

THE ROLE OF ECONOMIC COOPERATION FOR SMALL - SCALE FORESTRY PRODUCTION IN THE WORLD AND VIETNAM

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Abstract

Economic cooperation in small-scale forestry production is needed in the context of globalization and cooperation. Farmers or farms are often limited by access to resources as well as input and output information for their products. While they have land and labor for production. On the other hand, the development trend of the forestry sector has been increasingly confirmed in the world. Because, The forestry sector provides not only economic benefits to individuals but also to the wider community. The purpose is to explore the role and necessity of economic cooperation for small-scale forestry production in the world and in Vietnam. The objective of this paper is to explore the role and necessity of economic cooperation for small-scale forestry production in the world and in Vietnam by synthesizing relevant literature.

Key words: *economic cooperation, forestry production, small scale forestry ...*

1. Introduction

In the world, forestry in general and small-scale forestry production in particular have been developing and have the potential to bring significant economic benefits to landowners and communities. According to a report by MARD Vietnam 2011 - 2015, the forestry sector has achieved remarkable achievements. That is, the forest area increased rapidly and stable, with an average of 220,000 hectares per year. forestry production value increased sharply; in 2011, 3.4%, 5.5% in 2012, 6% in 2013, 7.09% in 2014, 7.5% in 2015; To step up the socialization of forestry as about 75% of the non-state budget investment capital for forestry. On the other hand, international forestry cooperation has been increasingly developed in the direction of multilateralization and diversification.

In the world as well as in Vietnam, forestry production is organized under different production models such as corporations, corporations, households, state organizations and other economic organizations... However, for small-scale forestation (household or farm type) there may be some discrete factors contributing to the production capacity. Many studies have demonstrated that the traditional type of production organization may not be effective for small-scale forestry, requiring a new strategic model - economic co-operation. Vertical economic cooperation is concerned with the seven potential elements of production needed for a successful forestry venture (land, labor, capital, silviculture, marketing skills, harvesting and processing skills and government). Horizontal cooperation Each partner can engage in a network with other partners in their field, thus representing economies of scale. This cooperation recognizes the importance of minimizing transaction costs, building trust, promoting healthy corporate governance, and ensuring ongoing communication between partners is a factor. Help the actors participate successfully.

This paper aims to synthesize all relevant studies to demonstrate the role and necessity of economic cooperation in small-scale forestry production both in the world and in Vietnam.

2. Research methodology

- The secondary data collection method is mainly the synthesis and inheritance of secondary data from published reports and researches.

- Professional solution

- Statistical analysis method

3. Research results

3.1. The approach to economic cooperation.

At the macro level, economic cooperation is expressed through the establishment of economic alliances between nations, regions or territories to form regional institutions at different levels. This cooperation has helped to establish broader, safer economic spaces for the economic activities of each participating partner on the basis of the division of labor and cooperation, the rational population distribution for the whole region. At the micro level of economic cooperation is achieved through the establishment of business cooperation relationships between actors in the economy. Promoting cooperation at the micro level, to a certain extent, will have a positive impact on macro cooperation. It promotes macro-economic relations to develop and transform in a way that facilitates micro-cooperation. In this context, we will focus on micro-economic cooperation.

What is economic cooperation?

According to Le Xuan Ba (2003): "Economic cooperation is the establishment of relationships among business and production entities, possibly between enterprises in the same field of activity, between competitors. or between businesses with additional activities, to save time, save costs, gain greater efficiency, and open new markets".

Meanwhile, Que Hau (2008) has introduced the concept of economic cooperation on a more general level. According to Ho Que Hau, "Economic cooperation is the proactive awareness and implementation of objective economic relations between economic entities in the socio-economic, to implement the relationship of labor division and labor cooperation to achieve common socio-economic benefits"

In general, economic cooperation is one of the forms of cooperation at high levels of human resources in the production and business process, including regular cooperative and cooperative activities by voluntary economic units. To work out and implement the undertakings and measures related to the production and business activities of the involved parties in order to promote the production and business development in the most profitable direction. The principle of link implementation must be based on voluntariness, equality, mutual benefit. These facilities must be agreed upon, reflected in the contract signed between the parties and in accordance with the legal framework of the countries.

Whatever the form of development, economic relations are oriented towards the common goal of creating a stable economic relationship. Adopt economic contracts or operating regulations to carry out the specialized production assignment and cooperation,

in order to tap the potentials and strengths of each affiliated unit. Or to jointly create a common market, allocate output quotas for each member unit, price for each type of product to protect each other's interests and minimize and spread the risks if any.

What is economic cooperation in agriculture and forestry?

In modern agriculture, economic cooperation is essential. Economic cooperation in agroforestry is understood as cooperation between agricultural production areas in the inter-regional, between agricultural, industry and service sectors, and between farmers themselves, to increase the scale of production, reduce transaction costs, increase competition

3.2. The role of economic cooperation in small-scale forestry production

3.2.1. General characteristics of small-scale forestry

Forestry has the potential to bring significant economic benefits to both large landowners and the wider community. Forestry production in general and small-scale forestry production in particular have a relatively long business cycle and need to integrate all 7 resources, the chances of success are high. Of these, 7 resources required for forestry production are: land, labor, capital, silviculture, marketing skills, harvesting and processing skills, and government. The model of small-scale forestry production, mainly of households and farms. Most of them only have land and labor for forest plantation, and other resources are inaccessible and unworkable. Because of that, the result is not high as well as incurred high transaction costs, incomplete information ...

Afforestation of small-scale production forests may have disparate factors contributing to production capacity. Small-scale producers do not have the resources necessary for large-scale production organizations such as corporations, corporations, large-scale enterprises, etc. The organizational models are not suitable for small-scale forestry (Brian W. Sharp et al., 2004). According to the authors, there is a need for economic cooperation on small-scale forestry activities to promote the effectiveness of actors. The author also proposed a collaborative model of the seven dimensions needed to create a successful forestry production:

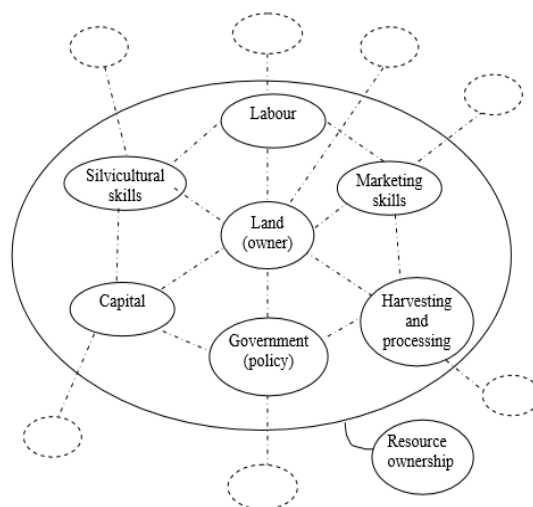


Figure 1: Viewpoint of economic cooperation for small-scale forestry production

(Source: Brian W. Sharp et al., 2004)

3.2.2. The role of economic cooperation

The question is why there is economic cooperation in agroforestry and why is small-scale production necessary to link the development of agro-forestry production today? Most studies identify the key roles of economic cooperation, including: taking advantage of economies of scale, increasing comparative advantage, leveraging partner capabilities (technology, machinery, equipment, market, capital, labor force, raw materials, etc.), improvement of management system.

Nguyen Manh Dzung emphasized in his book "Agricultural cooperatives in the world - an important factor in linking production development of farmers", 2004. The most basic characteristic of agricultural production is the human impact on the land to create material wealth. The society has stepped up strongly in the process of industrialization and modernization, the level of competition in the consumption of goods produced more fierce. Farmers are vulnerable and vulnerable. Against this backdrop, they need to be reunited in different organizations to create the necessary strength. There are many forms of linkage between farmers, but history has shown that only agricultural cooperatives are the most viable form of linkage to their production.

Economic cooperation helps farmers to take advantage of economies of scale.

From this point of view, Michael E. Loevinsohn et al. (1994) argue that cooperation in agricultural production will enable households to increase their economies of scale so that technology can be upgraded to increase crop yields.

Australia develops forestry to conserve natural resources. According to S.R Harrison et al., 1999, the role of joint ventures between government and natural resource owners for the development of natural resources. By grouping the authors to develop resource-based industries that require capital and risk, long-term nature, and ecosystem sustainability issues as well as environmental management. A joint venture should be set up between the government and the private sector in forestry based on forestry projects. This approach overcomes the difficulty of accessing land to state forestry services. Attract many landowners involved in the project.

Recently in Lithuania, a country located on the Bantich coast of the former Soviet Union, after its independence, private forestry activity has developed and is in the process of restructuring the forestry sector. In 2005, Marius Lazdinis and his colleagues also pointed out that cooperation between private forest owners in Lithuania was necessary. Forest owners have a small area of forest, lack information on forests and forest management, and face bureaucratic government and need help. The author points out that cooperation between smallholders promotes forest consolidation, information provision, and active participation in the timber market, which may lead to successful implementation of other policies.

Economic cooperation helps households to utilize production resources, create conditions for division of labor, and specialize production to increase comparative advantage.

From the theory of resource dependency (Pfeffer & Salancik, 1978), no firm can exist alone. All economic sectors must interact with the surrounding environment in order

to mobilize resources and distribute products to the market. Economic cooperation helps economic sectors to control the market, protect from risks and ensure resources are maintained in a stable and timely manner.

In 2007, GF Ortmann and RP King also conducted a study, "Cooperatives can facilitate small-scale farmers in South Africa involved in input markets and products," the study's objective This study investigates whether agricultural cooperatives can facilitate smallholder access to input markets and products. The authors investigate two types of co-operatives, including traditional and new co-operatives, which co-operative form is appropriate for small-scale farmers in Kwazulu-Natal, South Africa to reduce the cost of delivery. It facilitates them to access market inputs and products.

According to a study by Lyne, 1996 and Matungul et al., 2001, it is suggested that small-scale farmers in South Africa and other developing countries have limited access to factors of production, Credit, and information, the market is limited by insufficient ownership and high transaction costs.

According to Williamson, 1985 transaction costs include information costs and costs associated with finding a trading partner, distance to market, and contract enforcement. This high cost is detrimental to the efficient operation and marketing of inputs and outputs.

Economic cooperation helps farmers maximize their production resources and minimize transaction costs.

With the characteristics of small-scale forestry production in Australia in 2004, Brian W. Sharp and his colleagues also pointed to the need for a cooperative strategy in small-scale forestry economic organizations. According to the authors, traditional models of Australian forest economy are not well suited to the scale of small forestry production in North Queensland. The characteristics of small forestry production in North Queensland are the production of paper pulpwood, the short harvesting period. At the same time, the Government is making great efforts to develop high value timber forests with a 30-year exploitation period (Harrison et al., 1999 and Herbohn et al., 1999). Collaboration offers the opportunity to save on transaction costs and increase information flow through an alliance integration process for small forestry production in North Queensland.

In short, economic cooperation is inevitable in today's global alliance economy. Especially it plays a very important role in agro-forestry production. Characteristics are dispersed, fragmented, unoccupied, small scale, long business cycle, risk, and low level of labor, poor market access... and one These sectors make important contributions to the strategy for the development and protection of natural resources and the global environment.

3.3. Economic cooperation in small scale forestry.

3.3.1. In the world

In summary, the studies point out the limitations of the traditional economic organization model that is not suitable for small-scale agro-forestry production. They are limited in terms of scale of production, less resources, inadequate property rights, high

transaction costs... it is difficult to access market inputs and products. In essence they do not have the resources necessary for traditional forms of organization such as corporations, corporations, etc. The theoretical form of cooperation can be a model suitable for small-scale production to take advantage of the advantages and resources of each agent (vertical link), reduce transaction costs, receive services more preferential. On the other hand, cooperation is likely to increase the scale of production or achieve a sizeable field (horizontal linkage) in order to achieve a size of resources that is consistent with new production conditions and maintains Sustainable sector in a region.

According to Michael E. Loevinsohn et al., In 1994, it was pointed out that cooperative farmer-oriented cooperation was in the development of farming systems in Rwandan Valley. The authors point out that the quality and scale of cooperation affecting the innovations in farming can be developed. Collective management makes a high degree of crop diversity, adopting greenhouse treatment technologies, thereby increasing yield.

The study by GF Ortmann & RP King, 2007, finds the underlying causes of traditional cooperatives in South Africa unsuccessful. This failure is due to subjective factors such as the type of co-ops that usually do not invest in long-term (improved) or intangible assets (training and research), poor management, conflict among members (due to poor service provision) and lack of funds. Many members of the cooperative do not know what cooperation is and what its purpose is. Thus, members lack knowledge due to incomplete information, lack of access to information, less contact with extension workers. In addition, due to external factors such as uncertain ownership (land, contracts, etc.), poor transport infrastructure, poor access to market information. In order to promote the efficiency of small scale producers, the authors point out in the research on the cooperative model between main producers being cooperatives (supply chain for the first two phases: production (assembly assemble / sort / pack)

With the characteristics of small-scale forestry production in North Queensland - Australia, Brian W. Sharp et al. (2004) also indicate that pre-existing forestry forms are not appropriate. The authors have also come up with an approach in the potential strategic alliance model that is horizontal alliance. Each partner can join the network with other partners in their field, thus achieving economies of scale or alliances (Child and Faulkner, 1998). Cooperation has the potential to offer the opportunity to save on transaction costs and increase information flow through the integration process within the strategic alliance. Horizontal alliance of forestland owners may be co-operative or similar arrangements

Also study the status of private forestry cooperation in the context of "restructuring forestry" in Lithuania, where privatization is a major factor. Marius Lazdinis et al., 2005 analyzed in detail the activities of private forestry cooperatives (FOCs). Research results show that the cooperation between private forest owners is slow, although cooperation can develop positively. Private forestry cooperatives are mainly established with the aim of private forestry, which focuses on providing commercial services to their private forest

owners in the most attractive conditions., link members and make a profit to members rather than attracting large numbers of participants. These cooperative activities focus on logging and trading. In providing services, forestry cooperatives are competing with state forestry enterprises and large private forestry companies.

According to Doug Brubacher, 1998, forestry development is the foundation for the emerging indigenous economy in Canada. But the reality is that when the forest industry brings wealth to governments and federations, indigenous Aboriginal communities become poorer and shunned with dependence on forest land. So, the author analyzes the assessment framework for forestry joint ventures, which consists of five elements. Case study shows that companies joining the forestry sector through cooperation with other people hold resources is very strong. This cooperation leads to people of different cultures working together in a certain area. The author argues that the value of indigenous communities needs to be reflected in the form of joint ventures

Research by Jeremy Boyd and Ronald Trospe, 2010 also confirms the role of joint ventures in forestry as a prerequisite for the economic development of British Columbia natives. The authors use the Aboriginal Development Framework (Anderson 1999). The in-depth analysis of two typical examples of joint venture demonstrates that indigenous communities have minimal control over forest management and harvest decisions. Both contribute to creating employment for community members and neighboring communities and also contribute to the development of Aboriginal skills in business management. However, joint ventures are fundamentally related to the Aboriginal community but do not meet all the elements of the AED - this is the means to keep the Aboriginal community moving towards the ultimate goal of the self-reliant and self-governing.

Another viewpoint in agro-forestry joint venture is also expressed between the government and private. It is shown in two studies by SR Harrison et al., 1999 and by Aine Ni Dhubhain and Thomas Kavanagh, 2003. Both examined the role of joint ventures in attracting households to participate in projects. and the Government's program for the development of natural resources.

According to GF Ortmann & RP King, 2007, the authors of the study at Impendle and Swayimana show the potential for high value tree planting, near-urban transport near ports and airports, Supply chain participation depends on minimizing total operating and transaction costs for each enterprise from a cooperative or investment-oriented company (IOF). Considering the entire supply chain in the study area, the study points to a "hybrid" model that combines a cooperative at the first two stages of the supply chain and an IOF. will bring efficiency. The optimum boundaries of a cooperative are production, assembly, sorting, grading, packaging, while the IOF's optimal boundary is to transport the product from place of manufacture to the market. They may be willing to advise smallholders on collective action and provide useful information such as input use, type of product, product quality required by the market. The members of the cooperative benefit from this information and reduce the transaction costs for the former traders.

3.3.2. In Vietnam

3.3.2.1. Planted forest for household production in Vietnam.

The planted area has grown rapidly globally and provides about 50% of the world's total timber production. The World Food and Agricultural Organization (FAO) estimates that the total planted area In 2005, about 140 million ha (FAO 2006), an average annual increase of about 3 million ha. In Vietnam, plantation forest production has also increased rapidly in recent years. The total number of forest plantations in the country is divided into 9 different management entities. In particular, the area of plantation forest allocated to households accounts for a significant proportion

Table 1. Planted forest area by households in Vietnam

unit: ha

No	Object	Year 2014	Year 2015	Year 2016	<i>tbq</i> (%)
1	The whole country	3,696,320	3,886,337	4,135,541	105.77
2	Households	1,784,113	1,747,781	1,601,001	94.73
	% (2/1)	48.27	44.97	38.71	

(Source: Ministry of Agriculture and Rural Development)

The model of household forestry is small-scale production. According to research by Tran Thanh Cao et al., In 2014, survey of production forest plantation in the Region / Province shows the scale of production as follows:

Table 2. Production scale of afforestation households in Vietnam

Unit: ha/household

No	Region / Province	Max	Min	Average
1	The Southeast region	105	1.5	2 đến 5
2	The central coast	30	2.4	12.7
3	The Highland			
-	Lam dong	61.3	1	11.84
-	Gia Lai	5	0.46	2.4
4	The North East			
	Lang son	2.5	1	1.44
	Quang Ninh	2	1	1.23

(Source: Tran Thanh Cao et al., 2014)

3.3.2.2. Economic cooperation of households for production forest

According to the results of the survey and survey of cooperative economy conducted by the General Department of Forestry in 2012, forestry cooperatives are formed and developed in localities with a clear distinction. Most of the southern provinces do not exist forestry cooperatives. Provinces in the Red River Delta have small forest areas or forests that are mainly used for special purposes and protection purposes. Therefore,

forest land and forestry activities are mainly provided by state organizations and units. . Provinces with forest cooperatives are mainly in the North East and Northwest and North Central (Lai Chau 15 cooperatives, Cao Bang 7 cooperatives, 9 cooperatives in Ha Giang, 23 cooperatives in Thanh Hoa, Yen Bai 32 cooperatives, Ca Mau 8). Most of them are agro-forestry cooperatives, mainly engaged in the production and supply of forest seed, purchase and processing forest products.

Table 3. Activities of Forest Cooperatives in Viet Nam

No	Criteria	Unit	2015
1	Amount	number	151
2	Production value / Revenue	Million VND/Cooperative/year	1000
3	Percentage of farmers participating in the cooperative / total farmer households	%	45
4	Average profit	Million VND/Cooperative/year	200
5	Average income	Million VND/member/month	1

(Source: Annual Review Report - Department of Cooperative Economics and Rural Development)

In the forestry production model cooperative groups are relatively common. Cooperative economic organizations are established by individuals and households with forest land. They linked themselves together to plant and protect the forest. Households who plant production forests contribute capital to purchase and process forest products. The benefits of the members of the cooperative group are expressed through the activities of contributing money to buy plant seeds and inputs when planting, exploiting and circulating forest products in order to save on transportation costs. machinery for production, labor for forest protection, pest and fire control.

According to the report of the General Department of Forestry, most cooperatives in the forestry sector now have very small scale production and business activities, less capital (less than 1 billion VND), low management level, active seasonal operations, narrow operation areas and unstable market. Most cooperative groups have not received support from local authorities. In addition, in the forestry sector, voluntary community forestry groups are formed. These are the cooperative groups established based on the support of the projects. These projects support the allocation of forest land to the community in collaboration with local authorities (FLICH project) in some provinces nationwide. This project has piloted land allocation and management to the community. Most of the activities of this cooperative group are forest management and afforestation under the project support plan and local government guidance.

Actual production of forestry has appeared effective cooperation models and links in the chain of production activities in the area of production of raw materials. For example, Vietnam Paper Corporation is affiliated with afforestation households; Planting organizations with Bai Bang Paper Mill in production and consumption of wood pulp.

Vietnam Forestry Corporation links with the afforestation households; plantation organizations with the Gia Lai MDF Plant on the supply and marketing of plantation timber.

However, cooperation and joint ventures are limited in reducing the efficiency of increasing the added value, income of individuals and participants, reducing the motivation for cooperation and linkages. Households and individuals have not been cooperated with each other to create the strength of investment, apply technical advances, organize production to create products in large quantity, high quality, stability, supply contracted. The relationship between production and consumption is usually through intermediaries, so the sellers are often unstable, lack transparency and price pressure. Many production contracts, raw materials supply between the producer and the factory may not be made due to the purchase or sale. In distribution of income (through price) for each stage in the production chain is lack of transparency, equity. Risk insurance due to production is not paid attention.

4. Conclusion.

The results show that in small-scale forestry production, economic cooperation is needed to successfully operate to bring high value and promote economies of scale, improve competitiveness and reduce costs. transact and utilize the resources of the participating actors. This cooperation can be horizontally integrated among forest landowners to increase the size of the economy. Or a vertical integration between actors in the discrete forestry production chain to leverage productive resources, enhance value, and reduce transaction costs.

On the other hand, economic cooperation in small-scale forestry production also contributes to promoting the development and protection of natural resources, and developing models of afforestation for high economic efficiency such as afforestation. In addition, economic cooperation helps countries around the world as well as in Vietnam to implement the policy of socialization of forestry. Objective of attracting private investment for forestry development with socio-economic value.

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