



**Northeast Sustainable Development Initiative - Rongmei Naga Baptist Association**  
**(NesDi-RNBA)**

**FORLIS - Forest Restoration with Locally Important Species**

**Objective: To restore forest cover while providing sustainable livelihood opportunities and preservation of culture**

**Primary Focus Area: Livelihood, Environment, Culture**

**Introduction:**

Over centuries, indigenous communities have developed interdependent systems of agriculture and forestry that are uniquely suited to their ecological and cultural requirements. Also called Tribal, these communities depend on land/forest for food, medicine, construction materials and even source of income, while at the same time, the ecosystem is sustainably managed. In fact, forest is life for them. One of the major findings across the globe is that there is positive correlation between indigenous people and density of forest cover.

RNBA has been closely working with Indigenous/Tribal people for the past 35 years. Its focus thematic area is Sustainable Natural Resource Management and Livelihood. Our interventions are informed by the methods and knowledge systems of Tribal communities and our past experiences. However, these methods are going through a paradigm shift among the communities and cultures especially in the Northeastern states of India. One of the major changes is a shift from coherent relationships to commercial and exploitative relationships with the natural ecosystem. Various factors have influenced this shift. Tribal communities were isolated from the rest of the world, especially the State. But the world has now become local and has a stronger influence of neo-liberal economies and other global communities. In some cases, this has brought a positive change for the community in terms of access to social welfare. However, inequality and unequal distribution has increased including elite capture of social, economic and political aspects.

As for forest, this shift has gravely impacted due to the exploitative and extractive nature of management. Human activities such as landscape clearing to make up for increased population, market forces, lack of employment and livelihood opportunities continue to threaten as serious factors that can cause degradation to forest lands. Timber collection, slash and burn agriculture for cash crops and reckless collection of NTFP also continue to address precarious economic needs.

The annual income of more than 90% of the households in the hill districts of Manipur populated by the Scheduled Tribe people of India varies between Rs.20,000 and Rs.80,000 with no fixed source of income. As per the National Multidimensional Poverty Index (2021), more than 38% of the population in the hill districts of Tamenglong and Noney are multidimensionally poor. Only households with government employees and in some cases households into construction businesses are considered to be well-to-do households, as there are no other economic opportunities. Tamenglong particularly is considered one of the most

backward districts of Manipur and India at large due to its extremely difficult hilly terrain where the bureaucrats are hesitant and schemes and policies have a minimal reach.

As a result, to make ends meet, dependency on forest has led to degradation which is primarily a serious socio-cultural, economic and environmental problem. In the 2021 Forest Survey of India, Manipur is only third after Andaman and Nicobar Islands and Sikkim with 78.01% of its geographical area as Forest Cover. However, concerning is that from 2019 the Forest Cover has been depleted by 1.48%. Tamenglong also remains one of the few regions in India and Manipur to have a thick forest cover and that is depleting due to various infrastructural projects coming in like railways, roads and highways. Additionally, since the economic condition of the majority of the people is precarious, the people depend on the forest for not only their daily necessities but also for economic or income gains.

Culturally, the Tribal people are extremely conscious and aware of the natural resources available around them be it for food intake, medicine, building houses and more. There are undocumented indigenous knowledge systems about the forest – flora and fauna and its uses – which are part of the oral tradition and gradually forgotten as more and more youths are becoming distant from the forests and land to find employment and income opportunities elsewhere. Additionally, with deepening poverty and precarity, intra-village conflicts and tensions have risen based on land and its use.

It is only due to interventions of NGOs like ours, Village Development Committees are formed, women, youths and Self-help Groups are made aware of their rights, entitlements and their abilities to imagine sustainable development and income generation for their community through Nature-based Solutions (NbS). An income generating, community driven and land dependent sustainable intervention also has the possibility to temper conflicts.

### **Rationale and Method:**

RNBA's relationship over the years with indigenous communities helped us recognise the value of a sustainable forest management system. It is important to create a multi-functional outlook that sustains both people and nature. That being the case, RNBA has considered maintaining, conserving and restoring forest lands to support and accelerate the function of the wide range of ecological services that forests provide. In view of that, "Forest Restoration with Locally Important Species (FORLIS) System" was coined. The goal of the FORLIS system is to promote rural resurgence where community and local economy thrive by restoring locally important species while keeping the community's native forest intact.

FORLIS is both our primary intervention and a localised model for forest restoration and livelihood. This model has been framed through our rigorous research, pilot studies, failures and successes. FORLIS as a model works on the trifecta of preservation and conservation of forest by restoring its cover; livelihood and; documentation of culture and indigenous knowledge systems.

Under FORLIS, through community participation, we (Implementation Agency and target community) do the following:

1. RNBA spreads the awareness of sustainable natural resource management and brings faith in indigenous knowledge systems while building local capacity like the Village Development Committee.
2. Community identifies species which are native to the land (no foreign species),
3. We map the significance of each of the species (medicinal, aromatic, essential oils, food intake, house building, etc)
4. We assess the correlation between species and its market-value (for instance, *sugandh mantri* (Homalomena aromatic) is native to Tamenglong and Noney district and has a high value in the global markets for essential oils). Likewise, we have identified more than 80 species in Noney and Tamenglong.
5. Provide awareness and skilling to the members of the village community either on their individual land or community land (from procuring seeds and saplings to harvesting to end-product)
6. Prepare a plan with diversified species with the community members i.e. some species after cultivation will be ready to harvest in 3 months while some are long-term which could take 10 years (like timber).
7. Only in some cases, we provide seeds and saplings. Otherwise most of the species are locally procured from the forest
8. Regular monitoring and evaluation
9. Building market linkages - while some species improve the dietary intake of the people, or help them build their sustainable house, other species need stronger and non-exploitative market linkages which can generate income for the people
10. Institution Building and Capacity Building - we also provide institutional support for processing units for spices, fruits, cane and bamboo and the skills to run these units
11. Assess the impacts after regular intervals as per species (short term, mid-term or long-term)
12. Parallely, we converge with various government agencies to provide access to rights and entitlements

This is expected to gradually and sustainably increase the forest cover, preserve and conserve the environment, protect endangered species, preserve culture and indigenous knowledge systems and most importantly generate regular income without depleting natural resources. The system is designed to restore locally important species without much interference from outside forces besides carefully assisting in site preparation and planting to actively restore and encourage their development spontaneously. FORLIS approach is not only substantially cost effective but also requires no long term intervention by NGOs or any other agency. This model has been implemented in some of our target villages in Tamenglong, Noney and other hill districts of Manipur.

This system is designed in efforts to conserve biodiversity, enhance food security and community's economic stability based on proactive voluntary involvement by the community.

**Output:**

- a) Awareness Building for restoration of forest cover, market value of species and significance of locally important species for Village Level Authorities and Civil Society Organisations



- b) Develop IEC materials on climate change, forest restoration, and indigenous knowledge systems
- c) Training for identifying species, documentation of oral history, topography
- d) Form Village Development Committees inclusive of women and youth per village
- e) Identification and mapping for species and land
- f) Skilling for strategic agro-ecological practices
- g) Planning of use of land and Non-Timber Forest Produces (NTFP)
- h) Regular Monitoring and Evaluation while assessing the impact
- i) Empowering local level institutions for managing and taking care of the forest
- j) Mapping and documentation of the forest using GPS, documenting and recording plant species and processes on a regular basis for assessing the progress
- k) Training young volunteers for better understanding of the cultural and traditional practices with scientific inputs

**Outcome:**

- a) Autonomous and community driven decision making for the shared forest and land
- b) Well informed Village Authority, Clan leaders, Village Development Committee and other key stakeholders about climate change, forest restoration, market linkages and livelihood practices.
- c) Enhanced forest conservation activities
- d) Built awareness, people more informed and concerned about their natural ecosystem
- e) Enhanced local food basket and diversified nutrition intake
- f) Increase in income

**Potential Impact:**

- a) Increased income
- b) skilled agriculturalists
- c) community-driven development and participation
- d) increased forest cover
- e) Diversified dietary intake and Food basket
- f) preservation of culture and indigenous knowledge systems
- g) conservation of important and endangered species
- h) Restoration of forest based on indigenous cultural and traditional practices

**Overall Impact:**

The project is expected to gradually and sustainably increase the forest cover, preserve and conserve the environment, protect endangered species, preserve culture and indigenous knowledge systems and most importantly generate regular income without depletion and exploitation of natural resources.

**Success Indicators of the project:**

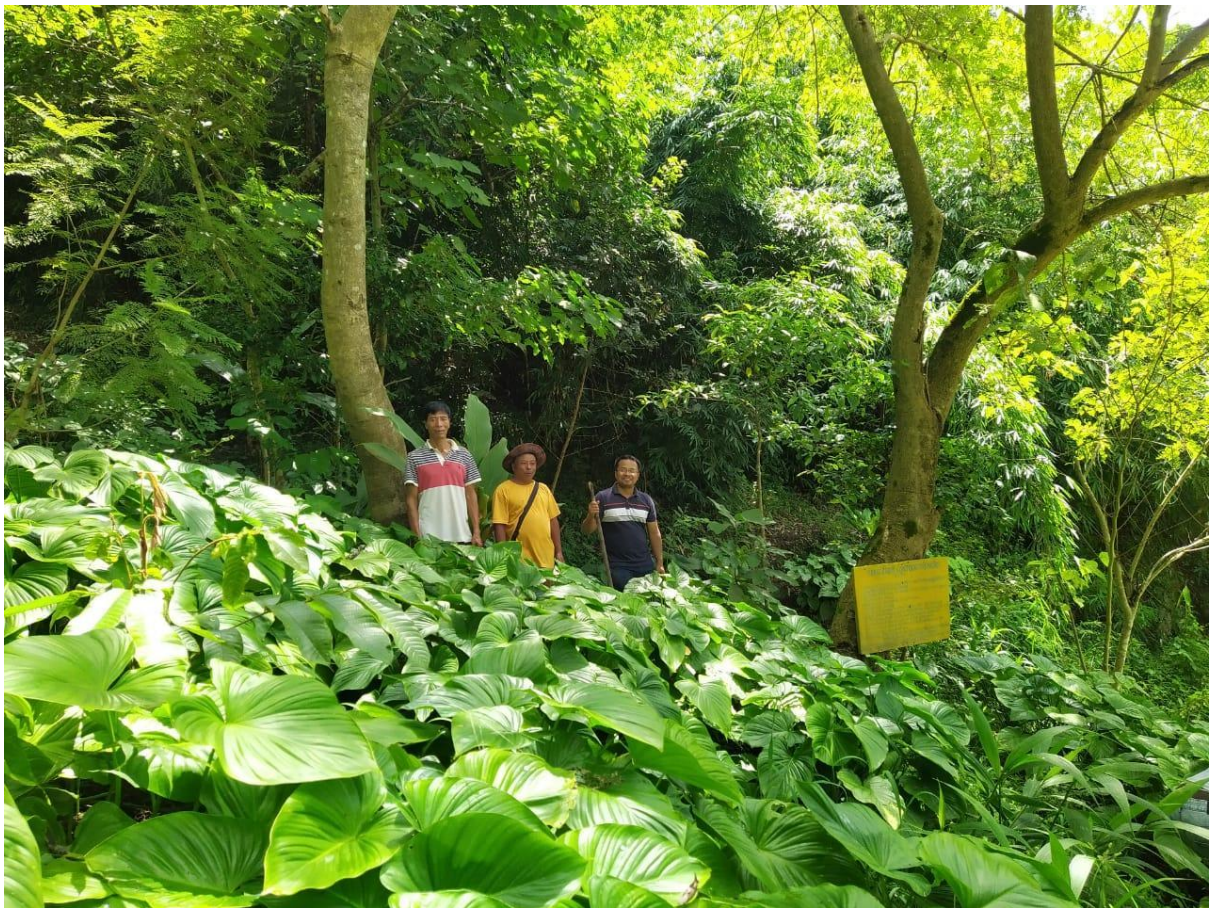
The people will be able to make decisions about their forest and land autonomously and well-informed which will also ensure that no private companies can exploit the natural resources. In the three-years time period, the forest cover may not visibly increase but geo-mapping will ensure the success of converting unused land or depleted land to restoration. However, a tangible indicator is the increase in income. The community will have





skilled agriculturalists who will know the effect of climate change and deforestation; will be able to identify, map and document local species; and become methodological and sustainable cultivators enhanced by indigenous knowledge systems

**Sustainability of the project:** The programme model (FORLIS) has the capacity to sustain on its own due to the governance of the Village Development Committee and the community-driven approach. The strong system and policies with the community level institution, community benefits (income, food & nutrition, medicinal, religious, etc.) will guarantee sustainability. The indigenous traditional practices are continued with only minor changes which makes them non-apprehensive to new practice rather makes them skilled agriculturalists and entrepreneurs. The choice of local species (non-intrusive) will further ensure sustainability of the intervention. The income is only bound to increase as the forest is now used for both cultural and economic reasons and with our intervention, the sustainability aspect of culture and financial gains are instilled. The sustainability of the project is as per our observations and experiences with our on-going target villages.



*sugandh mantri* (*Homalomena aromatic*) in Bwanruangh Taudaizaeng village, Noney District, Manipur