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Initiatives in forest restoration: Lessons and policy perspectives from recent experience in Vietnam, Laos and Indonesia

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TABLE OF CONTENTS

1. Introduction
2. Successes from the region and applicable lessons4Technology and innovation4Policy and process.4Business and investment.6
3. Drawbacks of forest restoration related policies in Vietnam 6 3.1. Lack of policies 7 3.2. Protracted and delayed introduction and implementation of 7 forest restoration policy 7 3.3. Overlapping policies 8 3.4. Ineffective communication of policies and technical advice 8 3.5. Other drawbacks in forest restoration in Vietnam 9
4. Recommendations10
5. Acknowledgements12
References

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Key lessons in forest restoration from Vietnam, Laos and Indonesia

This report synthesised lessons learnt and shared between participants from Vietnam, Laos and Indonesia at a regional workshop on natural forest restoration held in Ha Noi in October 2017. The three countries share some common approaches in forest restoration.

- Forest restoration techniques have been scientifically demonstrated to improve forest functions such as carbon sequestration, biodiversity and reduce impacts of natural disturbances.
- Recent advances in monitoring tools and spatial information allow better forest landscape planning and evaluation of the effectiveness of resources in forest restoration.
- In order to ensure these techniques are applied properly and successfully, effective communications and extension services promoting best practices, are required, both between all levels of governments as well as between the government and relevant stakeholders, such as forest managers and smallholder farmers.
- The Forest Landscape Restoration approach, which emphasises the participation of all relevant stakeholders in decision making (e.g., local people, scientists, policy makers, private sectors), shows promise for developing appropriate, long-term restoration and sustainable forest management plans, primarily by establishing communications and decision-making platforms that better represent the needs of all forest users.
- This participation can be enhanced through transparent and equitably shared rights to benefit from the goods and services created by forest restoration. Establishing these is among the most urgent policy changes requires in order to increase acceptance, 'buy-in' and investment by local people and private sector in forest restoration.
- To achieve this, changes to the legal frameworks for forest management, ownership and usage rights are prerequisites for attracting investments from different economic entities in forest restoration, especially the private sector.

1. INTRODUCTION

Forest restoration has been a national priority of many countries in the context of climate change and especially due to the rapid reduction of forest areas in the last few decades. Vietnam, Laos and Indonesia share a common context of rapid forest loss at the end of the 20th century, followed by a number of government policies and programmes being introduced to reduce and reverse this. Before 1990s, forests in Vietnam were severely damaged, resulting in the lowest forest cover in early 1990s (Tran, 2017). Similarly, Laos has lost 1.2 M ha of natural forests over 10 years (1992-2002) (Phompila and Sorthanongxay, 2017). Together with the reduction of forest areas, forest quality has been greatly reduced. Poor quality forest, typically defined by volume of biomass or timber species, has little value commercially or in terms of ecosystem services and public goods. Vietnam has ca. 6 M ha of poor and degraded forests that the quality needs to be improved, while this figure of Laos is ca. 10 M ha (Phompila and Sorthanongxay, 2017). These situations raise concerns among the governments about the ability of forests to meet the required functions in environmental protections, biodiversity conservation and providing livelihoods for local people. Degraded forest is also practically easier to clear for other land uses, and, in some cases, is legally and politically easier to re-classify as well, enhancing the risk of deforestation.

The governments in the region have shown a strong commitment to forest restoration, through implementing and funding many national programs to improve the forest cover and forest quality (Tran, 2017; Wicaksono, 2017). The last three decades in conducting forest restoration programs have resulted in lots of experiences and lessons learned that need to be revisited, collated and shared comprehensively within the region and worldwide to inform current and future forest restoration efforts.

This report synthesises the lessons and experiences shared by participants from Vietnam, Laos and Indonesia in a regional workshop on forest restoration organized by SNV in October 2017. It summarises the key messages from the experiences of the region for international audiences concerned with promoting forest restoration worldwide. It also discusses some relevant policy recommendations for Vietnam, based on the discussions at the workshop and experiences of the authors.

2. SUCCESSES FROM THE REGION AND APPLICAPLE LESSONS



While it is acknowledged that not all the efforts and resources put into restoration have been successful, here we present key lessons and recommendations based on what has worked well, or contributed to successes, in the region.

Technology and innovation

Restoration success is improved by science-led forest management techniques, and cost-effective and reliable methods have been found for many contexts, geographies and ecologies. A growing number of forest restoration projects across the countries in the past 5-10 years have provided scientific-basis and this has led to more accurate, evidence-based, management techniques for forest restoration. The application of science and technology to forest restoration is vital, because there are many examples from the region on failed restoration efforts, where inappropriate techniques have been applied (Tran, 2017; Wicaksono, 2017). The studies presented in the workshop have demonstrated that understanding of ecological features of forest habitats and biological characteristics of species is required for restoring different forest ecosystems for different purposes. The appropriate use of various forest restoration techniques successfully leads to the restoration of natural forests, improving carbon sequestration, increasing biodiversity and reducing natural hazard events such as soil erosion (Dang, 2017; Le, 2017; Vien, 2017). These appropriate management techniques may be highly specific to the ecosystems in question. For example studies on restoring forest on peatland identified the appropriate wetting regimes and fire prevention efforts that are the keys for maintaining carbon storing and biodiversity of this ecosystem (Le, 2017).

Investment in appropriate NTFPs and alternative livelihood strategies are shown to be costeffective and support forest restoration, but are also highly geographically specific. Case studies from across the region have demonstrated that investment in NTFPs or supporting alternative livelihoods in the landscape and agricultural matrix surrounding forests, can produce effective return on investment while also supporting the principles of forest restoration (Phan, 2017). Like restoration techniques however, they can be highly variable between and within different microclimates and geographies.

Utilising newly available monitoring tools can support the effectiveness of forest restoration. Remote sensing and spatial data demonstrate lots of benefits for forest management. These tools enable all participating stakeholders a better understanding of their landscape and land uses. In combination with other information such as soil properties, water availability data, the tools help to assist local people in designing appropriate activities and selecting appropriate species and restoration techniques for their land.

Policy and process

Strong commitments from the governments on forest restoration create a clear direction for all stakeholders. In Vietnam, the government developed a strategic plan targeting a 47% coverage of the country's natural land by 2020. Similarly, Laos' government also initiated a national program on planting, protecting and restoring forests aiming to achieve a forest cover of 70% by 2020 (Phompila and Sorthanongxay, 2017). To achieve these targets to increase forest coverage, it is required that existing forest areas are protected and sustainably developed, while other

areas, such as bare hillsides, are planted with trees. Therefore a base-level of public financial support for forest protection, forest restoration, and forest planting are continued.

Some good state-led policies and programmes have successfully promoted forest restoration. These have taken numerous shapes, from providing access to subsidised credit, to input support such as (subsidies) provision of seedlings, and fertilisers among other things. These policies have allowed local people to invest their time and money in forest restoration, by providing some support for their daily needs while there is little or no income from forest management. The recognition of some stakeholders, for example communities, cooperatives and groups of people, as an entity in forest management has demonstrated positive impacts in forest management.

Poor households and individuals are often prioritised in the distribution of some benefits and opportunities in forest restoration. For example, in Vietnam, at village level, heads of villages often allow poor households to join in the forest management team so that they can get the, limited, additional financial benefits that are available (from Payments for Forest Ecosystem Services or forest protection contracts). A successful lesson shared from Indonesia, also applied in Vietnam, is the providing of additional social welfare services for local people to ensure the success of forest restoration programs. Support like the provision of free health insurance and education is a common form of benefit transfer from the state to rural and poorer areas used in conjunction with restoration and conservation schemes and contributes to the provision of basic social safety nets. (It should be noted here that there examples of where this prioritisation does not happen in practice, see below).

The participation of all relevant stakeholders in a forest landscape approach is a key to success of forest restoration programs. When stakeholders are allowed, encouraged and supported to participate in all stages of forest restoration, from planning to monitoring, this enables them to give opinions and contribute to the planning of their landscape (Nghi et al., 2017; Wicaksono, 2017), thus increasing the success of restoration projects. This is also an opportunity for local people to access capacity building and training opportunities, be informed about changes and future plans in their landscape and present their views to policy makers. The forest landscape restoration approach also emphasises the importance of providing communities living within and near forests with access to key elements of social welfare, such as healthcare, education, financial services, as well as support in developing alternative livelihoods.

Working at a landscape-scale when restoring forests more naturally fits the socio-economics of these communities than isolated decision making about forest restoration. Evidence shows a high degree of diversification of household incomes among families working in forestry and in communities living near forests (Phan, 2017). Planning forest restoration without understanding how it impacts other economic activities in the local area, and vice versa – how economic development activities in the surrounding area affect forest restoration – is counter to the way these communities work. In Vietnam, forest restoration is not planned or delivered on a landscape level, but by forest managers with responsibility for (typically) small and fragmented areas of forest, who manage their forest estate separate from the mosaic of agricultural and productive forest land in between. The example of the Ecosystem Restoration Concessions in Indonesia where the concessions are very large, covering 'landscapes' and this requires managers to create zones within them, understanding how productive land, and protection areas, interrelate and support each other to achieve the ecological, and socio-economic, objectives (Darusman, 2017; Rezkiana, 2017; Wicaksono, 2017).

Business and investment

Business, communities and the private sector can be incentivised to invest in restoration if they have adequate opportunities and rights to benefit from it. While most of the funding for forest restoration in Vietnam, Laos and Indonesia has historically come from the government, it is widely acknowledged that there is a need to attract a wider range of stakeholders, in particular the domestic private sector, into investing in forest restoration if national restoration targets are to be met. Examples from Indonesia and Vietnam show how creating an opportunity, or the right to, benefit from restoration is critical to unlocking this. In Indonesia, the establishment of the Ecosystem Restoration Concessions has attracted private investment into restoration of over 600,000 hectares, based on the rights to earn returns from the land, from everything from carbon credits, to future timber sales, once ecosystem balance has been satisfactorily restored. On a smaller scale, but similarly instructive, in Vietnam, it has become common that families and communities are tasked by local authorities with supplying the labour protection and maintenance of replanted forests, in return for a small amount of forest protection money, the right to collect fuelwood, NTFPs and other agroforestry. In other areas where local people make larger contributions to forest management, for example through ongoing liana removal and costs of seedlings and fertilisers, their might have rights to a share of future timber sales (up to 50 %). In those cases, the prospect of significant returns from the investment of money, or time, is certainly decades away, and in some cases seemingly unlikely. But these examples show how creating the right to earn benefits mobilises resources from stakeholders who are prepared and able to compare the risks with the rewards.

Linking traditional forest restoration with international funding initiatives is a common trend. Many countries in the region including Vietnam, Indonesia and Laos have been pioneers in implementing REDD+ programmes at various scales: national and sub-national. In Vietnam, REDD+ and the PFES policies have been integrated into national forest restoration, forest protection and forest development programs, and vice versa. The financial incentives from PFES (generated through a levy on hydropower) has demonstrated positive impacts on forest management.

3. DRAWBACKS OF FOREST RESTORATION POLICIES IN VIETNAM

Although the forest areas of these countries, Vietnam, Indonesia and Laos, has increased since the introduction and implementation of the national restoration, forest quality may not follow the same trend, and biodiversity of flora and fauna is still decreasing. Incomes and goods from forests generally still do not meet local people's needs, increasing pressure on other land uses and expansion of agricultural land, and creating tension between local people and forest managers.

Policies have been developed to promote forest restoration nationwide, yet some policies have revealed drawbacks that prevents the sustainable management of forests and the economic development of local communities.

This section provides some reflections specifically on policy and implementation gaps in Vietnam, drawing on the expertise and contributions of the many Vietnamese participants.

3.1. Lack of policies

In some cases, there is a need for new policies, or improving the implantation and adherence to newly created policies, in order to address certain issues:

- There have been a critical lack of policies guiding transparent benefit sharing mechanisms and the equitably shared rights to benefit from the goods and services created through forest restoration – whether this is carbon payments or future rights to produce timber. The lack of clarity over rights to forests and forest-products has discouraged significant and long-term investment in forest restoration by different economic entities, in particular by the private sector.
- In many cases, the existing policies show limitations in addressing the diversity of situations in forest restoration. For example, although the government now recognizes communities as a forest management entity, there is a lack of detailed guidelines on the implementation of this and in practice it has been achieved in very few cases.
- Investments in forest development are faced with high risks due to natural disturbances (typically typhoons) yet there is a lack of insurance policies, or widespread availability and uptake of insurance, that guides the compensation and reduces the risks of forestry activities.
- New initiatives such as PFES, REDD+ are in the piloting stages and require the development of supporting legal frameworks in promoting restoring natural degraded forest.

3.2. Protracted and delayed introduction and implementation of forest restoration policy

Rapid changes in forest development require timely application, and widely applied polices. However, a policy often takes a long time to be developed, amended, adjusted and approved. In many cases, the untimely released policies have resulted in conflicts and prohibited the development of forests. Examples include:

- The policies that allow people to intercrop agro-forestry plants under the canopy of the main forest trees reveals limitations and sometimes creates conflictions between land managers and local people. While applying this policy, due to the light competition between forest trees and intercropped plants, local people often over-prune forest trees or even kill them to open the canopy for intercropped plants to grow.
- The forest and land allocation program have been implemented since early 1990s, yet they are incomplete, and local people in many areas have not been given the land use certification. The certification is the key to access many benefits from the government including credit benefit and input support (seedlings, fertilizers) for forest planting. In addition, the lack of land use certification implying an unstable investment environment has discouraged private sectors in making cooperation with households.
- Related to this many Commune People's Committees still 'manage' forest land and have not successfully redistributed it yet to households, despite this having been a Government policy for many years.

3.3. Overlapping policies

Many policies are overlapped to some extents that results in confuses and sometime delay in the implementation and solving problems. For example, due to only having very limited rights of arrest assigned to them, in order to address an illegal logging case, forest rangers may require and have to wait for the support of polices and the local government. In Vietnam, some people have taken advantages of special support policies for ethnic minority groups and that they hire ethnic minority people to cut trees so that they do not have to take responsibilities when the ethnic minority people are caught.

3.4. Ineffective communication of policies and technical advice

Policies and the latest technical guidance may be well understood at higher administrative levels but there is often lack of understanding at lower levels. The capacity of local staff in understanding and implementing new policies, as well as applying new techniques and equipment for forest restoration, differs among areas. This often results in inconsistences in implementation of policies and technical guidelines. Local staff also differs in their ability to recognize problems and address the problems if occurs.

This is not just an issue between levels of government, but also between the government and forest stakeholders, managers, communities and farmers. The lack of communication from local staff to local people on new policies is a common problem in many areas. Local people are poorly informed and have low awareness of new policies and technical guidance. In many cases, local people have very vague understanding of their rights and responsibilities on their land. The ineffective communication of new policies between staff and local people often results in lack of understanding and increases conflicts between local people and forest managers. As such, local people are sometime subjected to inequality of benefit sharing.

A result of this ineffective communications is that local people still use poor and ineffective restoration techniques. Poor communication and poor understanding by the limited staff providing extension services leads to local people ignoring best practices and sticking to former ways. Without applying appropriate evidence-based forest restoration techniques, there have

been too many examples of failed restoration projects where the wrong species are matched to the wrong soil and site-specific conditions.

3.5. Other drawbacks in forest restoration policy in Vietnam

Forest restoration in Vietnam has a long history, yet related policies show existing drawbacks that should be addressed:

State-centric approaches to restoration. With forest management traditionally the responsibility and domain of the public sector or state-owned companies, forest restoration is typically considered a government-led issue, even though there are some examples of this slowly changing. This state-centric approach not only limits the innovation and investment that the private sectors can bring, but concentrates power and responsibility in part of local government with very little experience of working with the private sector or the finance sector, and little capacity to design policy and programming to change this.

Lack of land for cultivation is putting pressure on society and local politics: in Vietnam especially, with a high population density and growing population, rural economies reliant on agriculture face increasing shortages of land to meet everyone's needs for cultivation. This results in low income, increased pressure on natural forests due to illegal cutting and harvesting of non-timber forest products, and increases the tension between forest managers and local people. It also increase pressure on local authorities to re-categorise degraded forest land to agricultural purposes.

Unsustainable cultivation: This is a common problem in many areas across Vietnam. Due to the high benefits of planting agricultural and industrial plants, many forested sites have been converted for these plantings e.g., oranges, mandarins, mango, coffee, cashew etc. Noticeably, local people have overused pesticides and this will results in consequences on human health and the environment.

The implementation of policies related to forest restoration remains inequitable in many regions. There are cases when government support that should be prioritized for poor households has been awarded to less-needy families (for instance the re-allocation of land by CPC's to those who already have land and health insurance being given to higher income families).

Low economic or financial incentives for forest restoration: in some cases, payment for forest environmental services (PFES) has resulted in conflicts between recipients receiving different levels of payments, while expected to provide similar support to forest protection. In addition, the current financial incentives are low and unstable, and not enough for secure families' finance. Similarly the rights to forest goods remain very low and can only provide a small percentage of basic household needs.

4. RECOMMENDATIONS



The following recommendations represent common agreements among the workshop participants on the amendment and development of policy and practices that would benefit forest restoration across these countries. They likely have strong applicability to other communities, countries and regions seeking to learn from the experiences of forest restoration in SE Asia:

- 1. Business, communities and the private sector must be given adequate opportunities and rights to benefit from restoration if we want to incentivise them to invest in restoration. It is widely acknowledged that there is a need to attract a wider range of stakeholders, in particular the domestic private sector, into investing in restoration if national restoration targets are to be met. To bring significant, and sustainable, investment into restoration, a link between restoration and markets need to be made where it is currently, generally missing. The examples above show how creating the right to earn benefits mobilises resources from stakeholders who are prepared and able to compare the risks with the rewards. In many countries these rights are typically not available to private actors, or are not transparently shared among and between different actors. Instead the government typically retains too much responsibility and authority over forest restoration yet it usually does not have the budget to do this and cannot adequately resource or finance forest restoration to the desired scale. Resolving this will unlock investment and innovation in an inclusive way.
- 2. To incentivise private investment, governments must identify, and support through policy change, connections between forest management, local people and private sectors. This includes the opportunities that would be available in all countries if community-based forest management were be given more prominence. Local people need to benefit more from forest restoration, whether by direct access and rights to the goods and services they provide, or indirectly through enhanced transfers such as social services or payments for ecosystem services. Whatever method is selected, the financial benefits received from forest protection need to be increased to provide better support for the livelihoods of local people.
- 3. Developing favourable credit policies and better benefit sharing mechanisms would be a good first step. New policies that give greater fiscal incentives to private sectors (through credit access with low interest rates and reduced tax rates on some natural resources, among others) would attract their investments in forest development. In parallel to this, due to the high risks in investments in forestry activities, policies on investment insurances or compensations should be developed to create a secured environment for investors. Generally, governments should develop more mechanisms to foster the collaboration between local people and private sector.
- 4. Actively improve the connection and communication among relevant forest stakeholders. Effective communication and collaboration among stakeholders e.g., households, individuals, communities, NGO, government at all levels, scientists, research organisations, private sectors etc., will maximize the results of forest restoration programs. This includes utilising the Forest Landscape Restoration approach, and working at 'landscape-scale' in order to include a broader range of forest users in decision making

about forest management, development and restoration. It also facilitates knowledge transfer for implementation of new initiatives e.g., PES, REDD needs to be shared within region and the global network. Taking lessons learnt will allow subsequent programs to avoid similar mistakes and to be more effective in forest restoration. Too many restoration projects are designed and delivered in silos – focussing only on the forest land and forgetting the matrix of other land uses and the communities that surround forests in need of restoration.

- 5. Identify how restoration can support other important societal issues. Linking forest restoration to other key issues in the communities can support its uptake. For example in many countries there is an overlap between forest-dependent communities and ethnic minorities. Harmonising local policies and guidelines on restoration to best utilise the traditional knowledge will benefit forest restoration, and vice-versa, incorporating the opportunities for social and economic development programmes can provide opportunities for social and economic development of key communities. Another example is that of climate adaptation and disaster risk reduction forests play a vital role in provision of ecosystem service that have tangible local benefits such as regulating water flows, preventing erosion and landslides, among other things. Highlighting the role of forest restoration in preventing local loss of life and property from disasters might be more equally, or more, effective in creating support for these investments than the typical focus on climate mitigation and biodiversity benefits.
- 6. Accompany the recent growth in research and evidence with a commitment to extension and communications in order to put this knowledge into action. Investment into research and evidence on appropriate restoration techniques has led to advances in understanding of restoration techniques in the region. But this knowledge is wasted without promoting the transfer of knowledge of these results. Recent history in these countries has many examples of ineffective restoration approaches, in parallel to the growing evidence and experience in achieving it successfully, and this needs to change. The provision of extension services and communication must not be ignored. In highly decentralised countries such as Vietnam and Indonesia, there is a great need for improved communication across all levels of government, and to establish extension services to farmers and communities by the forest sector that match those in the agriculture sector which have been so successful. This is especially important given the extreme heterogeneity in the countries' geography and ecologies, which means that restoration techniques, and viable NTFP and alternative livelihood strategies, can vary highly within and between provinces or states. Ensuring replication of proven techniques, and preventing entrenchment of ineffective techniques, requires significant effort. To counter this, a clear effort on effective extension services and communication is needed, between all levels of government as well as between the government and relevant stakeholders, to ensure that any resources and financing behind restoration can achieve maximum impacts. Unfortunately, this typically falls outside the remit of much international support for forest management and restoration, yet domestic public budgets do not currently provide these services to the levels required.

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