



Relationship between Forest Land Allocation and Payment for Forest Environmental Service in Dienbien Province

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Abstract

The study examines the relationship between forest land allocation and payment for forest environmental services in Dien Bien province, compared with some provinces in the north-west. The study indicates that the allocation of less forest land to households and communities makes the effectiveness of the PES scheme not so high. In the context of local preparation for the REED program, the reallocation of forest land is needed to help communities with stable incomes from the forest.

Keywords: Forest land Allocation (FLA), Payment for environmental services (PES), Payment for Forest environmental services (PFES)



1. Introduction

In 2010, the Government of Vietnam approved a Decree 99 on Policy on Payment for Forest Environmental Services (PFES). Three environmental services being practiced nation-wide are soil erosion control and water regulation in watershed areas and eco-tourism business. MARD (2016) reports that total revenue from PFES for 2011 – 2016 was 6510 million VND, of which 98% of revenue comes from hydro power plants. 29 provinces are implementing PFES and the revenue of PFES payment are paid for protecting about 4 million ha of forests in these provinces.

As regulated, the payments require to be made to forest owners who are managing forests to provide environmental services. The main data set used for setting up the payment under the PFES is results of forests and forestland allocation programs. However, data and information on status and impact of forests and forestland allocation and results of PFES implementation are not up to date and are not sufficiently and properly arranged and analyzed. Moreover, the lack of monitoring and evaluation of PFES outcomes and a poor understanding of how PFES benefits are currently being used and distributed across different level are seen as the major obstacles for effective implementation of PFES (Pham et al. 2013).

The Northwest provinces including Dien Bien, Lai Chau, Son La and Hoa Binh hosts critical natural resources and play a critical role in watershed management under national PFES program. These provinces share common characteristics such as having high poverty rates amongst ethnic groups, having more than 40% of forest land are currently managed by local communities under community forestry regime, and are being listed in the top 10 provinces receiving the largest PFES payment in the countries. Yet previous studies conducted by Center for International Forestry Research (CIFOR) in Son La, Hoa Binh, and Dien Bien during 2011- 2015 have showed the mixed impact of Forest Land Allocation (FLA) on both forest protection and development and local livelihood improvement (Yang et al. 2015), the challenges in designing effective, efficient and equitable benefit sharing mechanism under PFES at local level that take into account local preferences (Pham et al. 2014), the current pitfalls of existing institutional setting for PFES implementation from provincial to village (Pham et al, 2014), and the challenges in involving private sector in forest protection and development in general and in PFES in particular (Pham et al. 2009). Moreover, although these four provinces all have high potential for Reduce Emissions for Deforestation and Degradation (REDD+) and all have high political wills to adopt this new financial mechanism, only Dien Bien has developed the Provincial REDD+ Action Plan. As these provinces receive the largest share of national PFES programs, lessons learnt on how to address those above challenges, either in in each province or amongst all provinces as collective action, are critically important for future national PFES policies improvement and the future design of REDD+.

This study is seen as the first step in addressing those gaps by providing most updated data and information on current status of forestland allocation and PFES in Dien Bien province. The overall objective of this study is to provide up-to-date information and data on FLA and PFES in Dien Bien. The study aims to answer major questions:

- i. What is the status of PFES implementation and How PFES is currently implemented in Dien Bien provinces? What are opportunities and challenges for PFES implementation?
- ii. What are policy gaps that need to be addressed to improve PFES and REDD+?
- iii. How equity has been taken into account in FLA and PFES in DienBien?

The following sections will lay out how each of those questions will be addressed in this study.



2. Approaches and methods

Literature review: The author conducted a review of the following documents to gather information of FLA and PFES in Dien Bien province.

Semi-structure interviews with local authorities in Dien Bien province: The author conducted in-depth discussion and interviews with local authorities to discuss on the 3 main research questions.

3. Overview of the Dien Bien Province

Dien Bien is a mountainous province in northwest of Vietnam, 500 km from the west of Hanoi. Its total area covers 9,560 km². It is bordered by Lai Chau province to the west, Son La province to the east, Yunnan province - China to the northwest, Laos to the west and the southwest. Dien Bien province comprises 1 city, 1 town and 8 districts with main city is Dien Bien Phu.

The population of the province is 504,502 people (2012), including 252,378 men and 252,124 women; the population density is 52.8 people/km²; the growth rate of population is 15.87%. The province composes of 21 ethnic groups, among which major people are Thai (46%), Kinh (24.6%) and H'Mong (18.6%), other ethnics include Yaos, Dzay, Tay, Ha Nhi, Lao, Cong, Si La, Kho Mu, La Hu. While Thai people are gradually changing their traditional form of cultivation into permanent farming, H'Mong people still relies on income from swidden area and often be known as shifting cultivation communities. In term of language, Thai people are basically familiar with Kinh language (Vietnamese official language) while the fluency of H'Mong people on this language is far lower. The low level of education and the production custom characterized as backward with low level of technology application have a significant impact on agriculture – forestry production activities and other activities.

The natural area is 956,290.37 ha with 760,449.86 ha forest land which account for 79.5% of total natural area. The majority of forest land is located in the watershed of 3 large rivers: Da River, Ma River, Mekong River, in which the total area of Da River's basin in Muong Nhe District, Muong Cha District, Tua Chua District, Tuan Giao District and Muong Lay Town is about 5,300 km², account for 55% of total area of the province. The forest cover rate of the province in 1999 was 28.7% (Decision No. 03/2001/QD-TTg dated January 05th, 2001 of Prime Minister), in 2012 was 40.2%. The forests of Dien Bien have a very important role in watershed protection, protection of large hydropower projects on Da River and regulate the flow to downstream areas.

4. Result

4.1 FLA in DienBien province

To enforce land allocation process, on 20/3/2013, the Dien Bien people's committee introduced plan No 388/KH-UBND about checking, completing procedure for land and forest allocation, handing forest land use right certificate in period of 2013-2015. To implement this plan, the authority released Decision No 728/QD-UBND dated on 20/9/2013 for granting expense of land and forest allocation process. On 7/6/2013, the National government adopts a resolution about land used planning for Dien Bien province up to 2020 (NQ71/CP). According that, there are 423,113 ha will be planned for protected forest, 47,581 ha for special used forest and 257,413 for productive forest. Following this, on 26/9/2013, the Dien Bien DONRE and DARD introduced the guideline about content, order and method for land and forest inventory before allocating. In 2014, the Dien Bien people's committee released letter No 3634/NN-UBND dated on 29/9/2014 and letter No 196/NN-UBND dated on 29/8/2014 about checking and allocated forest land for Dien Bien FMB, Tuan Giao FMB and Muong Cha FMB. Related to allocated land near the national



bounder issue, the DONRE and province military have agreement letter No 1824/BCH-TM dated on 24/10/2014. Up to 2015, the FLA process in Dien Bien is concerned as slow and need to be improved. There are only 176,440 out of 280,240 ha has been allocated for households and communities and there are only 84,532 ha of them have land certificate. The reason is break out by province authority that in 2015, the district authority have not pay much attention on FLA as it should be and does not enforce the FLA consultant firms. Under this condition, the Dien Bien people's committee releases letter No 4022/UBND-TN dated on 17/11/2015 to enforce the FLA and handing land certificate to forest owners.

The result of forest inventory program will be available in March 2016. The provincial authorities expected that this program will provide advance data and maps for FLA management. According to DONRE interviewees, master land- use planning is stable for the last 5 years and specific zoning for social-economic development has been finalized and implemented. Steering committees to enforce FLA has been setup at province level and 10/10 district. The provincial People's Committee also requests to accelerate FLA process from 2016 onward. Plan No 388/KH-UBND dated 20/2/2013 about checking and completed procedure for FLA from 2013-2015 has continued being the key legal document and guidance for DONRE to ensure the quality of FLA.

Table 1. Forest land allocation status/progress in 2014 (overall, by forest use purposes)

Types of forest	Allocated						Not yet allocated	Total land
	Total	FMB	State company	Household	Community	Others		
Total	173,364	46,449	1,244	16,294	96,193	13,184	586,388	759,752
Forest (Natural + Plantation)	142,534	32,461	-	13,945	96,128	-	256,494	399,028
Rubber and industrial	1,459	-	1,244	128	-	88	566	2,026
Bare land (forest land)	29,371	13,988	-	2,221	66	13,096	329,328	358,699

Source: DARD of Dien Bien, 2015.

Despite of strong political wills to fasten the FLA process, FLA is also impeded by numerous factors. Firstly, according to Forest Protection Department, migration from Hoa Binh and Son La to Muong Nhe has been rapidly increased in the last 5 years. Forest Protection Department has not been able to control neither the migration pattern nor the forest loss due to migration. Provincial authorities expressed their concern on the fact that those who drive deforestation and degradation are not actually benefiting from PFES and other programs. At the same time, migrants continue purchase land from local people both formally and informally to continue and expand their swidden area. Shifting cultivation is still widespread while there is no effort to collect this data. Secondly, the forest areas allocated to households are often small and scatter leading to high transaction costs in monitoring and evaluation. Moreover, human resources and provincial funding for FLA is also seen by provincial authorities as inadequate. Thirdly, the actual land area in the field does not match what is being recorded in the book also made DONRE and FPD reluctant to allocate forest land in highly contested area. Provincial authorities interviewed also highlight the weak technical capacity of consultant services who support the province in implementing FLA also leads to the delay of FLA.

Potential risks identified as the result of current FLA in Dien Bien are (i) the interest of private companies and forest protection management boards to retain forest land and do not involve local people; (ii) the overlap in land use right regime between national parks, forest



management boards on the same land causing difficulties in both benefit distribution and monitoring environmental services. In Dien Bien, forests are mostly managed by People's committee yet allocating to any households. Households and communities have little say over forest resources.

4.2 Status of PFES implementation

Dien Bien is located in upstream of three main rivers system in Vietnam namely Da river, Ma river and Mekong river which regulate the two biggest hydropower dam in the country (Hoa Binh and Son La hydropower). The province has 10 districts, of which 7 districts which including 242,304 ha is watershed area of Da river, three districts with 59,679 ha in watershed area of Ma river and 5 district with 29,264 ha located in watershed of small hydropower plants within the province. Dien Bien FPDF was setup at 2012 according to Decision No 134/QD-UBND dated 08/3/2012 of Dien Bien People's Committee and has 16 staffs to date. The fund received budget from national fund from 2012 and started to pay for forest owners since 2013.

Amongst those 4 Northwest provinces, Son La has the longest PFES implementation experience (payment distribution started in 2009). Hoa Binh and Lai Chau started to distribute PFES payment in 2012 and Dien Bien started in 2013. Annual PFES revenue in 2014 for Dien Bien was 192 billion VND, Lai Chau was 210 billion VND, Son La was 110 billion VND, and Hoa Binh was 11 billion VND. The average payment also varied from province to province (162,000 VND/ha/yr in Hoa Binh; 220,000 VND/ha/year; 281,000 VND/ha/year and 439,000 VND/ha/year in Lai Chau).

All of four provinces have forest area within Da watershed and hence area receiving PFES payment from three large-scale hydropower plants: Hoa Binh, Son La and Lai Chau hydropower plant. Son La, Dien Bien and Lai Chau are top PFES recipients in the country.

Table 2: Institutions of PFES in Dien Bien

Categories	
Year starting distributing PFES	2013
Institutional arrangement	In 2012, was unit under Department of Agriculture set up under PPC, but since 2015, acts as independent and Rural Development (DARD)
Number of staff	12
Annual PES revenue 2014 or 2015	192.323 billion
Average PES level of payment per hectare 2015 (VND)	281,254 5,684 457,722
Environmental services (ES) are implemented in the provinces	Watershed protection
Number of ES providers	40,000 Households + 1 forest management board (Muong Nhe)
Number of ES buyers	9 hydropower plants + 6 water supply companies
Area of forest eligible to receive PFES payment (ha)	311,241
Frequency of payment	Twice per year (unfixed time) and also depend of level of payment

Source: DARD of Dien Bien, 2015.

Amongst 4 provinces, only Dien Bien has provincial REDD+ action plan. Yet, the



provincial authorities in Dien Bien as well as other 3 provinces are all skeptical about REDD+ and have very limited interest in developing REDD+ due to uncertainty on financial benefits generated from REDD+. Amongst 4 provinces, only Hoa Binh provincial authorities highlight the need to treat PES and REDD+ as a part of Provincial Forest Protection and Development Plan. The other 4 provinces express their belief and interest in treating PES, REDD+ and Provincial Forest Protection and Development Plan as separate programs and lack of synthesis.

In 2015, the fund received 192,152 million VND and already used 73.5% of this budget up to 15/12/2015. There are 15 forest environmental services buyers, including 11 buyer inside province and 4 buyers outside. In there, 6 buyers are water supply and 8 buyers are hydropower companies. According to three year working summarize report of Dien Bien PFES fund, the PFES in Dien Bien already convinced the commitment from 605 forest owners (including 307 household, 429 communities) and the participation of 24,806 households on forest protection in 2013. The FPDF interviewees claimed that the payment from PFES has significantly contributed to income of forest owners, especially for poor farmers. In 2013, on average each household protects 10 ha of forest and received about 4,450,000 VND/year. Provincial political commitment for PFES is high and forest protected areas eligible to receive PFES payment will increase from 335,238 ha (2014) to 423,113 ha in 2020 as provincial planning indicates.

To implement PFES in Dien Bien, the Dien Bien people's committee also introduced plan No 559/KH-UBND dated on 22/4/2011 about implementing Decree No 99/2010/NĐ-CP and Decision 2284/QĐ-TTg of prime minister; Decision No 362/QĐ-UBND dated on 26/4/2011 about setting Steering Board for implementing PFES payment in Dien Bien province. Recent policies approved related to PFES include Plan No 128/KH-UBND dated on 13/7/2012 about examining FES providers for Da river catchment; Plan No 388/KH-UBND about checking, completed procedure for land and forest allocation, handing forest certification in period of 2013-2015; Decision No 35/QĐ-dated on 18/01/2013 approved plan for PFES received and payment in 2012 and 2013; Decision No 57/QĐ-UBND dated on 29/01/2013 about introducing K factor; Decision No 62/QĐ-UBND dated on 31/01/2013 approved list of FES users in 2011, 2012 and 2013; Decision No 766/QĐ-UBND dated on 2/10/2013 about area of catchment for hydropower and water supply.

The Dien Bien FPDF is working under the regulation pointed in Decision No 397/QĐ-UBND dated on 14/5/2012 about regulation, operation and working of PFES fund. Related to checking what forests are under condition of PFES, the Dien Bien people's committee assigned DARD according to Decision No 196/QĐ-UBND dated on 08/4/2013. In district level, the Steering board of FLA and examining ES providers has been setup and forest protection station at district level has been nominate as officer acceptance of forest area, forest quality of household and community according to Decision No 691/QĐ-UBND dated on 06/9/2013.

Despite of political support, implementation of PFES in Dien Bien is constrained by numerous factors. First, the progress of FLA is slow. Only 176,440.33 ha/280,239.76 ha has been allocated for household and community until end of 2015 (DONRE 2016). Previous FLA are not completed and inconsistent between hard copy data and actual data in the field leading to difficulty for evaluate PFES areas. Secondly, according to all interviewees in Dien Bien, payment value might not reflect ES value of forest leading to the problem of tragedy of common. Thirdly, environmental services buyers in the province often delay payment to the fund yet there is no penalty applied. Fourthly, different payment value in different catchment inside province and payment process is passive and depending on budget obtain end of the year.

In terms of benefit sharing mechanism, provincial FPDF kept less than 15% for management fee and reserve fund. For people who own forest will received 85% of PFES payment from province



level. For household, community who make contract to protect forest for forest management board, FPDF pays 85% budget for forest management board, 10% of this money will be kept in management board for management fee and the rest (90%) will be pay by cash for community. Communities make decision on how to used PFES money and provide payment document for forest management board for assessment.

Muong Nhe nature conservation has 45,581 ha and Muong Phang landscape conservation has 4,436.6 ha but lack of information how they shared PFES money. For community who received PFES money, the community will have an agreement that how much will be used for general activities such as forest protection, forest patrolling, buy equipment for forest protection, contribute to build infrastructure such as road, village meeting houses,... and how much will be shared for all household in villages.

Le Ngoc Dung et al. found major challenges for PFES payment distribution in Dien Bien: (i) both service providers and suppliers have limited information on PFES and process of contractual arrangement; (ii) decision making on PFES payment and utilization is made solely by the head of village with limited involvement of local people; (iii) people prefer to have equal distribution leading to low economic benefits gained and hence limited willingness to participate in PFES.

Le Ngoc Dung et al., also found that in Dien Bien, PFES payment is used to pay for forest protection groups, organizing village annual meeting and party, livelihood development activities, investment to infrastructure and distribute equally to households.

Loft et al. also found that local perception of equitable benefit distribution corresponds to the egalitarian understanding of fairness. However, this distributional equity principle is very much influenced by the degree of transparency of the process and information on payment distribution. However, Le Ngoc Dung et al. forthcoming found that the information on PFES contract and conditionality is not clearly disseminated to local people nor well-understood by those group. The local community prefer a distribution of PFES based on input.

In addition, according to Dien Bien FPDF (2015), other barriers that have impeded the PFES implementation include:

- Guiding documents for spending reserve fund are inconsistent and difficult to implement.
- The difference between the payments rates at watersheds creates a sense of inequity amongst minority ethnic beneficiaries.
- Most staff in provincial FPDF are part-time with unclear employment package hence the human resources are not stable.
- Review and approval of forest owners, forest acceptance has been slow in some districts directly slow disbursement process.

4.3 Key issues and recommendations for FLA and PFES

Consultations with provincial authorities and literature review indicate numerous knowledge gaps that need to be further studied and addressed.

- The environmental, economic and social impact of PFES program remains unclear. All government interviewees asserted the need to carry out such study to report to both buyers and sellers.
- Several REDD+ pilot projects (e.g. Dien Bien), CDM (e.g. Hoa Binh) and pilot benefit sharing mechanism and participatory forest monitoring (e.g. Dien Bien) have been implemented in studied provinces for few years with the aim to support policy development.



Yet, the effectiveness of these proposed mechanism developed by those projects is unknown. Carrying out evaluation and lessons learnt from the implementation of those projects provide a solid evidence for policy makers to uptake lessons learnt and model proposed by previous project proponent.

- The case of direct payment in Hoa Binh opens a new way to implement PFES. Yet, to extent this can help to enhance PFES effectiveness is still questionable, future study could certainly address those knowledge gap.
- Migration and shifting cultivation are not only the main driver of deforestation and degradation in the four provinces studied but also are also social and political issues. To what extent migration/shifting cultivation can reinforce or remedies D&D and equity discourse on who should be benefit from PFES and REDD+ and what benefit sharing mechanism should be designed to capture those dynamics remain unclear.
- Who benefit from PFES? Local people or hydropower plants? All hydropower plants in all provinces delay the payment to the fund so they can use this financial capital for their own business.
- The payment of PES by each basin using PES has created a huge difference. The disparity of PES supply basins leads to a very large gap between the revenues of the provinces, especially the provinces in the same river basin, which makes the income of the forest workers very different. question, match, incite conflict of people in different regions.
- PFES is a performance based for enhancing environmental services or social development program? Provincial funds use its 10% for their management costs to contribute to rural development significantly (infrastructure development for forest management boards, school for children based on provincial needs, and develop model for agriculture production. One the other hand, PFES is not a social and rural development program and such payment should be reinvested in sustainable forest management. How provincial authorities aim to balance these 2 objectives and what is government view/policy?
- In Dien Bien, currently the hydropower plant's payment compensation for forest loss is transferred to the Dien Bien FPDF. However, while the payment is small, high transaction costs to transfer to management boards to carry out actual reforestation activities and paper words involved has created less incentives for the fund to manage this fund. In addition, forest protection department and forest department also express their concern on the lack of available land to reforest. Unclear mechanism and benefit sharing mechanism has hampered the actual implementation of this policy.

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