Gearing Towards 2030: The Race to Combat Dissertation in Viet Nam

BACKGROUND

Viet Nam faces severe land degradation affecting over 12 million hectares, particularly in the northwest, central highlands, and coastal regions. The central coast is critically impacted by encroaching sand dunes, which destroy 10 to 20 hectares of fertile land each year. This problem is compounded by a 29% increase in drought frequency and intensity since 2000, threatening the livelihoods and food security of rural communities. In response, Viet Nam has been actively combating desertification since joining the UNCCD in 1998. Through national policies like the National Action Program to Combat Desertification, the government focuses on sustainable land management, reforestation, and protecting vulnerable areas. These efforts, which include ambitious goals to restore forest cover, align with international frameworks like the SDGs to build climate resilience and support local communities. This project tackles severe land degradation in the northwestern "hot spots" of Hoa Binh, Son La, Lai Chau, and Dien Bien, where deforestation and soil erosion are driven by steep slopes, heavy rainfall, and unsustainable farming of crops like maize and cassava. These practices have accelerated fertility loss and desertification, creating economic hardship for local farmers.

To combat this, the project integrates scientific soil research with innovative forest restoration models, such as the Sloping Agricultural Land Technology (SALT) method. This approach combines forestry species with fruit trees and non-timber products to rehabilitate land in a way that balances ecological restoration with economic development. The initiative directly supports Viet Nam's national policies on forest restoration and sustainable land management, including the ambitious plan to plant one billion trees. By restoring degraded land, the project aims to protect natural resources, mitigate climate change, and foster sustainable rural development.

Key Messages

1. Combating Desertification and Land Degradation: Viet Nam is combating desertification and land degradation by uniting government efforts with local communities, positioning forest restoration as a key solution for climate change mitigation.
2. Land restoration techniques and sustainable management models: These techniques and models have revitalized local economies and ecosystems, delivering significant economic and ecological benefits.
3. Viet Nam's global commitments and national priorities: Aligned with the 2030 Sustainable Development Goals (SDGs), the project actively supports Viet Nam's global commitments and national priorities for forest rehabilitation and desertification prevention.

Figure 1. Degradation or Deforestation of Viet Nam Forest @ AFoCO

Figure 2. Successfully Mobilized the Participation of Local Communities in Planting Activities @ AFoCO

IMPACTS

Integrated Land Restoration Models

The project implemented cutting-edge land restoration models designed specifically for degraded, sloping areas. The Sloping Agricultural Land Technology (SALT) method, which integrates forestry species with non-timber forest products and fruit trees, has proven highly effective in combating soil erosion and restoring vital soil fertility. By using fast-growing Fabaceae species and advanced microbial soil enhancement techniques, the project has dramatically boosted water retention and nutrient absorption of the land, leading to significant improvements in both short-term agricultural yields and long-term productivity. These results offer a scalable and replicable solution for other degraded regions facing similar challenges.

Soil and Forest Health Improvement

A key factor of the project's success is the deep engagement of local communities. Through a combination of workshops, training sessions, and hands-on restoration efforts, local farmers and landowners have taken an active role in revitalizing their land. The project has unlocked significant economic opportunities by promoting the production of high-quality seedlings and the cultivation of valuable non-timber forest products (NTFPs), such as fruits and medicinal plants. These initiatives have empowered participants to diversify their income streams, boosting their economic resilience while fostering a strong sense of ownership over the restored landscapes. The agroforestry systems introduced have delivered immediate economic gains and laid the foundation for long-term sustainable land management, profoundly enhancing local livelihoods.

Community Engagement and Economic Benefits

The active participation of local communities is one of the key ingredients of this project. Local farmers and landowners have taken a leading role in restoring and managing their land. This direct involvement has not only strengthened community but also created new economic opportunities, particularly through the production of high-quality seedlings and the cultivation of non-timber forest products (NTFPs) like fruits and medicinal plants. These activities have enabled participants to diversify their income streams, boosting their economic resilience while cultivating a strong sense of ownership over the restored land. The agroforestry systems introduced immediate economic gains and established a foundation for sustainable, long-term land use, dramatically enhancing local livelihoods.

Building Local Capacity

Building local capacity has been fundamental to ensuring the project's long-term success and sustainability. Through comprehensive training and hands-on technical support, local authorities, residents, and forest landowners have been empowered to take full ownership of the restoration process. This empowerment ensures they can maintain and enhance the land even after the project ends. The knowledge and expertise gained from this initiative provide a lasting foundation not only for ongoing restoration efforts but also for future projects, empowering local communities as stewards of their environment and key actors in forest conservation.

Figure 3. Training Courses on Restored Model Selection @ AFoCO

Figure 4. Training Courses on Restored Model Selection @ AFoCO

Expanding Land Restoration Models Across Vulnerable Regions

This project's success unlocks significant potential to scale integrated land restoration practices to other vulnerable areas in Viet Nam. The proven efficacy of the Sloping Agricultural Land Technology (SALT) method, supported by fast-growing tree species and soil-enhancing techniques, provides a replicable solution for reducing soil erosion and enhancing forest productivity on sloping terrains.

Furthermore, the promotion of agroforestry and Non-Timber Forest Product (NTFP) activities ensures sustainable income growth for local communities, reinforcing the project's forest restoration goals.

Advancing Agroforestry for Economic and Environmental Gains

The Central Highlands, South East, and North Central Coast have been identified as the main areas for robusta coffee production in Viet Nam's Master Plan on Agricultural Production Development to 2020, Vision to 2030. Viet Nam's 2020 NDC outlines national climate initiatives for 2021–2030, with a UNFCCC update due by 2025. The 2020 NDCs for Viet Nam also emphasize the need for suggested actions to demonstrate the co-benefits and synergy between climate change adaptation, mitigation, and sustainable development goals, such as advancing gender equality.

The expansion of agroforestry systems amplifies both economic and ecological benefits, providing rural communities with a sustainable income source while increasing forest cover. This dual benefit not only supports community livelihoods but also enhances ecological stability, making the project a valuable model for addressing regional environmental challenges.

Agroforestry, an integrated agricultural system with crops and trees, can substantially reduce greenhouse gas emissions (GHG) through carbon sequestration. The cost efficiency of agroforestry expansion needs to be learned.

Figure 5. Agroforestry on Sloping Land Model in Son La Province, Viet Nam @ AFoCO

For the successful agroforestry options in Viet Nam, it is necessary to develop and promote market-based agroforestry and forest rehabilitation options.

Generating Economic Growth Through Carbon Credits

The initiative introduces new opportunities for generating carbon credits through reforestation and sustainable land management, establishing a long-term economic growth pathway.

By aligning with Viet Nam's national carbon reduction targets and international frameworks such as Land Degradation Neutrality (LDN) and the Sustainable Development Goals (SDGs), the project actively contributes to global climate change mitigation efforts while strengthening the economic and social resilience of local communities.

Positioning AFoCO and partners for the future of forest climate investment on the forest sector in Asia, AFoCo and members can utilize existing platforms such as Climate Action Matching Platform (CAMP) under AFoCO's Climate Action Plan (CAP) and the Friends of Asia and Asian Forests (FAAF) to match carbon credits projects with suitable financing partners and to forester multi-actor engagement.

Scalable Model for Regional Sustainability

With continued support from the Viet Nam government and international collaborators, this project serves as a replicable framework for Southeast Asia. It offers a strategic pathway to combat desertification, foster sustainable land management, and drive resilience across both local and regional landscapes.

This model showcases the synergy between environmental stewardship and socio-economic development, positioning Viet Nam as a leader in sustainable land management practices.

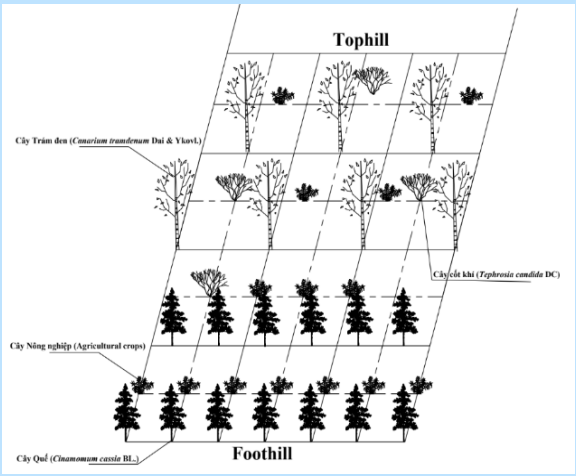

Figure 6. Project Sloping Agricultural Land Technology (SALT) Model Design in Veit Nam

THE WAY FORWARD

Looking ahead, the path forward involves scaling up and integrating successful restoration models, particularly the Sloping Agricultural Land Technology (SALT) approach, into national and regional land management strategies to combat desertification and enhance productivity. Achieving this expansion will require sustained government support and deep collaboration with local communities. Crucially, to guarantee long-term sustainability, AFoCO and partners invest in capacity building for these communities and local authorities, empowering them with the skills to manage restored areas and prevent soil erosion independently, thereby creating a self-sustaining system of enduring benefit. Moving ahead, a primary way forward is to actively pursue public-private partnerships, particularly in carbon trading and agroforestry. These collaborations are essential for generating new income for local communities and supporting Viet Nam's climate goals. Ultimately, leveraging these partnerships will be the key mechanism for securing the sustained financial support required to maintain and scale the project's critical impacts.

Addressing the escalating desertification crisis requires a fundamental shift toward integrated systems thinking and long-term policies. By building on this project's successes and committing to continuous innovation, Viet Nam can achieve its national land management goals and establish itself as a regional leader in sustainable development

Figure 7. Rattan Enrichment of Poor Forest Model on Nearly Degraded Protection Forest Land in Hoa Binh @ AFoCO

Figure 8. Successfully Mobilized the Participation of Local Communities in Planting Activities and Agroforestry Practices @ AFoCO

ACKNOWLEDGEMENT

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