



INTERNSHIP PROGRAM

Pakku : Assignment, Exercise and Essay

Mobile: 09795982987

Email address; albertpakku9@gmail.com

Apr 11, 2025. HEPA. Symposium Comment

My comments and perspective of Symposium event in HEPA

The approach and methodology had found clearly from this event. Many invited people attended the symposium, but they were not very interested in the discussion topic. Time management was weak, and some participants did not show proper respect to the speaker. Most participants stayed quiet/ talked to each other and did not share comments or give feedback. Translation support was missing for Myanmar, Indian friends on each talking, which made it hard for them to follow. The preparation for the event was good, but some activities were rushed because of time limits, for example, video click showing. The translator often spoke more than needed and sometimes added personal opinions, which was confusing and wasted the time of this event. On the positive side, the news agency, printing post, and journalists helped to share our goals and activities with the public more easily and wider. If participants had shared more of their ideas and views, the event would have been more valuable and meaningful. In this event, it would be helpful if we had invited businesspeople, government officials, especially policy makers, and officers from the agriculture and forest departments to learning about green revolution. Next events, we should consider more about the participants and invited persons.

March 28, 2025. Establishing a Seedling Nursery Farm

Establishing a successful seedling nursery farm requires careful planning and attention to location selection, seed collection, sowing, plant care, and pest prevention. These steps ensure young plants have the best chance to grow into strong, healthy trees.

Seedling Bed Preparation; Before starting, it is essential to observe and plan the seedling bed carefully. First, identify the highest and lowest points of the garden. Next, examine the landscape slope and measure the surface to ensure it is level. Then, create the seedling bed frame based on these measurements. Finally, follow the natural water flow and establish contour lines or pathways to prevent erosion and support plant growth. The bed should be lower than the surface during the dry season to retain moisture and higher than the surface in the rainy season to prevent flooding.

Seed Collection; Seed collection begins with identifying a healthy mother tree. Using a GPS device helps accurately track its location. Understanding the blooming season of the mother tree is crucial, as it determines when the seeds will be ready for collection. After a few months of growth, collect the seeds and transfer them to the seedling bed. The area where young plants grow is vital for their development. Seedlings thrive best on flat or gently sloping land. In steep areas, young trees struggle to grow beneath the mother tree, so seeds/ young plants may need to be collected from lower, flatter areas nearby.

Sowing the Seeds; Once the seeds are collected, they must be sown properly. First, lay a layer of silt soil in the seedling bed. Then, spread the seeds evenly across the surface, the seeds should be mixed with silt soil during spreading into the bed if the seeds were soft, and lightly cover them with more silt soil. Next, cover the entire frame with dried leaves to provide dark shade and protection. For small or soft seeds, smooth the bed surface first to ensure even distribution.

The best sun protection for a nursery is a black sun net, which shields seedlings from excessive sunlight. Once the seeds begin to grow, remove the net at night and replace it in the day time. When plants reach over three inches in height, they still require shade at night. Very small and soft seeds should be watered gently with a sprayer instead of a pipe to prevent soil disturbance.

Lining the Young Plants; Once the seeds have sprouted, the young plants should be carefully arranged in the seedling bed. They should be lined up in four rows for a group with sufficient spacing to promote healthy growth. Larger or taller plants should be placed at the corners of the bed. Cover the frame with soil to stabilize the plants and protect them from external factors. Ensure that all seedlings receive adequate water for strong and healthy development.

Water Source and Irrigation System; A reliable water source is essential for the success of a seedling farm. The piping system should be located centrally to ensure even water distribution throughout the garden. Proper planning of contour lines and walking paths is also crucial for managing water flow efficiently. This ensures that all seedlings receive the moisture they need to thrive.

Herb Tree Planting; To grow herb trees, cut the roots into small sections (3 to 6 inches long) and plant them in a bed or bag filled with soft, well-draining soil. Water generously to help the roots settle and grow into healthy trees.

Pest and Disease Prevention; Protecting seedlings from pests and diseases is crucial for maintaining a healthy nursery. Plant diversity in the garden helps reduce the risk of pest infestations. Guava trees are particularly beneficial in repelling pests and protecting young plants from harmful insects and diseases.

Conclusion; A successful seedling nursery farm requires careful planning and consistent management at every stage. Choosing the right location, preparing the soil properly, ensuring efficient irrigation, and implementing pest prevention strategies will create a thriving nursery that supports the healthy growth and development of plants.

March 15, 2025. Co-governance in Cao Quang

A Key Element in Sustainable Land and Forest Management; Cao Quang commune has implemented a co-governance system that plays a crucial role in its sustainable development and the model of the Vietnam. Co-governance refers to a shared responsibility and collaborative decision-making process

between local communities and government authorities in managing natural resources, such as land and forests. This collaborative approach ensures that both the economic needs of the community and the environmental requirements are met effectively.

Under the co-governance system in Vinh Xuan, villagers work closely with local authorities to manage and protect the natural forests located in the mountainous and higher-altitude areas, as mandated by the Vietnamese Forest Law. These forests are designated as protected areas, with strict rules designed to prevent illegal logging and land clearing. Through the co-governance model, villagers actively participate in monitoring and enforcing these regulations, playing an essential role in preserving the forest for future generations.

This system also allows the villagers to have a voice in decisions regarding land use and crop cultivation. For instance, in the lower regions of the village, villagers are involved in the planting of acacia trees, an economically beneficial crop. The government, in turn, provides training, resources, and guidance on sustainable farming practices. By sharing their local knowledge and insights into the land's condition, villagers and government authorities collaborate to improve overall resource management, which benefits both the economy and the environment.

The co-governance system fosters a sense of ownership and responsibility among the villagers. They recognize the importance of maintaining a balance between short-term income—such as from acacia plantations—and long-term conservation, like preserving the natural forest. This shared responsibility strengthens the relationship between the community and government, leading to more effective land and forest management practices in Vinh Xuan Village.

The Structure and Process of Co-governance; The success of the co-governance system in Vinh Xuan Village is built on strong community-based organizations that work together to advocate for policy changes. In 2017, the Vietnamese Forest Law was revised, and a co-governance circular was introduced as a separate chapter that recognizes the role of local communities. The community of Cao Quang Commune, part of Vinh Xuan, has effectively implemented the rules set forth by this revised law, which is evident in the positive outcomes seen from the forest co-governance system.

Under the co-governance framework, land is divided into different layers with specific purposes. The upper layers of the mountain are preserved as natural or untouchable forests. The middle layer is designated for short-term economic use, such as planting crops, and the lowest layer, including valleys, is allocated for settlements, rice fields, and daily livelihood activities like home gardening. This system ensures that the land is used sustainably while also supporting the community's economic needs.

Key Components of Co-governance in Vinh Xuan Village; A well-established and strong governance structure is essential for the success of the co-governance model. In Vinh Xuan, the co-governance team consists of various stakeholders, including the vice chairperson of forestry, community representatives, police officials, and forest rangers, with a total of 24 individuals involved. The system operates at various levels, from the village to the household and individual, ensuring that everyone shares responsibility in forest and land management.

The collaboration between villagers and local authorities ensures that the forests in the higher and mid-mountain areas are protected under strict rules, preventing illegal logging or land clearing. Villagers are

not only involved in monitoring but also play an active role in enforcing these forest protection regulations, ensuring that the forest remains intact for future generations.

Additionally, the government provides support in the form of training, resources, and guidance on sustainable farming and forest management. Villagers contribute local knowledge about the land's condition, further improving resource management. The collaboration ensures a balance between economic activities, such as acacia plantations, and environmental conservation. This approach creates a sense of ownership among the villagers, who recognize the importance of both the natural forest's preservation and the economic benefits derived from sustainable practices.

Co-governance in Practice in Cao Quang Commune; More recently, Vietnam has introduced systems like co-governance, where ethnic minorities are more involved in decisions about land use, particularly in forest management. This represents a shift towards recognizing traditional practices and involving communities in sustainable resource management. The practice of co-governance is fully realized in Cao Quang Commune, where all households have a responsibility to participate in co-governance and have the right to access forest resources. The village is divided into smaller groups of 8 to 10 households, each managing a specific plot of land or forest area. These groups are directly involved in co-governance, ensuring that everyone has a stake in the sustainable management of resources.

The co-governance system in Vinh Xuan Village is a successful example of how shared responsibility and collaboration between local communities and government authorities can lead to effective and sustainable land and forest management. By balancing economic development with environmental conservation, Vinh Xuan Village demonstrates the potential for co-governance to achieve long-term sustainability and enhance the well-being of the community.

The Importance of Diagram Mapping and Ecological Transect Cutting Mapping; Diagram mapping and ecological transect cutting mapping are important tools in ecological research and environmental management. Diagram mapping helps create visual representations of environmental data. It shows relationships within ecosystems, such as habitat types, species distributions, and ecosystem interactions. This mapping helps researchers and decision-makers understand patterns and trends. It is important for planning land use, conserving biodiversity, and tracking environmental changes.

Ecological transect cutting mapping is another method used in the field. It focuses on studying ecosystems along straight paths, called transects. This method helps researchers check biodiversity, habitat health, and how environmental factors, like temperature or moisture, affect ecosystems. By collecting data along the transect, researchers can learn about the distribution of species and how they respond to different conditions. It is also a cost-effective and accurate way to monitor changes in the environment.

Both methods work together. Diagram mapping gives a broad view of the data, while transect cutting mapping gives detailed, on-the-ground information. Together, they help researchers understand ecosystems and make better decisions for conservation and sustainable management.



Co-governance land scape management in Cao Quang

March 7, 2025. Land, Forest, and Acacia Plantation Management Practices in Vinh Xuan Village

Vinh Xuan Village has a clear system for land, forest, and acacia plantation management, organized by elevation. The village's land use is divided into different areas, each serving specific purposes for agriculture, income, and conservation.

In the lower area, between 32 to 33 meters above sea level, crops like corn, peanuts, and rice are grown. The Nan River nearby provides water for these crops, making this area vital for the village's food supply.

The residential area sits at 38 to 39 meters above sea level. Here, villagers grow various fruit trees and herbs, including bananas, lychees, jackfruit, coconuts, lemon grass, guava, and roof palm trees. These crops serve both for household consumption and as a source of income.

In the southern part of the residential area, at 39 to 40 meters above sea level, rice is cultivated. Acacia trees are also planted for their fast-growing timber, which generates short-term income for the villagers. A traditional temple is located in the southwest, adding cultural significance to the area.

At higher elevations, between 45 and 55 meters, acacia plantations dominate. This area is primarily used for acacia trees, providing an economic benefit for the village. Beyond 55 meters, the natural forest is protected by the Vietnamese Forest Law, and villagers have become more aware of the importance of forest conservation.

Vinh Xuan's land management is organized into three layers following the 2017 Forest Law. The top layer, above 55 meters, is reserved for natural forests and conservation. The middle layer, between 39 and 45 meters, is used for acacia planting and crops like Myntra plants, which are used for making wine.

The lowest layer is dedicated to rice and rotational crops. This system balances farming, income generation, and environmental preservation, benefiting both the villagers and the ecosystem.

Co-governance Land, Forest, and Acacia Plantation in Vinh Xuan Village

Vinh Xuan Village's land and forest management also involves a co-governance system that plays a key role in its sustainable development. Co-governance refers to the shared responsibility and collaborative decision-making between local communities and government authorities in managing natural resources, such as forests and land.

Under the co-governance system, the villagers work together with local authorities to manage and protect the natural forests located in the mid of the mountain and higher areas, as required by the Vietnamese Forest Law. These forests are protected areas, and the law decrees strict rules to prevent illegal logging or land clearing. Through co-governance, the villagers actively participate in the monitoring and enforcement of these regulations, ensuring the forest is preserved for future generations.

This system also allows the villagers to have a voice in decisions related to the use of the land and the types of crops grown, including the planting of acacia trees in the lower areas. The government provides training, resources, and guidance to the community on sustainable farming practices, while the villagers offer local knowledge and insights into the land's condition. This collaboration helps improve the overall management of resources, providing both economic benefits and environmental protection.

The co-governance model fosters a sense of ownership and responsibility among the villagers. They understand the importance of maintaining a balance between short-term income, such as from acacia plantations, and long-term conservation, such as preserving the natural forest. This shared responsibility strengthens the relationship between the community and the government, allowing for more effective land and forest management practices in Vinh Xuan Village.

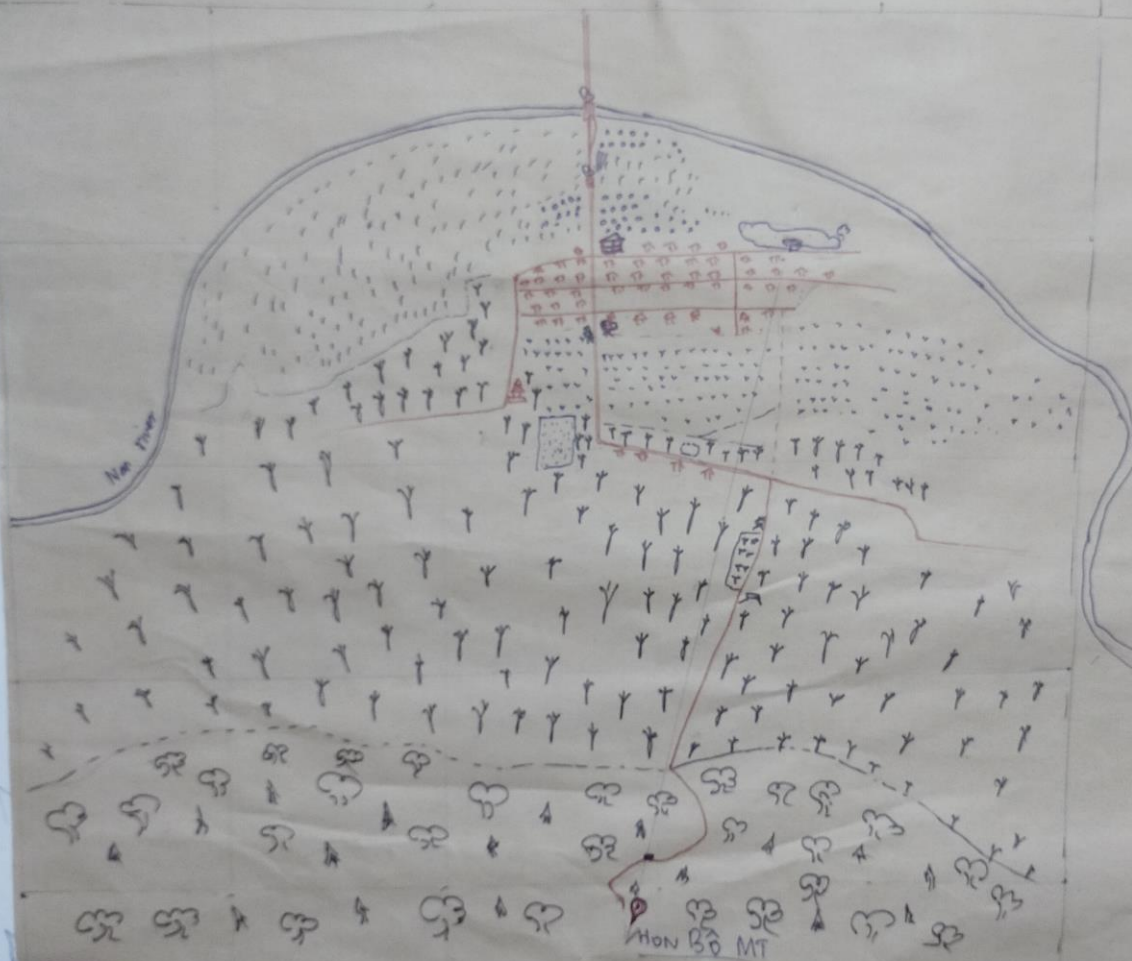
March 03, 2025. Vinh Xuan Diagram

Creation Date: 2 Mar 2025

Time - 7:00 PM

Drawn By: Pakku

VINA XUAN VILLAGE DIAGRAM MAP



Legend

- | | | | | | |
|--|--------------|--|------------------------------|--|-------------|
| | - River | | - Concrete road | | - Grassland |
| | - Rice field | | - Gravel road / rocky path | | - Bamboo |
| | - Stream | | - Walk path | | |
| | - Fish pool | | - Tombstone worship / Temple | | |
| | - Grassland | | - Village meeting hall | | |
| | - Lake | | - Bridge | | |
| | | | - Spirit tree | | |
| | | | - Cattle house | | |
| | | | - Rice yard | | |
| | | | - Rice field | | |
| | | | - Natural forest | | |
| | | | - Electric transformer | | |
| | | | - Corn field | | |
| | | | - Peanut field | | |

March 03, 2025. Vinh xuan Transect

Date: 2 Mar 2025
 Time: 9:30 PM
 Name: Pakku

ECOLOGICAL TRANSECT - CUTTING

NW → S

	River Cum + Peanut Field		Settlement area		Rice field	Acacia field		Natural forest		NF	Highest point of this map
Height	32 m	33 m	37-38	38 m - 39 m	39	39 m - 56 m	56 - 79 m	78 m	84 m		
Slope	-	0-1'	0-2'	1-2'		5-15'	20'-30'		20'-30'		
Soil	Sand	silty soil	clay	clay soil, silty	clay silty	silty, Rocky, Sandy	Rocky, silty		Rocky, silty		
Flora	Bamboo tree	Corn, Peanut, Bamboo, edible tree	Banana, Cardamom, lychee, palm, Cassava, Mango, Lemons, rice, Cardamom, betel nut, sugar cane, pumpkin	Rice, Acacia	Acacia	Acacia	Woods, herbs more than 74 trees, 83 herbs				
Animal	fish, small snake		Buffalo, cows, dog, chicken, Boar,	snail, fish, crab		Bird, cattle, snake	Monkey, bear, snake, iguana, bird, cat, mouse		Only fish, lizard		
Management	Community	Private	Private, community	Private	Community	Private	community, co-governance body		-		
Challenges			Many time flooding	snail,		very deep soil for crop cultivation					