The role of Payment for Forest Environmental Services (PFES) in financing the forestry sector in Vietnam

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Key messages

- Despite being a new funding source, PFES now contributes 22% of total forestry sector investment.
- The impact of PFES funding differs by location and actor group.
- To enhance the scale of PFES, and its impacts as a key funding source, the sector must sustain and maximize the potential of existing revenue, carry out strategic investment and use of PFES revenue, and expand to include new potential PFES sources.

Introduction

Since being implemented nationwide in 2011, Payment for Forest Environmental Services (PFES) has been a breakthrough policy in Vietnam. PFES, where benefiting enterprises and organizations pay for forest-derived ecosystem services, aims to financially incentivize forest managers to better protect and develop their forests. The PFES policy requires users of forest environmental services to make payments to suppliers of these services. Services, as outlined in Decree 99, include: watershed protection; natural landscape beauty protection and biodiversity conservation for tourism; forest carbon sequestration and the reduction of greenhouse gas emissions through the prevention of deforestation and forest degradation; and the provision of forest hydrological services for spawning in coastal fisheries and aquaculture. In 2010, the Government of Vietnam established fixed payments for watershed and landscape beauty protection services. The government also identified specific forest environmental service users to pay these PFES fees, such as water supply companies, hydropower plants and tourism companies; and suppliers to receive PFES revenue, such as forest owners, i.e. individuals, households, communities or organizations who hold forested land titles. PFES revenues have since become an important source of income for the sector: resulting in more effective forest protection and development, increased income for forest owners, and reduced pressure on the state budget. This brief highlights the increasing role and importance of PFES in financing the Vietnamese forestry sector, discusses how PFES finance can be used strategically to invest in forestry development, and proposes policies and measures to overcome on-the-ground challenges faced during PFES implementation. This brief is based on a literature review, in-depth interviews with government, civil society, academic and private sector actors in Vietnam, and consultation workshops undertaken as part of CIFOR’s Global Comparative Study on REDD+.

Increasing PFES revenues to finance the forestry sector

Although nationwide implementation of Vietnam’s PFES only began in 2011, revenue generated under it has increased significantly in that time (Figure 1).

Between 2011 and 2017, total revenues generated from the PFES system amounted to VND 8,220 billion. In 2015, PFES contributed approximately 22% of overall forestry sector investment (Table 1).

It is expected that PFES revenue will continue to increase in future, as state management agencies are now developing new payment mechanisms for different types of PFES-related environmental services such as industrial water and carbon sequestration. PFES payments are also now being channeled through water and electricity bills.
PFES has financially contributed to the sector through providing:

1. **Funding for forest protection contracts.** Between 2011-2016, PFES revenues paid for contracts to protect 5.8 million ha of forest (more than 44% of the total area in Vietnam); contracts to the value of VND 4,304,731,894,000 (VNFF 2018).

2. **Funding for staff time, operational costs and capacity building for forestry activities.** A total of VND 372,512,117,000 of forestry management expenditure was covered by PFES revenue between 2011-2016. This covered national and provincial staffing costs, monitoring and inspection activities, capacity building and awareness raising for government staff, environmental services users and providers.

3. **Income for forest management boards, protected areas, national parks and state forest enterprises.** The Central Forest Protection and Development Fund (VNFF) (2018) states that PFES contributions helped 181 forest management boards, 79 forest enterprises and 192 companies cope with income deficits. Figures 2 and 3 show that Protected and Special Use Forests make up the largest forested areas where protection is paid for through PFES contributions.

4. **Support for community development programs.** A study conducted by Pham et al. (2018) to assess the impact of PFES in Son La Province found that over VND 57,970 billion of PFES funding was paid to communities, helping to finance 2,689 community infrastructure projects, such as meeting halls, village clinics, tree nurseries and reparations of roads between villages.

**Strategic use of PFES finance – where and when PFES works best**

Country hotspots and PFES impacts.
The PFES collection and distribution mechanism involves VNFF centrally collecting PFES payments from organizations operating across provinces, before 99.5% of this revenue is distributed to provinces where PFES revenue was generated; Provincial Forest Protection and Development Funds also collect money from companies located in their provinces.
before distributing this amongst forest owners within their provinces. Deforestation and forest degradation were most notable in the North Central, Northeast, Central Highlands and Northwest areas of Vietnam (Khuc et al. 2018; Government of Vietnam 2016). To date, PFES revenue has mainly been generated from and distributed to the Northwest and Central Highlands (37% and 35% of PFES revenue, respectively) as these two regions have the highest proportion (80% and 60%) of total forest cover, whilst revenue generated from (and thus distributed to) the North Central and Northeast regions is more modest (6% and 11% respectively). This implies that only certain hotspot areas benefit from PFES. Moreover, the largest mangrove areas are concentrated in Vietnam’s South Central and South East regions – playing a critical role in climate change adaptation and mitigation and National Determined Contributions. However, PFES revenues generated from and
distributed to these regions currently stand at a modest 2-9% (Figure 4) as PFES payment mechanisms for mangrove and aquaculture services are not yet in place. As yet, the PFES scheme has only been effective in providing finance for in-land forests, not mangroves, and until such mangrove and aquaculture schemes are operationalized, the protection and expansion of mangroves must rely primarily on funding from alternative sources.

Who does PFES impact most?

Households vs. communities. Previous studies (e.g. Pham et al. 2013; Pham et al. 2018) show that PFES’s impact at a household-level is usually minimal, as most households in Vietnam manage a small area of forested land. Meanwhile community-level PFES impact is often much more significant. Community forestry has higher potential both to access and benefit from PFES than individual households, for whom it appears more strategic to use microcredits and similar sources to fund forest protection and plantation development; whereas approaching PFES payments as a community can maximize both its potential and impact.

Variation in PFES revenue across provincial forest protection and development funds, national parks and protected areas. Despite high expectations around PFES’s potential revenue and impact, amongst 40 provincial Forest Protection and Development Funds, only 13% currently receive significant PFES revenue (i.e. higher than VND 100 billion); 17.5% receive less than VND 1 billion (Figure 5). According to interviewed stakeholders, provinces receiving less than VND 1 billion from PFES struggle to cover their operational costs, and rather than being an important funding source, PFES results in additional expenses related to payment distribution. In such provinces, authorities are considering how best to enhance the effectiveness of PFES revenues: is it efficient and effective to distribute minimal amounts of PFES revenue to individual households, or would it be more strategic to pool this revenue and reinvest by building significant infrastructure like development facilities for wood processing and trade?

Similarly, although Vietnam has 33 national parks and 174 protected areas, VNFF data (2018) for national PFES revenue shows that only 13 national parks (39.3%) and 36 protected areas (20.68%) receive PFES payments. Figure 6 also shows that only
6% of protected areas receive payments over VND 10 billion, compared with 31% of national parks. Over a quarter (28%) of protected areas and 15% of national parks received less than VND 500 million/year. Such statistics imply that only a small number of national parks and protected areas are benefitting from PFES, with many areas seeing insignificant income from this source.

**Overcoming challenges to increase PFES income for forestry**

*Sustaining and maximizing the potential of existing revenue.* In principle, Article 5 of Decree No.99/2010/ND-CP stipulates that organizations and individuals benefiting from forest-derived ecosystem services must pay forest owners for these services. The overwhelming majority (98%) of current PFES revenue is generated through hydropower plant payments. However, VNFF reports that, between 2012 and the present day, both VNFF and the Provincial Forest Protection and Development Funds have experienced constant delays from these hydropower plants with many in significant debt relating to due PFES payments; with the result that general public PFES payments have not been passed onto forest-derived ecosystem service providers (i.e. forest management groups). The government imposes sanctions against those who do not strictly implement the PFES policy, however as penalties are not high some areas do not strictly enforce the policy. For PFES funding sources to be sustainable, the general public must trust in the effectiveness of PFES for forest protection and development; a clear and well-enforced legal framework, effective monitoring and evaluation and evidence-based analysis on its effectiveness are all required to sustain this public trust.

**Strategic investment and use of PFES revenues will enhance effectiveness.** While PFES can become a significant funding source for certain forest owners and managers, it can equally provide too little income to create real change for many (e.g. households, small-scale national parks and protected areas, and provinces without large forested areas). How PFES revenue can be used efficiently in such areas will need careful consideration and design so that PFES money is not solely used for administration purposes, and instead is used strategically to leverage forest protection and development activities. Even in communities or provinces with high PFES revenue, transparent and accountable distribution of payments will enhance the effectiveness of PFES income.

**Expanding the scope of potential PFES income sources.** Decree 99 specifies wide-ranging environmental services to be regulated under PFES. To increase potential PFES revenue from new sources, such as aquaculture services, carbon sequestration and use of industrial water, pilots have been developed across the country. However, development of PFES schemes for new environmental services requires a strong understanding of

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2 See Decree No.40/2015/ND-CP dated 27 April 2015.
potential markets for these services, service user willingness to pay for these services, and a clear monitoring and evaluation framework. All of these aspects are understudied in Vietnam and need to be addressed in future.

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