

THE CURRENT SITUATION OF PAYMENTS FOR ENVIRONMENTAL SERVICES IN VIETNAM AND SOME POLICY RECOMMENDATIONS

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Abstract: The article on the financing of environmental services in Vietnam, especially forest environment services in 2011 - 2018. First, the article deals with the approach to the concept of environmental service payment in Vietnam and points to some similarities and differences between the concept of environmental services in Vietnam and the world. The article employs a variety of research methodologies to exploit secondary and primary data to analyze the real state of environmental service payments in Viet Nam 2011-2018. From the practice of environmental affordability, particularly forest services in Vietnam, the paper proposes a number of policy recommendations for the creation and development of the market for environmental services payment in Vietnam, and towards a complete market economic institutions and sustainable environmental protection in Vietnam in the coming period.

Keywords: Environmental services, environmental services payments, environmental services markets.

I. OVERVIEW OF PAYMENTS FOR ENVIRONMENTAL SERVICES

In the face of the powerful wave of the Industrial Revolution, which despite delivering huge economic benefits to the world, has been directly responsible for environmental issues, the importance of environmental protection is becoming more and more clearly understood. Over the years researchers, lawmakers, governments of most countries have been searching for solutions, tools to protect the environment. In the process, authors around the world (especially pro-free economy authors) have referred to environmental service payments (DVMT) as a tool of the market for the protection of the environment. On the concept of environmental service payment, there are several approaches:

According to the IUCN, environmental service payments are interpreted as "*buyers (voluntary) agreeing to pay or other incentives to adopt and maintain the more sustainable natural and land resource management measures that it provides defined ecosystem services*". This concept clarified the economic relationship (muA-selling and pay-off) between the environmental provider and the user of that service. In this interpretation, to perform environmental service payments, it is necessary to obtain a voluntary agreement between the service provider and the service user.

Swen Wunder contends that *environmental service payments are any restitution to services, labor or efforts, and/or any return for the maintenance and enhancement of environmental services* (S.Wunder 2005). Such reimbursement may take the form of direct cash or in-kind payments. It consists of five main elements: voluntary transactions; A well-defined environmental service; At least one buyer of services; There is at least one service seller and must be conditional (the

buyer only pays when the provider guarantees the delivery of the service is to be ongoing. In view of S.Wunder (S.Wunder 2005), there are four types of environmental service payments:

1. Pay for carbon absorption and storage services (through the purchase of carbon credits);
2. Pay for biodiversity conservation services (e.g. conservation sponsors pay local residents to request cancellation or restoration to create a natural biological corridor);
3. Payment for upstream forest protection services (e.g., downstream water users pay farmers on through land use activities which limit deforestation, soil erosion, flood risk, etc.);
4. Payment for services that provide scenic beauty (e.g. a tourist operator has to pay a local community when not hunting in a forest that is being used for tourists to see wildlife).

This view is shared by most scholars around the world.

There are also a number of authors in Viet Nam who are interested in environmental service payments, but this is still an unfamiliar concept with large segments of the population, who are either subject to direct payments or covered in environmental service payment programs. We can tell from the perspective of the author group Hoang Minh Ha et al. 2008: *Environmental service payment is a commitment to contract on a legally binding voluntary basis, and with this contract one or more buyers pays for a defined ecosystem service by paying the cash or support for one or more sellers, and it is the responsibility of ensuring a certain type of land use for a specified period in order to produce agreed-upon ecosystem services. It has made clear what payment is, what is it paying for, and what mechanisms it relates to?* Environmental service payments are compensation for the provision of environmental services, and this compensation is expressed in various forms (cash, support, exemption, tax exemption, etc.). A seller is a person who is willing (or forced) to create environmental goods and services; A buyer is a person who is willing (or forced) to pay for the benefits of receiving the goods and services of the environment. To do so effectively, there must be clear identification of environmental services, a contract/commitment made that must be made clear and legally based with access to market information and adequate environmental services from both sides: the buyer and the seller.

However, in Vietnam the concept of forest environmental services payment (PFES) has been given more attention. One can point to the study by the Pham Chi Chi Authors on forest service spending in a number of pilot locales. Accordingly, payment for forest environment services includes coverage for: Head source protection services, scenic beauty and biodiversity services, a provider for land supply, food sources and natural offspring for aquaculture (Pham Thu Thuy et al. 2013). This view is in line with the government's view on forest environment service spending in Decree No.99/2010 / ND-CP, dated 24 September 2010, on forest environment service spending.

The concept of environmental service payment in general, and forest service payment in particular, is handled in this article in the sense that *environmental service buyers (users) must pay the vendor (the service provider)*. This viewpoint is in line with the majority of experts around the world, as well as Vietnamese forest service payment legislation.

II. THE STATE OF PAYMENT FOR ENVIRONMENTAL SERVICES IN VIETNAM - THE STATE OF PAYMENT FOR FOREST SERVICES

2.1 Some of the Achievements of Forest Service Spending In Vietnam.

The disbursement of environmental services in Viet Nam will come to a halt at the expense of forest environmental services, so this article will analyze some of the results achieved by forest service payments, thereby setting out the possibilities for implementing environmental service payments in other ecosystems.

(i) The number of participants

In terms of subject supply of services: As of 31 December 2016, there were a total of 416,089 forest environment Service providers, of which the forest service providers were: 208 subjects for forest Protection and Special Forest Service management boards (0.05%), 81 entities were forestry companies (0.02%), 415,138 individuals/households/communities (99.8%), 467 subjects were People's Committees (0.11%) and 195 were other organizations (0.5%). This number has had noticeable increases as of 2018 (Table 2.1) :

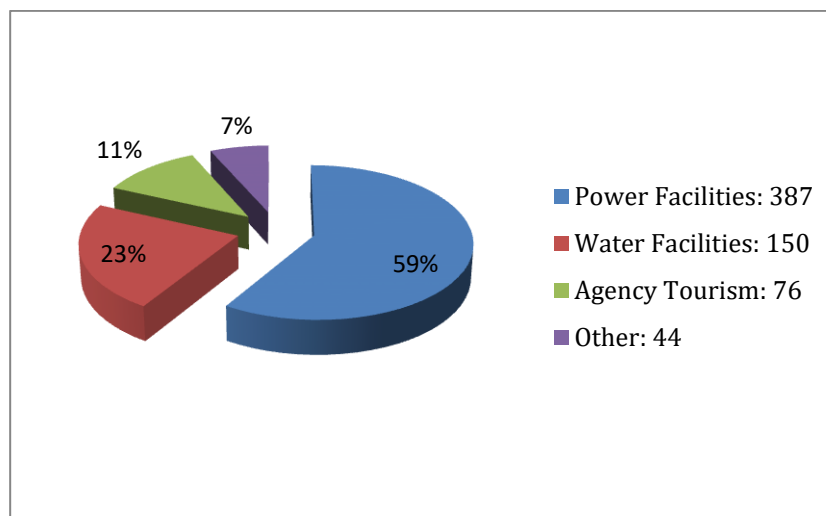
TABLE 2.1: THE NUMBER AND SHARE OF THE SUBJECT SUPPLY OF FOREST ENVIRONMENT SERVICES IN 2018 (COMPARE WITH 2016)

| Order | The Subject Of Providing Forest Environment Services | 2016 | | 2018 | |
|-------|--|---------|---------|---------|-------------|
| | | Amount | Density | Amount | Density (%) |
| 1 | Forest protection administration | 208 | 0,05% | 152 | 0,2% |
| 2 | Special Forest Management Boards | | | 75 | 0,1% |
| 3 | Forestry companies | 81 | 0,02% | 79 | 0,1% |
| 4 | Commune-level People's Committees | 467 | 0,11% | 544 | 0,8% |
| 5 | Police units, armies, enterprises and research centers | 195 | 0,05% | 205 | 0,3% |
| 6 | Individuals, households, communities | 415.138 | 99,8% | 450.108 | 98,4% |

(Source: Synthesis from REPORTS made by VNFF)

Thus the suppliers (sellers) of forest environment services are the individuals/households/communities the largest share. This is a good signal, as spending on community-based forest environment services is going to be not only cost-effective, but also productive for the poor, and shows that environmental protection is a collective effort of all individuals and communities.

In terms of subject use of services: in 2009-2010 (two years of pilot spending on forest environmental services in Son La and Lam Dong) there were only four hydroelectric power plants, three water companies and five tourist companies involved as piloted, in August 2014 these were 235 hydroelectric power plants, 72 clean water production and supply enterprises, and 44 tourist extraction companies participated in the market for environmental services. As of 31 December 2016, nationally all persons/organizations use forest environmental services, of which 324 are power producing enterprises, 88 using forest environmental services are enterprises producing and delivering clean water, and 59 using forest environment services are tourism companies. In 2018 the number increased significantly. In particular:



THE GRAPH 2.1: FOREST ENVIRONMENT SERVICE BUYER STRUCTURE IN 2008

(Source: Synthesis from statistics on [HTTP://dvmtr.siteam.vn/default.aspx](http://dvmtr.siteam.vn/default.aspx))

Thus, the majority of forest service buyers in Vietnam are power producing enterprises and clean water enterprises. In practice, these facilities also act as "householders" of the environmental service costs, because the amount they pay for the environmental services charged per unit price for electricity and water.

In terms of middlemen: in the environment service payment market, the intermediaries can be Ngos and inland, which can be state agencies, which can be local mass organizations or professional consultancy firms. Since 2008, the Government of Viet Nam has issued Decree 05/2008 on forest protection and Development funds with the aim of creating a legal basis for attracting investment capital and being a key link in the trust payment chain from forest environment providers to the forest environment providers. From 8 provincial forest protection and Development funds in 2011, 44 provincial forest

protection and development funds have been established that raise the total proceeds from forest service payments from VND 282, 9 billion (in 2011) to VND2,937.9 billion (in 2018), an increase of 10.4 times.

CHART 2.2 SHOWS THE GROWTH IN NUMBER OF FOREST PROTECTION AND DEVELOPMENT FUNDS ESTABLISHED FROM 2011 TO 2018.

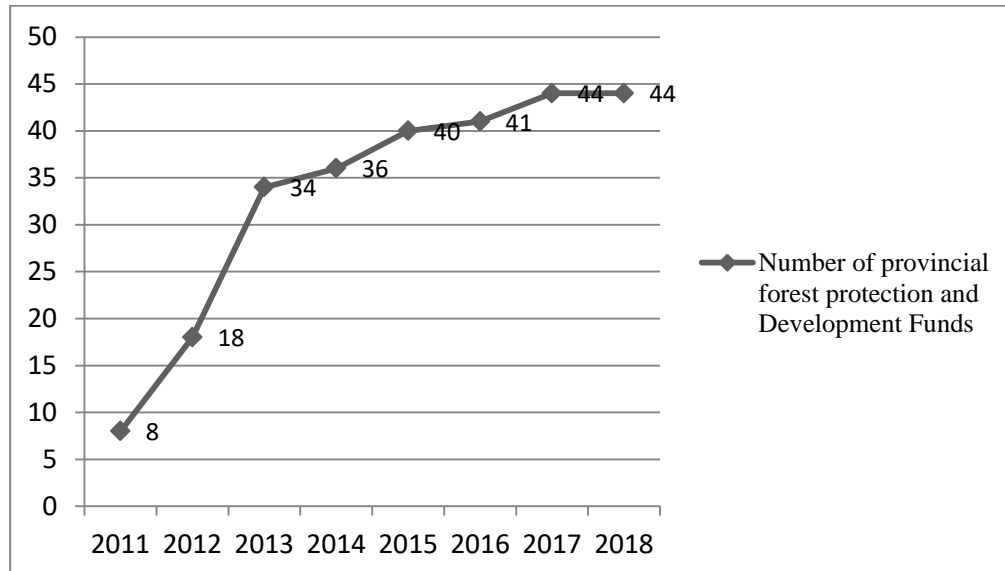


Chart 2.2: Number of Forest Protection and Development Funds 2011-2018

(Source: Compiled from VNFF reports from 2011 to 2018)

The increase in forest protection and development funds to act as intermediaries in the transaction of forest environmental services between sellers and buyers in the present time is significant, as the capacity for negotiation and access to information by the forest environment service providers (mostly ethnic mountainous peoples) are poor. However, with full focus on the conditions of the environment service payment market, transactions in the environment service payment market will take the direct form between a buyer and seller, in which case the fund will gradually act as a state financial institution and will need to follow market principles in operation.

(ii) The number of transactions on the market

As of 31 December 2018, the total number of trustees signed by the central and provincial funds was 657. Of these: The Central Fund signs: 92 contracts (including 75 hydro-electric contracts and 17 clean water contracts); Provincial fund signed: 521 contracts (including 312 hydroelectric contracts; 133 clean water contracts; 76 contract travel). In particular, 44/51 industrial production establishments have contracted to trustee in the pilot program for environmental service payment of their production establishments using water directly from water sources. In 2020, 20 more units signed trust contracts in the pilot program to pay forest services for carbon absorption and storage services The exact figure is shown in table 2.2:

TABLE 2.2: THE TOTAL NUMBER OF TRUSTEES FOR FOREST ENVIRONMENTAL SERVICES PAYMENT AS OF 2018 (COMPARE WITH 2014 AND 2015)

| <i>Kind of contract</i> | <i>2014</i> | <i>2015</i> | <i>2018</i> |
|--|-------------|-------------|-------------|
| Hydro-electric contract | 235 | 297 | 387 |
| Water contracts | 72 | 103 | 150 |
| Travel contract | 44 | 79 | 76 |
| Other contract (Industrial production) | --- | --- | 44 |

(Source: Synthesis from VNFF reports)

As a result, the majority of the contracts for forest environment services signed are hydro-electric contracts (hydroelectric power generation companies that have signed trust contracts with the central and provincial Forest Protection & Development Fund) (accounting for nearly 58.9% in 2018), with tourist contracts having the lowest density (11.5 percent in 2018). This demonstrates that the landscape service's payment is not yet commensurate with its value.

(iii) Turnover from forest services

Over the eight years of implementing environmental service payments, total forest service revenues have also achieved remarkable achievements. In 2011, the total revenue from forest service spending policy was 289.9 billion VND; in 2012, the total rose to 1,183.9 billion VND and was maintained for subsequent years with a great growth in 2018 of VND 2,937.9 billion. In particular:

TABLE 2.3: TOTAL REVENUES FROM FOREST ENVIRONMENT SERVICE PAYMENTS FOR THE PERIOD 2011-2018

UNIT: BILLION VND

| Years | Gross revenue | Annual increase compared with the previous year (Billion VND) | Year-to-year growth rate (%) |
|--------------|---------------|---|------------------------------|
| 2011 | 282,9 | -- | -- |
| 2012 | 1.183,9 | 901 | 318% |
| 2013 | 1.096,4 | - 87,6 | - 7,3% |
| 2014 | 1.335 | 238,6 | 21,7% |
| 2015 | 1.327,8 | - 7,2 | - 0,5% |
| 2016 | 1.284,7 | - 43,1 | - 3,2% |
| 2017 | 1.709,3 | 424,6 | 33,1% |
| 2018 | 2.937,9 | 1.228,6 | 71,9% |
| Total | 11.157,9 | -- | -- |

(Source: Synthesis from THE REPORT of VNFF)

Table 2.3 indicates that the forest environment service spending policy has been adopted very effectively as soon as it is put into practice. Essentially, total revenues from forest service payments have risen (revenues in 2018 were more than 10 times that from 2011), especially in 2017 and 2018 due to the adoption of new environmental services payments under Decree 147/2016 / Decree -Government, total annual revenues have risen dramatically. Total revenues for eight years reached 11,157.9 billion VND. This is an impressive figure for a developing country with low middle income and recent implementation of national environmental service payments since 2011.

Hydroelectric power generation facilities accounted for 95.4 percent of the revenue earned by forest environmental services, with the rest coming from clean water supply and manufacturing facilities, as well as tourism (landscapes) revenue. Specifically:

TABLE 2.4: STRUCTURE OF REVENUE SOURCES PAYMENT FOR FOREST ENVIRONMENT SERVICES DISTRIBUTED ACCORDING TO SUBJECT TO COST 2011-2018.

(Unit: Billion VND)

| Number | Subject to payment | Expenses | Density | Notes |
|--------|--|------------|---------|---|
| 1 | Hydro-electric production establishments | 9.6888,885 | 95,4% | |
| 2 | Establishments producing clean water | 297,980 | 2,9% | |
| 3 | Organizations and individuals doing business in tourist services | 37,4 | 0,4% | |
| 4 | Water industrial production establishments | 0,234 | 0,002% | Piloted in Lao Cai, Thanh Hoa, Nghe An, Ha Tinh |
| 5 | Subjects benefiting from fisheries supply services | 0,068 | 0,001% | Piloted in Lao Cai, Ca Mau |

(Source: 10 year assessment report on the organization and Operation of the Forest Protection and Development Fund System (2011-2018))

Table 2.4 shows that landscape service revenue is negligible, amounting only to 0.002%, which clearly does not match its potential.

(iv) Total expenditures on forest service spending

In designing the financial resources to operate VNFF, Article 15 of Degree 99/2010 / Government degree allows VNFF to be used up to a maximum of 0.5% of the total amount of trust allocated to the forest service to pay for office administration under a trust mechanism and to spend on money received and related financial management activities. The remaining funds are transferred to the provincial Forest Protection and Development Fund.

Eight years after spending on forest services has had considerable success. Specifically, the total spending of the 2011-2018 period for the subjects was over 6 trillion VND. Which spend on specific objects:

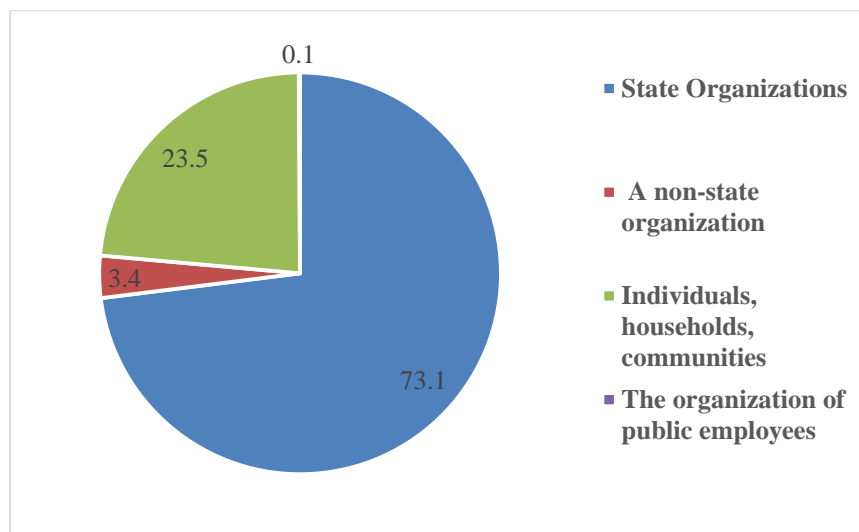


CHART 2.3: THE TOTAL STRUCTURE OF THE EXPENDITURES ON FOREST SERVICE PAYMENTS ACCORDING TO THE BENEFICIARY SUBJECTS

(Source: 10 year summary report on organization and Operation of the System of Forest Protection and Development Funds (2011-2018))

Chart 2.3 shows that state organizations account for 73.1% of total forest owners, non-state organizations 3.4%, and individuals and communities 23.5%; Social and political payment was 0.1%. Thus, although forest owners are large quantities of people, households, communities and non-state organizations, they receive a small amount of money from environmental service payments. The reason for this is that the forest area of these subjects is allotted low. This causes the meaning of livelihood creation, and the increase in incomes for people from forest services has been significantly reduced. Moreover, that figure indicates that Viet Nam does not really have a perfect market for environmental services.

2.2. Some Exist Of Environmental Service Payment Activities In Vietnam

Although Viet Nam is the first country in Southeast Asia to have a national program in terms of environmental service payments, government and agencies at all levels in the 2000s, it is important to take care of this area, the implementation of environmental service payments in Viet Nam today is heavily administrative while (True-Pes) programme should be market-based. This existence was manifest in the following ways:

First, the development of the environmental service market in Viet Nam is lacking in synchronous and does not fully operate a market mechanism.

Currently, in Vietnam, only forest environmental services are being performed quite effectively, while environmental services provided by off-forest ecosystems have not been substantially calculated to enter their market operation. Even in the forest environment services market, they are not uniform and complete because Vietnam is only applying 60 percent of the environmental services provided by the forest

Environmental service spending mechanisms in Viet Nam are not yet in place to become true environmental service spending mechanisms, where market based payment systems are lacking and payment is lacking the required criteria. Environmental service payment research in Viet Nam shows that both buyers and sellers are not willing to participate in environmental and repayment contracts, as well as not guaranteed conditionality (according to the 5 criteria of a PES, which S.Wunder proposed (S.Wunder 2008)); Instead, environmental service payments in Viet Nam can be seen as a "phage system for forest management based on performance" or as an "Pham Thuy et al. 2013". In addition, environmental service providers (growers and forest guards) are paid the same amount as compensation for opportunity costs in terms of labor, rather than for the value of service provided over the area of the forest.

Spending on environmental services is now substantially lower than the value of the services provided by the environment. As a result, a market-oriented environment framework is required to conduct market payments for environmental services.

Buyers, sellers, and middlemen are not clearly identified in environmental service payment arrangements, and there is no major information flow between these essential groups. There is no feedback between service customers and service providers, in particular. This is the gap in information between market participants.

Second, there are no procedures in place to track and evaluate environmental service.

Environmental service payments must be monitored and evaluated, according to Decree 99/2010 / Decree - the Government wants to examine the issue, identify causes, and find solutions to ensure the justice, transparency, and efficiency of the payments. However, environmental service payment monitoring and assessment has been restricted to date, in part because a set of indicators and standards for reviewing and evaluating environmental service payments has yet to be developed.

The Ministry of Environmental Services Monitoring and Efficiency Assessment has been established, although it is not yet extensively operational. It has 22 monitoring indicators and 13 environmental service payment assessment indicators.

Third, the role of the state in implementing environmental service payments is unclear and highly administrative.

Despite the fact that Viet Nam's economy has been operating on a market-based model for more than 30 years, the subsidy mechanism still remains in many areas, including environmental services. The government continues to be a large supplier of environmental goods and services, as well as a big buyer of them; citizens can, in many situations, employ environmental services provided by the government. Viet Nam will no longer be able to preserve its position once all commodity exchange interactions between countries comply to market principles. To put it another way, for Viet Nam to build a worldwide unified market, it must urgently move the spending mechanism for environmental services from the state to society.

III. A NUMBER OF PROPOSALS AND SOLUTIONS

The paper proposed the creation of an environmental service market not only for forest ecosystems but also for the expansion of other ecosystems in Viet Nam. To do so, a number of solutions need to be focused:

First, in order to create and develop the environmental services market in Vietnam, the first thing is that the Government has to formulate a full legal framework for all types of environmental services, including forest services, Marine environment services, land services, and in the near future, to finalize the legal framework for existing forest markets: Market for source protection, market for carbon storage services, market for Biodiversity conservation services, market for Landscape beauty services.

Second, developing environmental service markets for ecosystems is difficult and time-consuming. As a result, it is conceivable to first construct and develop the forest environment service market (for which market implementation is, by far, only a matter of time), then develop the environmental service market for the Marine ecosystem, and finally expand to other ecosystems (land ecosystem, rocky mountain ecosystem).

Third, a market-oriented pricing system for existing environmental services is critical. Environmental service value calculation methodologies are utilized as the foundation for valuing environmental services in the market all over the world. Alternative cost technique for assessing head defense value (land protection and water regulation), tourism cost and revenue method for determining landscape value, and market value for determining storage and carbon uptake values are all viable ways in Vietnam.

Fourth, there is great need to raise awareness and access to information for all market participants. One of the reasons for implementing market based environmental service payments is the perceptions of the participants. Because of the free consumption of natural resources and the lack of access to market information, subjects are either unwilling to pay for it, or vulnerable to contracts for environmental services.

Fifth, define precisely the roles and scope of state intervention in the environmental service market, and ensure a harmony of economic interests among the market participants.

Viet Nam is in the process of moving towards a socialist-oriented market economy and active international economic integration. In order to facilitate the established and developed market for environmental services, it is necessary to strengthen the macro management role of the state in addition to downsizing state intervention in the market to form the market price mechanism. It is necessary for the State to formulate policies to develop the market for environmental service payment on the basis of both bringing economic benefits to the subjects while harmonizing interest relations in the market, protecting legal interests and creating an enabling environment for the activities of seeking the interests of the economic actors participating in the market. Economic activities always occur in a given environment. The more favorable the environment, the more efficient and continuous economic activity is. A favorable macro-environment does not create itself, but must be created by the state.

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