

Forest Monitoring, Payment for Forest Environment services and REDD+ in Điện Biên Province  
Nguyen Dinh Hung (Division of Sciences and Technologies, Forest Inventory and Planning Institute,  
Vietnam)



Today I would like to present the latest situation about ‘Forest Monitoring, Payment for Forest Environment Services and REDD+ in Dien Bien Province.’ Actually, this presentation was prepared by Mr. Nguyen Dinh Ky but he was busy and could not attend the meeting and I was asked to present on behalf of him and I will try my best.



There are four main contents in the presentation. First, I will give brief overview of our national forest monitoring system in Vietnam. Secondly, I will introduce about forest monitoring in Dien Bien Province, and third Payment for Forest Environment Services in Dien Bien, and finally some relationships between PFES<sup>1</sup> and REDD+ we have derived from our experience in Dien Bien Province.

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<sup>1</sup>Payment for Forest Environment Services

## I. NATIONAL FOREST MONITORING IN VIETNAM

### 1. General about national forest monitoring

- The national forest inventory, assessment and monitoring programme has been implementing since 1991 in a 5-year cycle to provide a national data system on forest resources. Forest Inventory and Planning Institute (FIPI) is the implementing agency for conducting this programme. The last inventory was conducted in 2006-2010
- The annual forest monitoring programme (conducted by Forest Protection Department) has been implementing since 2002 to provide annual updates on forest resources
- In order to meet IPCC requirements, annual forest monitoring reports are needed. However, current annual reports do not reach the necessary accuracy level

## I. NATIONAL FOREST MONITORING IN VIETNAM

**2. Constrains and challenges**

- A** Forest cover maps at the village and commune levels do not have the necessary accuracy level to be updated annually
- B** Each province updates forest cover data differently depends on province requirements and budget
- C** Updates at provincial level are often not integrated into national forest cover data because these updates have not been verified
- D** The forest protection sub-department only updates area data for reporting without updating the forest cover maps. In addition, there is a lack of budget for national forest assessment so the quality of the result is not high

First, about the national forest monitoring system in Vietnam. Basically, we have two programs for monitoring forest resources in Vietnam. The first one is national forest inventory, assessment and monitoring program, which has been implemented since 1991 in a 5-year cycle. So far, we have already completed four cycles. This program was conducted by my institute. The second program is called the annual forest-monitoring program, which was conducted by Forest Protection Department. This program has been implemented since 2002 and the purpose is to provide annual updates on forest resources. As you already know, in order to meet IPCC requirements, you need to provide annual forest monitoring reports. However, in Vietnam the annual reports do not have the necessary accuracy level.

Here are some drawbacks of the national forest monitoring in Vietnam. First of all, we have the forest cover maps that are quite accurate at the district, province level, but not to the village and commune level. Therefore, the forest cover maps cannot be used by local forest rangers to update the changes annually. Also, each province updates annual changes on forest resources on their requirements and budget. There is no consensus about the data. The third drawback is that these updates at the province level are normally not updated into the national forest update because there is no mechanism to verify this update. Also in many provinces the forest protection sub-department only updates area data, but does not update the corresponding forest cover map. We only know the changes but do not know where the changes happen. And also, budget from the state have been limited. As a result, the quality of previous cycles is not so good.

## II. FOREST MONITORING IN DIEN BIEN PROVINCE

- 1. Existing data:**
  - Forest Cover Map year 2006
  - Forest Cover Map year 2009
  - Hard-copy/digital maps at Forestry Sub-department and Forest Protection Sub-department
- 2. Annual updates of forest changes**
  - Deforestation due to agriculture, forest fires, changing of forest use purposes to industrial trees, transportation system, forest concession – for production forest),
  - Afforestation, reforestation, regeneration
- 3. The reporting flow**
  - Commune forest rangers -> District forest rangers -> Provincial Forest Protection sub-department -> Ministry of Agriculture and Rural Development

## II. FOREST MONITORING IN DIEN BIEN PROVINCE

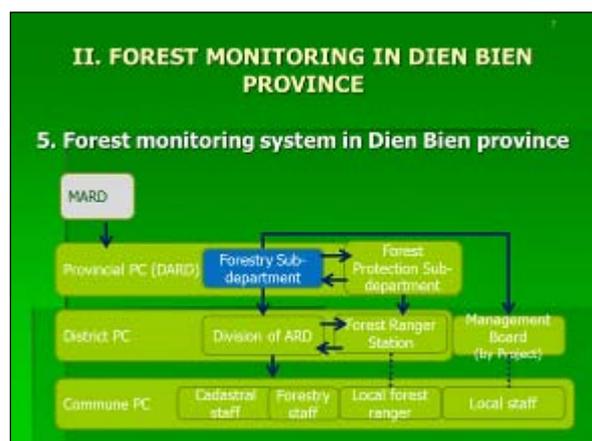
**4. Constraints and Challenges**

- A** There are lack of full forest cover maps for local forest rangers. The changes (increasing, decreasing) on forest area, stock do not reflect on hard-copy and/or digital maps (only statistical data are available)
- B** Forest owners do not have capacity to monitor annual changes. The capacity of forest rangers forces is limited. Their skills on using maps and GPS are not high. There are lack of maps and GPS.
- C** The allowance for local forest rangers and forestry staff is low. Therefore, they are not encouraged to protect the forest.
- D** The monitoring and assessment work (conducted by district and provincial PCs) is not implemented adequately.

The second main content is about forest monitoring in Dien Bien Province. First of all, I would like to talk about the existing data. We have forest cover map for the years 2006 and 2009 and we also have many hardcopy and digital maps at the forestry sub-department and forest protection sub-department.

About annual updates of forest changes, every year the forest protection sub-department updates the changes in area of deforestation due to agricultural use, forest fires, changing from forest use purposes to industrial trees, transportation systems or hydropower plants and also the area of forest concessions. This data is for the production forest. We also update the area changes of afforestation, reforestation, and regeneration. Based on these updates forest rangers at the commune level report the changes of the data to the forest rangers at the district level and the district level aggregates the data on communes within this district and then reports the results to the forest protection sub-department at the province level. Then, at the province level, they will aggregate the data for the districts in this province and report the results to the Ministry of Agriculture and Rural Development.

Here are some drawbacks about the forest monitoring system in Dien Bien Province. We do not have adequate and accurate forest cover maps for local forest rangers in order to do the annual updates. Also the updates are for the area data, but not forest maps. Also, many forest owners do not have the capacity or scheme to monitor annual changes. And the capacity of local forest rangers is also very limited. Often, they lack the skills of using GIS software or GPS equipment. Also, the allowance for local forest ranger and forestry staff is rather low, so they are not encouraged to protect the forests. As for monitoring and assessment work, here I mean the quality assurance, which should be conducted by the district and provincial People's Committees is not implemented adequately.



This slide shows the forest monitoring system in Dien Bien Province and for other provinces in Vietnam the system is also similar to this. At the province level we have the Department of Agriculture and Rural Development, which belongs to the provincial People's Committee and inside the department we have two sub departments relating to the forestry sector, which are the forestry sub-department and the forest protection sub-department. At the district level, we have the division of agriculture and rural development, we have the forest ranger station. And now JICA have already supported a pilot project in Dien Bien Province. So, we have a management board for this project. At the commune level, we have one cadastral staff, one forestry staff, local forest rangers and also local staff for the project.

### III. PAYMENT FOR FOREST ENVIRONMENTAL SERVICES (PFES)

**1. Concept:**

- Value of forest - storing carbon, protecting water sources, avoiding soil erosion, creating good environment and landscapes. The users of these values (hydro-power plants, water plants, tourist companies) have the responsibility to pay to forest owners who create these values
- The process of implementing the above concept is called payment of forest environmental services.

**2. Payment method:**

- Direct payment: The users pay cash directly to forest owners
- Indirect payment: The users of services authorize a third party (for example, The Forest protection and development fund) to pay the money to forest owners

### III. PAYMENT FOR FOREST ENVIRONMENTAL SERVICES

**3. Constrains and challenges**

- This is a new activity, implemented in Dien Bien province the first time.
- Almost all forest area do not have specific owners (currently managed by commune PCs).
- The forest are dispersed, not fully inventoried, interlaced with residential area or agriculture land.
- The total payment for the whole area is quite high but the payment for each forest owner is low (each forest owner has in average 3 ha of forest, receiving about 600.000VND – equivalent to the price of 3 chickens or 10 bamboos).
- Many people want to have forest allocated so the conflicts among them can easily occur.
- The land and forest allocation in the past have many problems and needs to be re-conducted.

### III. PAYMENT FOR FOREST ENVIRONMENTAL SERVICES

#### 4. Implementation progress in Dien Bien province

- About 242,000 ha (~2/3 province's forest area) have already received PFES.
- 6/9 districts have already received PFES
- In two years, two hydro-power plants (Hòa Bình and Sơn La) have paid 6 million USD. This amount is equivalent to the annual state budget allocated to the province for forest protection and development.
- The province is negotiating with other small hydro-power plants in the province jurisdiction to increase the amount of money received from PFES.
- About 600,000 USD has been paid to forest owners (~35,000 ha, in which Mường Nhé Natural Conservation Park: 30,000 ha; Mường Lay town: 5,000 ha).
- The province is examining the owners for 205,000 ha of forest in the remaining districts/towns.

The third part is about Payment for Forest Environmental Services. After piloting the Payment for Forest Environmental Services in two provinces, the Vietnamese government decided to expand this payment to other provinces and Dien Bien is also one of these provinces. The concept is that forests have many environmental values and the users of these values should pay to the forest owners and to whoever creates these values. There are mainly two payment methods. The direct payment method, in which the user pays cash directly to the forest owners and the indirect payment method, where the users pay the cash to the forest owners through a third party, for example, the Forest Protection and Development Fund. I think that Vietnamese Government prefers the second method of payment.

There are some constraints and challenges in implementing PFES in Dien Bien Province. Firstly, this activity is quite new for Dien Bien Province. So, we do not have much experience about doing this. Almost all the forest areas do not have specific owners. It currently managed by the commune People's Committees. Also, the forests in Dien Bien province are very dispersed and interlaced with residential areas and agriculture lands. Although the total payment for the whole area is quite high, the payment for each forest owner is low. Each forest owner has only received about 600,000VNĐ on average for 3 hectare of forest. Also many people nowadays know that they can receive some incentive from the forest, so they want to have the forest allocated to them so that there will be many conflicts among them.

About the progress of implementing PFES in Dien Bien Province. So far, about 242,000 hectare have already implemented PFES. In 2 years, two hydropower plants have already paid about 6 million USD. Now, the province is negotiating with other small hydropower plants in order to get more money for PFES.

#### IV. RELATIONSHIP BETWEEN PFES AND REDD+

**SIMILARITIES**

- Have the same objective of forest conservation
- Pay for an area of forest based on forest quality
- Implementing annual forest monitoring as a base for payment

**DIFFERENCES**

- PFES pays when someone uses the services
- REDD+ pays for the increment of carbon stock (or the reduction of GHG)
- PFES pays for the forest area in the basin area

**RELATIONSHIP**

- The implementation of PFES will provide inputs (forest owners, forest area, forest stock) for the implementation of REDD+
- When implemented together, REDD+ and PFES will consolidate each other to encourage forest conservation and development activities
- REDD+ needs to establish a benefit sharing system, which is also a base for implementing PFES

Thank You!

When implementing PFES in Dien Bien Province, we have compared it with REDD+ in order to draw some experience to do REDD+. Here are the similarities: Both have the same objective of forest conservation and both pay for an area of forest based on forest quality. The annual forest monitoring is the basis for payment. But they also have some differences. PFES pays for someone who creates the service like hydropower plant and it uses the data of forest area in the basin area as a base for payment. But for REDD+, we pay for the increment of carbon stock or the reduction of greenhouse gases. Here, the monitoring system for PFES and REDD+ may be different.

We have drawn some conclusions. First, the implementation of PFES will provide inputs for data about forest owners, forest area, and forest stock for the implementation of REDD+. When implemented together, both REDD+ and PFES will consolidate each other and encourage forest conservation and development activities. REDD+ needs to establish a benefit sharing system, which is also a base for implementing PFES.