was being proposed at Laitsohpliah.

**22<sup>nd</sup> January:** NESFAS followed-up

on the CSB initiative at the PGS meeting. They found 22 varieties and 103 species of crops in the village decided to store 28 species in the Community Seed Bank to start. The community chose to cultivate potato and yam in the biodiversity block owing to the varieties they possess.

**March:** Mr Pius Ranee and Mr Janak P Singh conducted a programme to train the farmers to maintain a CSB account on 26<sup>th</sup> March. On 28<sup>th</sup> March they also discussed establishing PGS groups to promote organically grown crops and legalization of the CSB. rates of seeds were fixed.

**The Laitsohpliah CSB was inaugurated on 18<sup>th</sup> April 2019 by Mr Phrang Roy.**

## CSB MEETINGS

**24<sup>th</sup> January:** 22 varieties and 103 species of crops were found in Nongtraw at the CSB follow-up meeting & crops to be grown in the biodiversity patch were discussed.

**4<sup>th</sup> Feb:** NESFAS member, Rejoiceful Mary Rashir with the headman and village committee members of Pydengmawlieh village in the West Khasi Hills district discussed CSB as a part of the Work Plan activity for the village.

**5<sup>th</sup> Feb:** CSB was discussed as a part of the work-plan meeting at Langshonthiang village, West Khasi Hills district



*NESFAS team with community members of Laitsohpliah.*

# SEED EXCHANGE & BIODIVERSITY BLOCK

**6<sup>th</sup> March:** A seed exchange visit was conducted for 5 farmers from the ALC at Bhoi Rymbong at Laitsohpliah. Laitsohpliah ALC member Bah Nester Kharmaphlang demonstrated crops and they discussed problems of water shortage, strong winds and pests, etc. Kong Ibanpynshailang Nongrum, member of Latrieliang PGS group provided with pea seeds. Sohphlang tubers were also exchanged and information about growing period and sowing patterns was disseminated.



*Seed Exchange at the Mei Ramew Rice Festival*

The first Mei-Ramew Rice festival (12<sup>th</sup> & 13<sup>th</sup> March) was born when the Ri-Bhoi rice farming community felt the need to showcase local seed varieties to impart the importance of preserving their culture. Among other events, the festivals conducted a seed-exchange too.

**March:** At Laitsohpliah, an inspection of the Community Seed Bank Biodiversity Block with the yam and potato cultivation was conducted. The cultivation had resulted in low yield and such cultivation would be practiced to only preserve the varieties.



*Discussion among the communities on rice varieties*

# 4 CELL ANALYSIS

Four cell analysis is a participatory method to assess on-farm diversity status. The Four cell analysis is a rapid assessment technique to assess the amount and distribution of crop diversity within farming communities. Its takes into account richness and evenness aspects of inter- or intra specific diversity.

Alongside seed banks, seed exchanges and fairs, 4 cell analysis has enabled NESFAS and its partners to revive, document and map many indigenous species of Northeast India.

## 14<sup>TH</sup>

## FEBRUARY

### **A Four Cell Analysis on the rice varieties at Bhoi Rymbong and Umling block in Ri Bhoi district**

**Umling Block:** Marngar, Plasha, Umwang Them, Umwang & Nongbah – The exercise noted 35 rice varieties wherein 6 were extinct.

**Bhoir Rymbong Block:** Khweng and Liarsluid – The exercise noted 27 rice varieties wherein 8 were extinct.

#### **Reasons for extinction:**

1. Early harvest
2. Crop requiring a lot of input
3. Pest attacks
4. Unfavourable soil conditions
5. Unpalatable
6. Difficult to keep seeds
7. No market
8. Some seeds were consumed without stocking a portion for sowing.

## 14<sup>TH</sup> MARCH

### **A Four Cell Analysis on the rice varieties at Borgang Margnar**

#### **Aim:**

1. To determine the varieties of rice being grown in Raid Lapngar and Raid Margnar
2. To understand the distribution and preferences of farmers when it comes to the varieties being cultivated
3. To engage the farmers in dialogues on how to preserve indigenous varieties

#### **Participants:**

1. Farmers from Khweng and Liarsluid, Bhoi Rymbong Block
2. Farmers from Umwang Them, Umwang Nongbah, Plasha and Margnar

Post introductions, the farmers discussed the existing rice varieties and the farmers' preferences for cultivation. The NESFAS team explained the rationale for the four cell analysis. The farmers listed the cultivated and extinct varieties of rice. The factors leading to extinction were investigated.

#### **NESFAS highlighted the following :**

1. The need to conserve the rich biodiversity of the region + create awareness on the changing farming patterns in the region.
2. To organize a common platform for farmers from different regions to meet and share their knowledge about farming practices.
3. Both regions showcased different rice varieties representing the vast diversity in the produce within Meghalaya itself. 20 different varieties of paddy were collected from 6 villages.
4. In order to secure the rich biodiversity of the region, it is important that farmers value the heirloom varieties over hybrid seeds.
5. Same rice types were known by different regional names in the two villages. Hence all varieties will be verified and recorded in all dialects.
6. Issues such as use of chemical fertilizers and pesticides were touched upon.



# PESTS & COMPOSTING

A major challenge while switching or reviving organic methods is tackling pests and soil fertility. The workshops, awareness drives, PGS and ALC meetings have facilitated knowledge exchange and experimentation. Multiple experiments and were conducted in the first quarter that demonstrated the advantage of organic and native methods over pesticides and chemical-laden fertilizers. NESFAS and partner organisations have successfully and systematically turned individuals, home gardens to village farms into organic cultivation through workshops and activities.



## WORKSHOPS ON COMPOSTING

### 25<sup>TH</sup> FEBRUARY

---

Session on Integrated Pest Management by Mr Thomas Langjuh, Jr. Scientist with Bio- Resources Development centre (BRDC), Meghalaya

**Aim:** empowering the local farming communities

#### Activities

1. Briefed local communities on methods and techniques of integrated pest management in agriculture & the BRDC initiatives to aid local farming communities.
2. Undertook the initiative to find insecticidal indigenous plants, their local names and geographic locations to help farmers access organic pesticides.



# MEETINGS UPDATES & AWARENESS



## **Liarsluid 29<sup>th</sup> January:**

Ms Naphishisha Nongsiej, Ms Gratia Dkhar and Mr Pius Rane of NESFAS conducted a session for the formation of PGS groups. 55 participants listed the production systems practiced in Liarsluid, Khweng and Khliehumstem wherein chemicals fertilizers were used for cabbage, tomatoes and beans. They introspected on the effects of chemicals and detailed long term effects such as soil degradation, water pollution and effect on human health. Bah Pius then spoke about third party certification of organic products, trust-based PGS certification and peer reviews that will help farmers adapt to organic farming.

## **Mawkma, 7<sup>th</sup> February:**

Sandalyne Chyrmang facilitated a discussion to form PGS groups with the 33 attendees at the meeting. It was noted that the farmers do not use much chemicals in home gardens and shifting cultivation. But fertilizers were used in bun and syllai cultivation. 4 groups were formed and they agreed to convert to organic farming and endeavour to obtain organic certification.

## **Durakantagre, 8<sup>th</sup> February:**

NESFAS members, Simchi and Tengsrag conducted a PGS workshop where they observed that the farmers practiced organic farming and were keen to learn organic pest control methods.



## **Lewrynghep, 21<sup>st</sup> February:**

Bankerda Chyne cross-checked the PGS documentation and the 19 farmers at the session decided to abstain from using fertilizers, pesticides and chemicals.

## **Pyrda, 7<sup>th</sup> February:**

Ruth B Sohtun, NESFAS, conducted a meeting on PGS and Agroecology Learning Circles with 18 participants. Farmers mentioned declined in soil fertility owing to use of urea and stated that they do not use pesticides. It was decided that farmers from the PGS groups would convert 20% of their farms for organic produce and gradually convert the rest.

## **On 20<sup>th</sup> February, the following methods were discussed for pest management:**

1. Organic pesticides such as ash, lime, tobacco and a mixture of onion garlic and tea leaf were considered for ñiangriej (type of beetle).
2. For the pest ñiangpei, commonly found in mustard leaves, spraying tobacco water was deemed effective.
3. Dogs and rats were identified as the main pests for crops such as maize.

## **Nongwah 15<sup>th</sup> February:**

At the farm appraisal with NESFAS member Rejoiceful Mary Rashir, The NESFAS team shared the solutions based on the information shared and also shared pest management solutions such as 'sohpangkhlieh.

# CASE STUDY: INDIGENOUS PEST CONTROL METHODS



*Experiment on pest management by ALC members of Bhoirymbong block*

## ALC: BHOIRYMBONG BLOCK

Agroecology Learning Circles of Bhoirymbong Block established 29<sup>th</sup> January had 5 members from the Khweng, Liarsluid and Khliehumstem communities with intent of increasing production through pest management and traditional methods. In the first cycle, the farmers experimented with Taro that is affected by Corm borer/Niagrirej (*Haplosomyx chalybaeus*) & potato for cut worm/Niangkhung (*Agrotis ipsilon*).



*Bah Wosly Muktieh experimenting on indigenous pest management*



*Agroecology Learning Circle from Khweng, Liarsluid and Khliehumstem communities, Ri-Bhoi. (L-R: Kyrmen Sohshen, Ridian Syiem, Wosly Muktieh, Nason Syiem, Triol Jalong)*

## Results

1. Bah Wosly: He filled the stem centre of the taro with rice hull. Formerly, 1 kilo of tuber yielded 1 kilo produce. Post the experiment, 2 kilo seeds yielded 15 kilos produce. He added ash to the ditch dug for potato plantation before cultivation. Formerly 15 kilos of potato yielded 50 kilos while the experimented yielded 100 kilos.
2. Kong Ridian: She successfully used rice hull for the taro cultivation. Formerly, 1 kilo of tuber yielded 0.5 kilo produce. Post the experiment, 10 kilo seeds yielded 50 kilos produce.
3. Kong Triol: Kong yielded similar results. She used to harvest 1kilo tuber from planting 1 kilo. Post the experiment; 20 kilo cultivation reaped 200 kilos.

Alternate methods use either powdered maize, crushed rice or soil in the Taro stem in place of the rice hull.

The documentation of traditional pest management methods was completed on 1st March 2020 at the ALC meeting at Khweng.



*Kong Triol in her field*



*Kong Ridian's Homestead garden*

# PUNGZM MILLET FESTIVAL

## 1<sup>ST</sup> & 2<sup>ND</sup> FEBRUARY

**NEFAS FACILITATED A 2-DAY 'TASTE WORKSHOP' AT THE 'PUNGZM' MILLET FESTIVAL**



*NEFAS representatives along with community members of Arunachal Pradesh*

**Aim:** Create a platform for knowledge-exchange with the humble millet being the central theme.

1. The festival started with a traditional inauguration ceremony with dance performances by various indigenous groups of the Longding district, Arunachal Pradesh.
2. Ms Salomi Yesudas, a research scientist from Hyderabad and consultant at NERCORMP, gave the opening remark. She highlighted the high nutritional content and health benefits of millet and encouraged its consumption in the daily diet.



*Millet delicacies at the taste workshop*



The inauguration of the Pungzm Millet Fest

- Local MLA, Mr Thangwang Wangham promised to take forward the memorandum by the Wancho Cultural Society of conducting the millet festival annually.

#### **Taste Workshop**

**Conducted by:** Long Karalin Ranee, a community youth from Nongtraw, East Khasi Hills

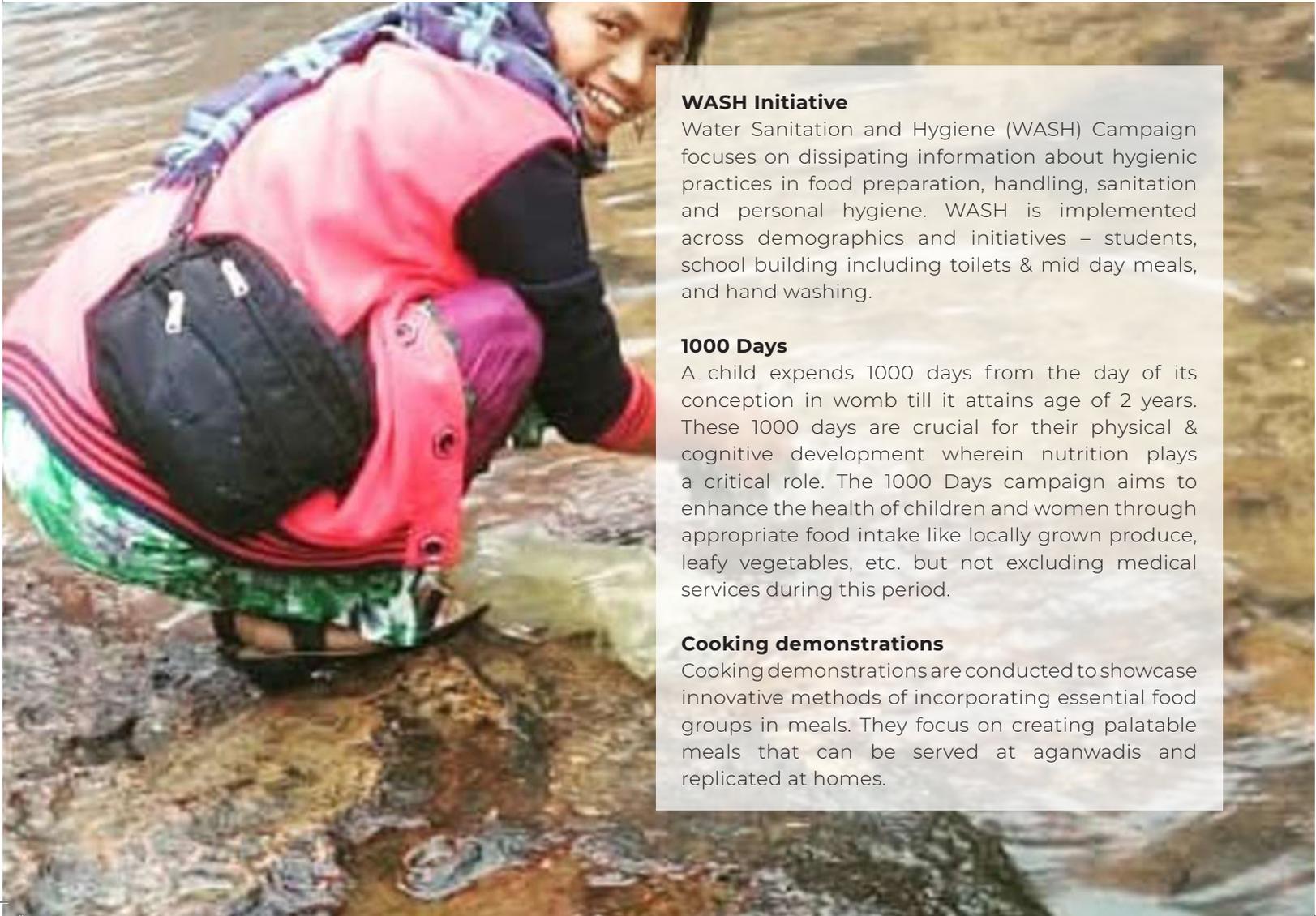
alongside NESFAS members Associate Badarishisha Nongkynrih and Field Coordinator Ruth B Sohtun.

- The workshop was facilitated by The Tirap Community Resource Management Society with the sponsorship of the NERCORMP

Society and the Wancho Cultural Society.

- The NESFAS team showcased millet-based recipes alongside raw millet products and honey. The recipes included millet cake, millet pancake, millet banana pancake, millet pu sla, millet pu khlien.

**Feedback:** Wancho Cultural Society gave a positive feedback with the innovative recipes since millets were only used for making wine. They expressed that the recipes can provide livelihood and business opportunities for the youth.



# ENHANCING INDIGENOUS FOOD SYSTEMS

Northeast India is home to 67% of the nation's biodiversity yet the region is under-researched and the natives face micro-nutrient deficiency. NESFAS and partner organisations aim to improve nutrition and food security by drawing from its indigenous food systems. The key target-group being women, adolescent girls, children, youth and elders. The plan of action involved awareness drives followed by targeted campaigns like:

1. 1000 days
2. Cooking Demonstrations
3. School Gardens
4. WASH Initiative

## **WASH Initiative**

Water Sanitation and Hygiene (WASH) Campaign focuses on disseminating information about hygienic practices in food preparation, handling, sanitation and personal hygiene. WASH is implemented across demographics and initiatives – students, school building including toilets & mid day meals, and hand washing.

## **1000 Days**

A child spends 1000 days from the day of its conception in womb till it attains age of 2 years. These 1000 days are crucial for their physical & cognitive development wherein nutrition plays a critical role. The 1000 Days campaign aims to enhance the health of children and women through appropriate food intake like locally grown produce, leafy vegetables, etc. but not excluding medical services during this period.

## **Cooking demonstrations**

Cooking demonstrations are conducted to showcase innovative methods of incorporating essential food groups in meals. They focus on creating palatable meals that can be served at aganwadis and replicated at homes.

## WASH & 1000 DAYS

### 28<sup>th</sup> Feb, Umsawwar Bah

Participants: 76

Twency Suting sang three songs about the 1000 days nutrition campaign and the WASH initiative. Interns from the play conducted a play on health and hygiene practices, followed by a speech by the NESFAS facilitator on food group consumption.

### 27<sup>th</sup> March: Liarsluid

NESFAS member Naphishisha Nongsiej did a follow-up session on WASH.



1



2

1 & 2: Nutrition and WASH Campaign with the Umsawwar Community.



Nutrition and WASH Campaign with the Langshonthiang Community.

## RAINWATER TANK

### Water tank construction at Laitsohpliah RCLP & UP School by NESFAS, assisted by the Meghalaya State Council for Science, Environment and Technology (SCSTE)

**31<sup>st</sup> Jan:** NESFAS and the SCSTE team Kong Biola and Bah Shan conducted a field trip to Laitsohpliah to gauge the water conditions and availability.

NESFAS undertook the water tank construction using moulds developed by SCSTE. SCSTE lent the moulds and assisted to train masons as 'master-masons' who would train others.

The SCSTE team then independently visited the location to inspect sites for the rainwater harvesting construction. The team, along with village executive members and school teachers selected the RC LP/ UP SSA School for the construction.

**12<sup>th</sup> – 16<sup>th</sup> March:** People from the community were trained by trainers from State Council of Science and Technology (SCSTE).

### Trainees:

4 skilled labours from Laitsohpliah: Mr. Shining Nongrum, Mr. Pynshongdor Nongrum, Mr. Ehkumar Nongrum and Mr. Pynshai Khongngain + 1 skilled labourer from Pyndengmulieh: Mr. Binda Mawsor. The trained masons spearheaded the construction in the other villages.

**Outcome:** The tank was constructed at Laitsohpliah RCLP & UP School

In the upcoming months of June and July, water tanks were constructed in Pyndengmawlieh LP School and UP Free Modern Technique School.



The tank constructed at Laitsohpliah RCLP & UP School.



### School Gardens

School Gardens deploy schools and its spaces as classrooms to connect students with the earth as they grow crops; from sowing the seeds to nurturing the plants. In the process learn about nutrition, biodiversity followed by harvesting the produce and experiencing the joys of consuming their creations on a plate. To engage students, activities pertaining to school gardens and awareness about native crops were conducted in schools in conjunction with WASH and 1000 Days campaigns. The activities pertained to agro-ecology walks, cooking demonstrations for mid-day meals, etc. With the school authorities, NESFAS discussed infrastructural issues, logistical and operational concerns.

*School garden activity in Khliehumstem Presbyterian School*

## SCHOOL GARDENS

### 25<sup>th</sup> February Wakrintongre LP School, Wakrintongre:

The programme outlined objectives and the expected outcomes of the school garden and the responsibilities of teachers, students, parents, school authorities and the MDM cook. They discussed the seasonal calendar, the list of crops and the date of starting the school garden.

### 27<sup>th</sup> February, Selbalgre:

10 participants School authorities, teachers, students and parents- were briefed about the objectives, expected outcomes and a seasonal calendar was prepared.

### February: Khliehumstem

NESFAS field coordinator Naphishisha Nonseij discussed setting up a community garden. The school garden initiative has already been introduced to the community and the response has been positive. Another school garden at Khliehumstem Presbyterian School needed revival. The NESFAS team assisted the teachers and students to prepare a proposal for the school garden's fencing to the Block Development Officer. The school teachers and students were briefed about the importance of the seasonal calendar in their efforts to maintain the school garden.

### 15<sup>th</sup> March, Khliehumstem:

A meeting was facilitated with the school staff of the schools in the villages and plans were prepared for the school garden and WASH campaign as well. The students of Khliehumstem school prepared a seasonal calendar for crops and the seeds would be provided by the PGS groups of Liarluid and Khliehumstem.

**21<sup>st</sup> March Laitthemlangseh:** NESFAs team Ruth Sohtun, Merrysha Nongrum and Lamphrang Shabong + interns from Women's college conducted home visits followed by a play on the 1000 days nutrition and WASH campaign.



*Students of Nongpriang Presbyterian LP post the agro-ecology walk with the wild edibles that they collected.*

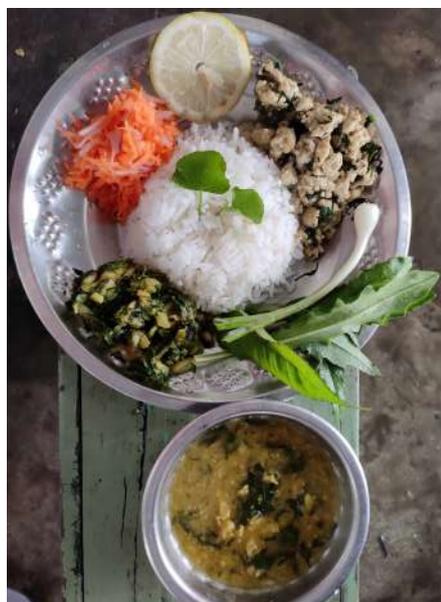
## SCHOOL GARDENS + WASH + 1000 DAYS

### 15<sup>th</sup> March, Khliehumstem:

A meeting was facilitated with the school staff of the schools in the villages and plans were prepared for the school garden and WASH campaign as well. The students of Khliehumstem school prepared a seasonal calendar for crops and the seeds would be provided by the PGS groups of Liarsluid and Khliehumstem.

### 14<sup>th</sup> March: Nongpriang &

**Nohrom Nongpriang:** Team member Lamphrang Shabong organized a community programme where home visits were conducted by interns to disseminate information about the importance of minimum 5 food group consumption, Dietary Diversity Score (DDS), anti-natal care check-up, pre-natal care check-up, height and weight monitoring and breast feeding as well as the importance of water, sanitation and hygiene. A food consumption calendar was handed to the listeners. NESFAS Associate Kong Merrysha Nongrum spoke about the 1000 days nutrition initiative and the WASH campaign. The students



*"Recipes created at the different cooking demos"*

conducted a play on aligned topics with songs sung on leafy vegetable consumption. The next day, students participated in an agrobiodiversity walk and collected 10 varieties of edible wild vegetables which were cooked for the midday meal for children.

**Nohron:** 4 schools participated. Interns visited 156 households and distributed nutrition related information and food consumption calendars. In the evening, Kong Bankerda Chyne gave a speech about the importance of food groups and the WASH campaign. The event ended with students performing a play on the importance of leafy vegetables and a cultural dance.

### 19<sup>th</sup> March, Nongwah:

Kong Merrysha Nongrum introduced WASH at the School Garden meeting. The school shared the following plans: Use a larger plot for the school garden. Constructing wash basins near the midday meal kitchen and soak pits to avoid stagnant water. Toilet facilities to be renovated. Water filters were recommended for drinking water in the mid-day meal kitchen. A workplan was devised for Nongwah.

**19<sup>th</sup> March Liarsluid:** WASH initiative was introduced to the school managing committee. Strategies to safeguard children from illnesses and a work plan were prepared for the school .

### 26<sup>th</sup> March: Mawlynggot:

**Dr Bhogtoram Mawroh addressed the following concerns:**

1. Lack of lighting
2. Dilapidated infrastructure
3. Absence of fencing for the school
4. Water shortages

**Possible solutions included:**

1. Fencing the schools
2. Water harvesting and safe water provision through SCSTE innovations
3. Diet diversification
4. Establish a school garden

### 27<sup>th</sup> March, Khweng:

The concept of WASH was introduced at a school during a session conducted for reviving the School Garden. Students were sensitised about their consumption patterns with an emphasis on consuming minimum 5 food groups. Importance of school gardens was discussed.

# COOKING DEMONSTRATIONS & ALLIED ACTIVITIES

## HEALTH & NUTRITION | SUSTAINABLE LIVELIHOODS



The food systems also interlink sustainable livelihood opportunities like Mei-Ramew Cafes, farmers markets, agro-biodiversity walks, etc.

Cooking Demonstrations can be understood under the purview of health & nutrition and knowledge exchange for sustainable livelihood opportunities like farmers' markets, Mei-Ramew Cafe, catering opportunities and more.

### HEALTH & NUTRITION

**22<sup>nd</sup> January, Mawhiang:** NESFAS visited Kong Mardalin Kharsyntiew (a)

**26<sup>th</sup> Jan, Mawlum Mawjahksew (b)**  
Cooking demonstration by Ms Badarishisha Nongkynrih for pregnant and lactating mothers with MDM and ICDS functionaries

**19<sup>th</sup> March, Dewlieh (c)**  
Cooking demonstration to reinforce the importance of nutrition for children and mothers.

**20<sup>th</sup> March, Pyrda**  
Bio-diversity walk + Dietary Diversity Score (DDS) + Cooking demonstration.

**22<sup>nd</sup> March, Selbagre**  
Cooking demonstration by Rimchi and Simchi school children, ICDS and mid-day meal cooks, and parents. Discussed the importance of consuming different food groups + wild edibles in their surroundings.

**Wakingtongre**  
cooking demonstration conducted by NESFAS team member Rimchi. importance of the different food groups and the health benefits of the 10 food groups + hygiene while cooking. Children collected, cleaned and cooked wild edibles.

### SUSTAINABLE LIVELIHOODS

**28<sup>th</sup> Feb – 2<sup>nd</sup> March: North-Eastern Hill University (NEHU), Shillong:** Indigenous Feast at The North-East Innovators Meet and Tie Expo

**7<sup>th</sup> March**  
Exposure visit to You and I-Arts café.

**15<sup>th</sup> March, Tura**  
Farmers' Market



Kong Mardalin Kharsyntiew

### 22<sup>nd</sup> January, Mawhiang: NESFAS visited Kong Mardalin Kharsyntiew

NESFAS staff visited Kong Mardalin Kharsyntiew. She shared her method of preparation of local food by adding colour to the snacks by using red rice. She collects shiahkrot from the forest to prepare tea at home. She would also mix the shiahkrot with herbs to create traditional herbal liquids to cure stomach problems.



Demonstration at Mawlum Mawjahksew:

### 26<sup>th</sup> January, Mawlum Mawjahksew Cooking demonstration by Ms. Badarishisha Nongkynrih for pregnant and lactating mothers with MDM and ICDS functionaries.

**Aim:** To develop a workplan with MDM and ICDS functionaries.

#### Discussions and engagements:

1. Ms Badarishisha Nongkynrih mentioned the importance of consuming 5 food groups for nutrition.
2. Incorporating local food in the diet of pregnant women, lactating mothers and children.
3. She asserted that the approach was centred on mothers and children who are the beneficiaries of the ICDS and Midday Meal initiatives.
4. Stressed on the involvement of mothers to successfully implement the program as they are majorly involved in preparing meals at home.
5. The programme has the potential to provide palatable food in schools and at home.
6. Cited the example of Nongtraw and Dewlieh successfully incorporating healthy, innovative food in the mid-day meals.

#### Conclusion:

1. The participants – school staff, children and women were enthusiastic about the program.
2. The school would conduct the programme with an Aanganwadi Centre, with the approval of the village headman.
3. A meeting would be conducted with Aanganwadi workers, cooks, MDM cooks and school staff for a cooking demonstration in March.

## **Pyrda, 20<sup>th</sup> March: Bio-diversity walk + Dietary Diversity Score (DDS) + Cooking demonstration**

**Aim:** To encourage consumption of naturally available wild edibles through innovative recipes.

**Mentors:** NESFAS team

**Participants:** school children, teachers, ASHA members, Mid-day Meal cooks and the knowledge holders of the village.

### **Activities:**

1. Conducted a bio-diversity walk and identified 10 wild edibles in the village.
2. Knowledge-holders imparted information about health benefits of the plants.

### **Dietary Diversity Score (DDS)**

Conductor: Ms Susalan Law

Conducted an activity on the 24 hours Dietary Recall to recall the participants' DDS and noted that the people consumed 3 food groups.

Ms Susalan Law held a session with mothers, teachers, ASHA members and cooks to sensitize them eating healthy and explained the 10 food groups. She emphasised minimum 5 food groups should be consumed for proper nutrition. She communicated that a study revealed 52% women

and 48% children in Meghalaya are anaemic. The people realized about the variety of food crops in their village and the importance of nutritious food to prevent illness and for overall wellbeing.

### **Cooking Demonstration**

Ms. Susalan Law and Ruth Sohtun Showcased recipes of rice, broad beans, green leafy vegetable and black sesame, dal and pumpkin, tomato salad mixed with cucumber and jalynnoh, boiled egg mixed with jawieh, spring onion mixed with wild coriander chutney.

They emphasized the importance of eating more vegetables, especially the leafy variety over large quantities of rice.



*Pyrda, 20th March: Bio-diversity walk + Dietary Diversity Score (DDS) + Cooking demonstration*

**19<sup>th</sup> March, Dewlieh Cooking demonstration to reinforce the importance of nutrition for children and mothers.**

**Participants:** Teachers, pregnant mothers, lactating mothers, ASHA and mid-day meal workers.

**Mentors:** Badarishisha Nongkynrih and Ruth Sohtun



*Cooking demo using natural resources*

**27<sup>th</sup> March, Selbagre: Cooking demonstration for school children and adults**

**Aim:** consumption of local foods.

**Conductors:** Rimchi and Simchi

**Discussion & activities:**

1. Importance of consuming different food groups to prevent micro-nutrient deficiency was communicated.
2. Existing variety of wild edibles in their surroundings and their nutritional benefits were discussed.
3. Cooking demonstration was conducted with the school children, ICDS and mid-day meal cooks, and parents. It combined the ICDS food ingredients and local food to demonstrate an ideal plate of food.

1. Stressed on nutrition for pregnant mothers, lactating mothers and children less than 2 years old.
2. Importance of innovation to attract children and the family to eat healthy
3. Reinforced the importance of five food groups in each meal.



**Wakingtongre:** Cooking demonstration conducted by NESFAS team member Ms. Chenxiang R Marak.

**Conductors:** Ms. Chenxiang R Marak.

1. Explained the importance of different food groups and their health benefits.
2. Children collected wild edibles from their surroundings.
3. The students cleaned and prepared the vegetables as a part of the cleanliness campaign.
4. A cooking demonstration was conducted.

# SUSTAINABLE LIVELIHOODS THROUGH FOOD

**Custodian cooks, members of the NESFAS Cooks Alliance from partner communities of Khweng and Liarsluid Ri-Bhoi, and Darichikgre, West Garo Hills organized lunch for 1300 participants at the three-day North East Innovators meet and Technology Innovation Entrepreneurship (TIE) Expo 2019**

NESFAS identified the opportunity to promote local cuisine to participants from across India. Prior to the event, NESFAS member Ms. Gratia Dkhar, visited Ms. Babika and Ms. Plantina Mujai to plan the menu. Ms. Mujai conducted a tasting session was organised for NESFAS team members Mr. Janak Preet Singh, Ms. Naphishisha Nongsiej and Ms. Gratia Dkhar. Fares like chutney Shynrai, Ktung Tyndong, Jhur wang, Pathaw sdieh nei iong, dal and rice (ja khaw khasi) were served and logistics were discussed.

Organisers: State Council of Science, Technology and Environment (SCSTE), Meghalaya in collaboration with the North Eastern Council, Meghalaya Basin Development Authority, Bio-resources Development Centre and National Innovation Foundation- India.



Visitors at the Science Fair in NEHU



Lunch preparation by members of Khweng community

## Participating cooks

1. Prithing T Sangma, Darichikgre, West Garo Hills
2. Henry G Momin, Darichikgre, West Garo Hills
3. Ebanjelyne Sohshen, Liarsluid Ri-Bhoi
4. Dial Muktieh, Khweng Ri-Bhoi
5. Anaster Diengdoh, Khweng Ri-Bhoi
6. Plantina Mujai, Khweng Ri-Bhoi
7. Mington Lyngdoh, Khweng Ri-Bhoi
8. Monmon Khyndeit, Khweng Ri-Bhoi

## Food served on 28<sup>th</sup> February

1. Ja khaw Khasi- Indigenous Khasi Rice
2. Dai- Dal
3. Pathaw bad nei iong- Pumpkin with black sesame seeds
4. Jur khleh (jamyrdoh, nei lieh, sohsaw)- salad made with Chameleon Plant, perilla seeds and tomato
5. Chutney ktung tyndong- Fermented fish chutney
6. Jatira- Wild edible plant
7. Chicken dish from the Garo Hills

## 1<sup>st</sup> March

1. Ja khaw Khasi- Indigenous Khasi rice
2. Dai- Dal
3. Lungsiej sdiehykhong- Fried bamboo shoot
4. Jhur khlieh (Pashor bad nei lieh)- Salad with banana stem, perilla seeds
5. Chutney dhania- coriander chutney
6. Kynbat maloi bad soh saw- Wild edible 'kynbat maloi' with tomato
7. Fish curry with mint from Garo Hills

## Food served on 2<sup>nd</sup> March

1. Ja khaw Khasi- Indigenous Khasi rice
2. Dai- Dal
3. Rynbai shyieng- beans
4. Chutney dhania- coriander chutney
5. Doh syiar tyrkhong- smoked chicken
6. Jatira, sohsaw bad nei lieh- wild edible 'jatira' with tomato and perilla seeds

## 7<sup>TH</sup> MARCH: EXPOSURE VISIT TO YOU AND I-ARTS CAFÉ.

The visit was a precursor to a workshop at NESFAS where the participants were oriented about the concept of Mei-Ramew Cafe and the promotion of local food initiatives. The workshop was conducted as a part of the Mei-Ramew Initiative.

**Participants:** 13 representative members from Umsawwar and Nongtraw, East Khasi Hills, and Khweng, Ri-Bhoi.

Kong Plantina Mujai from Khweng shared her journey. She mentioned that NESFAS gave her exposure as a custodian cook, which has helped her obtain catering orders

at governmental and non-governmental organization to showcase local food and have food stalls in various events.

Bah Wanphai expressed concern over the decline of local foods and the emergence of fast-food as trendy. He shared his experience wherein he has established the You & I – Arts Café with minimal resources. He motivated the group to use locally available resources. He served lunch with a practical demonstration on food. Lunch was prepared with local ingredients sourced from farmers and the cutlery was made with local resources.



Community members visit You & I Arts Café Shillong



## 15<sup>TH</sup> MARCH: FARMERS' MARKET AT THE TURA POLICE PARADE GROUND, WEST GARO HILLS

**Participants:** 13 representative members from Umsawwar and Nongtraw, East Khasi Hills, and Khweng, Ri-Bhoi.

Kong Plantina Mujai from Khweng shared her journey. She mentioned that NESFAS gave her exposure as a custodian cook, which has helped her obtain catering orders at governmental



Farmers' Market in Tura

## STREET PLAYS WITH THE HIGHLAND CREW ADVENTURERS

18<sup>th</sup> March: ĩew Smit

25<sup>th</sup> March: ĩew ĩewrynghep

29<sup>th</sup> March: ĩew Jatah

30<sup>th</sup> March: ĩew Sohra

Street plays were conducted in local markets as a part of the nutrition campaigns. Highland Crew Adventurers performed street plays on the importance of consuming the right food groups

to enhance nutrition in rural areas.

The campaigns continued in the upcoming months of April & May.



Street plays in local markets



## 12<sup>TH</sup> AND 13<sup>TH</sup> MARCH: LIARSLUID, RI-BHOI: THE FIRST EVER MEI-RAMEW RICE FESTIVAL



*Mrs. Plantina Mujai selling indigenous food products*

The Ri-Bhoi farming community suggested the idea of the rice festival to showcase local seed varieties. Farmers are increasingly cultivating hybrid seeds over the indigenous varieties owing to the former's resilience to various factors. The festival would assert the importance of preserving the culture and rich biodiversity.

**Aim:** To showcase local varieties of seeds and spread the importance of preserving culture.

**Host:** the community from Liarsluid

**Co-host:** Khweng

**Participants:** Farmers from 18

communities from West Jaintia Hills, East Khasi Hills, West Khasi Hills and Ri-Bhoi.

### **Components of the festival:**

1. Seed exchange
2. Stalls managed by local groups from Liarsluid and Khweng, formed under PGS. It promoted the indigenous food and offered them livelihood opportunity.
3. Workshop on "Nutrition and Culture in the Rice Farming System."
4. Bah Pius Rane, the Senior Associate of NESFAS facilitated a session to encourage farmer-to-farmer learning as the primary measure before seeking technical help.
5. Overall encouragement and propagation of cultivating indigenous rice varieties and awareness about the paddy heritage of the region.

*Cultural programme*



## Workshop on “Nutrition and Culture in the Rice Farming System Mr Lukas Pawera, an ethnobotanist and researcher from Czech Republic

**Participants:** 20 communities, including the Ri-Bhoi communities

### Activities and engagements:

1. At the onset, Mr. Lukas Pawera applauded the communities for preserving the indigenous varieties of rice and other local crops and highlighted their health benefits over hybrid varieties.
2. Shared the findings of the participatory mapping: high biodiversity and low Dietary Diversity Score (DDS) and asserted the importance of consuming other food groups for a balanced diet.
3. Participants were asked to list the rice varieties in their area alongside different crops, wild edibles and life-forms. It was observed that paddy supplements 3-5 food groups. He iterated that rice cultivation is often assumed as monoculture but it abounds in rich biodiversity that have to be preserved from the growing use of external inputs.
4. A comparative study between biodiversity in paddy field of Indonesia versus the paddy fields of Khweng illustrated that chemical herbicides have turned the former into ‘dead paddy fields’ whereas traditional farming practices in Khweng have sustained their “live paddy field.”

### Farmer-to-farmer learning by Bah Pius Ranee

1. Bah Pius Ranee, the Senior Associate of NESFAS facilitated a session where he encouraged farmer-to-farmer learning as the primary approach to solving problems within the community, before they sought technical help.
2. This would enable farmers to exchange indigenous knowledge and promote experimentation.
3. When asked to list general issues in rice cultivation, the farmers from different regions raised around 12 concerns. They were addressed and mitigated by other farmers and 7 out of 12 issues were resolved.



*Bah. H Jalong, a custodian farmer from Liarsluid, Ri-Bhoi*



*Rice varieties on display.*



Bah Kolishon Barim from Liarsluid narrated the story of discovering the Jwain rice variety.

During collecting harvest in 2008, Bah Kolishon Barim noticed 2 stalks of rice that were different from the Lakang variety that he cultivated that year. He cultivated the seeds separately in the next sowing season and discovered that grains from the 2 stalk of rice yielded about five fistful grains. The variety, now known as the ‘Jwain’ is softer and more aromatic than Lakang. It is cultivated across the Raid Iapgnar, Raid Margnar and even in the Jaintia Hills, West Khasi Hills.

### Outcomes of the festival:

1. The event established a network of rice-growers, to enhance the preservation of indigenous varieties.
2. The participating and host communities showcased and contributed 58 varieties of seeds in the festival.

## ERI SILK INITIATIVES

**22<sup>nd</sup> Jan, Umwang Nongbah, Ri-Bhoi**  
**At the village profiling initiative, silkworm rearers and weavers from Umwang were interviewed to collect data for the value chain study of Eri silk. The youth interested in pursuing weaving were identified.**

### **26<sup>th</sup> March, Khweng**

NESFAS team member Ms Aurilia Tariang conducted a follow-up visit to Bah Jalong's house in Khweng. She shared the data collected during the Value Chain Analysis of Eri silk with the weavers of Khweng. NESFAS also collected information about those involved in Eri silk and its finished products.

Bah Jalong shared the list of names of the rearers, spinners and dyers.

Khweng has most rearers. The rearers in Madanrtiang sell their cocoons only when in need of money. Cocoons from both villages have the same quality.

The yarn is obtained from the spinners of Khweng and from Bah Mang, an entrepreneur who owns a spinning unit in Bhoi Rymbong.

Bah Jalong and his wife Kong Rikynti dye the yarn themselves.

In the course of the discussion, it was concluded that the traditional method of weaving in a floor loom is no longer practiced by the weavers of Khweng.

They also discussed patterns and metaphors and narratives attributed to them.

Bah Jalong was keen to attend training programmes on indigo dyeing is sponsored by NESFAS. He also sought alternative ways of dyeing maroon/red colour since Lac is expensive.



*Value addition for Mei-Ramew weaves*



*Meeting with community weavers*

## INITIATIVES CENTRED ON WOMEN

NESFAS initiated a campaign for the nutrition of women and children in the first week of March.



### 8<sup>th</sup> March, Women's Day:

Ms Laribha Dohtdong, Faculty of the Department of Allied Health Sciences, MLCU aired a radio talk. She discussed local food and nutritional security, and the importance women's health was covered.

### Workshop on local food systems

The Deccan Development Society shared information about the Womens Sangam and about the autonomy over seeds, markets and food in the region. Ms Jeblin Sangma, a custodian farmer from the Durakantragre community, West Garo Hills spoke about the need for support with marketing in the region and policy support, for small producers and vendors for better access to markets.

Durakantragre community, West Garo Hills spoke about the need for support with marketing in the region and policy support, for small producers and vendors for better access to markets.

NESFAS is actively working to create awareness, means and opportunities to enhance diversity in daily diets through local food. Research done on 'The Relationship between Agrobiodiversity and Dietary Diversity' was presented by Dr Bhogtoram Mawroh, Sr Associate at NESFAS. The study focussing on the importance of biodiversity for nutrition, found that almost 180 -300 species of food plants in the surveyed villages. Ironically, 50% population in the same villages consumed less than 5 food groups. The gap between existing agro-biodiversity and local diet was analysed in the presentation.

### 3<sup>rd</sup> - 15<sup>th</sup> March: Analysis of barriers affecting children and mothers' nutrition and health status

**Villages surveyed:** Laitsohpliah, Dombah, Nohron, Nongmawlong, Mustoh, Mawhiang, Selbalgre, Tosekgre, Madanritiang, Marmain, Mupyut, Mulum.

### Personal interviews were conducted with the following:

- ◆ 120 mothers of children below 5 years including pregnant & lactating mothers.
- ◆ 53 fathers of the children below 5 years.
- ◆ 28 grandfathers staying with the children below 5 years.
- ◆ 39 grandmothers staying with the children below 5 years.
- ◆ 255 adolescent girls.
- ◆ 12 Accredited Social Health Activists (ASHAs').
- ◆ 12 Anganwadi workers.
- ◆ 3 Auxiliary Nurse Midwifery (ANMs).

### Areas of concerns:

- ◆ Poor infant care.
- ◆ Poor feeding practices & inadequate low-diversity diet.
- ◆ Low economic status.
- ◆ Low education in mothers.
- ◆ Smoking and drinking habits in fathers and grandfathers.
- ◆ Ignorance of the importance of ANC during pregnancy and vaccination of the children.

# FINANCIAL OVERVIEW

2018-2019



**Opening Balance**

₹ 3,626,582.71



**Donation, Grants And Other Income**

₹ 35,983,564.1



**Programme Cost**

₹ 16,788,953.44



**Management Cost**

₹ 252,772.7



**Closing Balance**

₹ 22,568,420.67



**Fixed Assets**

₹ 1,565,306.00



**Current Assets**

₹ 21,003,114.67



ANNUAL REPORT  
2018-2019

Kerie Ville, Arbuthnott Road,  
Laitumkhrach, Shillong- 793003

[www.nefas.in](http://www.nefas.in) | [info.nefas@gmail.com](mailto:info.nefas@gmail.com) | 03642507513