# Incorporation of Local Communities into Forest Land Use and Household Economic Development by Co-management Model in the Uplands of Central Vietnam

Huynh Van Chuong\*, Le Van An, Tran Phuong Nhi, Vu Tuan Minh, Tran Ngoc Liem

University of Agriculture and Forestry, Hue University (Vietnam), Hue, Vietnam

**Abstract** Vietnam is among the ten countries in which biodiversity and forest are most rapidly disappearing. The problem is ongoing and exacerbated by the growing population and rapid economic development in Vietnam - a "country in transition". Forest land and forest resources management works in mountainous areas in Central Vietnam through management models such as afforestation yards, Protective Forest management boards, local administration units and households have been facing to implicit difficulties. Before 1975, there were common pool resources management models managed by communities based on regulations of villages, minorities group. Communities could partially solve contradictions; create livelihood; exploit and preserve the pools quite easily through those models of management. Those models encouraged communities who live based on natural resources, especially agro-forest land resources, to use traditional knowledge on sustainable forest management and enhancing livelihoods; creating community consensus. Building co-management regimes reflect the combination between formal laws of government and local in conventions play an important part in creating consensus and promoting sustainable development in upland areas.

**Keywords** Co-management, Allocated forest land, Common pool, Rights, Regime

#### 1. Introduction

#### 1.1. The Importance this Topic

"Common pool resource" is a system of resources that is having numerous objects uses and gets the benefit [7]. Resources system management has to remain the reasonable benefits of households have rights in this common pool resource (1, 105). Follow these definitions, Phu Vinh commune in particular and mountainous areas of central Vietnam in general have a large number of common pool resources and local people manifest different rights in these resources for their livelihood activities. The government directly manages too much forest land through the Protective Forest management board. The district and commune People's Committee and households just manage small areas, for example, in Phu Vinh commune, local people manage less than 10% of the total area of forest lands which is mostly poor and bare land.

Recently, the Protective Forest management board, which represents Government, hasn't done well in allocating a part of the forest land to communities and households to manage based on Government policies [13] and also land

management agencies haven't done well in directing forest land exploitation and usage for effective and sustainable development. Land resources which need to be protected for living environment have been encroached on and increasingly exploited day by day [2, 3]. The area of forest managed by Protective Forest Management Board (PFMB) is very large, occupying about 70% of the total area of the whole commune, before this area has been planted forest under previous projects, and to the time of allocation and the people need lands, they still cannot be changed the purpose of usage because the Government capital invested into those lands is still remaining in the lands. The decentralization of management after allocating land to communities is not clear, which has meant that resource exploitation and usage hasn't followed specific planning guidelines; and the general goals including stable production, livelihood creation and development for the locals after allocating land couldn't be satisfied. [3, 4, 12].

#### 1.2. Study Goals

#### 1.2.1. General Goal

Enhancing awareness of stakeholders and supporting policies correction to building co-management regime on allocated forest land to households for managing and using.

#### 1.2.2. Specific Goals

- Enhancing awareness and capacity of communities and

<sup>\*</sup> Corresponding author: huynhvanchuong@huaf.edu.vn (Huynh Van Chuong) Published online at http://journal.sapub.org/ijaf Copyright © 2016 Scientific & Academic Publishing. All Rights Reserved

- authorities at various levels on common use forest land management after allocation;
- Building co-management resource regime on allocated forest land;
- Coordinating and promoting stakeholders on documenting, sharing and unifying co-management forest land regime;
- Learning experiences from the process of building co-management resource regime on allocated forest land from State to households and communities.

#### 2. Study Site and Methodologies

#### 2.1. Study Site Description

Phu Vinh commune, Thua Thien Hue province is a typical example for above situation. There are 4 villages in Phu Vinh commune: Phu Thanh, Phu Thuan, Phu Xuan and Phu Thuong. Among them Phu Thuong village is a settlment of Pa Co ethnic minority, while in the 3 other villages, Kinh people make up 98% of the population, with the remainder being from the Pa Co ethnic minority and Ta Oi ethnic minority. The total natural area of the commune is 2,904ha, in which forest land and forest area is 2,454ha and over 80% of forest land is managed by Protective Forest Management Board (PFMB), poor households' ratio is 40-50% (2009). Study on building co-management regime of allocated forest land at Phu Vinh commune, in which 43.5 ha of Phu Thuong village has been allocated from PFMB to the commune in 2009, the number of households who exploited and encroached forest land participated in co-management regime is 34 households including 24 households of Pa Co ethnic minority and 7 households of Kinh people.

#### 2.2. The Approach and Research Method

The research involved the positive participation of the

local people and stakeholders. Organized meetings were held with the people in villages, commune and district departments to explore and to listen to opinions before discussing and consulting on building the forest land co-management regime. The research group prepared contents of co-management before organizing meetings and discussions about the co-management regime. 100% of people of Phu Thuan village and Phu Thuong village attended all the meetings and 50% of them raised opinions during meetings. Nearly 100% of participants at the meeting on building co-management regime to develop production raised opinions and proposed suggests about co-management regime building. Surveys were Conduct to determine the boundaries of each co-management area with the participation of people in two villages and the local authorities. The villagers themselves determined the co-management boundaries in the field then mapped this on paper. Unified encroached area and made agreement with surrounding households to co-manage. Elaborating the content, documenting on allocated forest co-management regime at two villages Phu Thuan and Phu Thuong, Phu Vinh commune. Reviewing on references, government policies related to land and regime of allocated forest land community-based co-management. Research group's members discussed to elaborate the content of co-management regime. A draft of the co-management regime was shared with specialists, local authorities and advisory groups.

#### 3. Research Results and Discussion

#### 3.1. Results of Building Model and Co-management Mechanism for Forest Land

3.1.1. Surveying on the Contents of Building Co-management Model





Photo 1. Discussing the location to build the co-management regime

The research group selected 43.5ha of forest land area which is being allocated to Phu Vinh commune People's Committee by PFMB following a decision of the Province to build regime of forest land co-management (*Photo 1*). This area will be directly allocated for the locals to use and manage, but the locals have encroached into this area and have planted acacia with unclear boundaries, creating many potential difficulties for the general management of local authorities. Local governments are very embarrassing to impede the continuous invasion as well as resolve disputes and create fair conditions for local people, especially the poor. There are 34 volunteer households participating in the building of co-management regime and share the benefits together during the time of co-management.

During the time of building the co-management regime, we received the positive participation of stakeholders such as land users, government of villages, communes and district, PFMB and district rangers. Additionally, in the process of building the regime, the research group promoted the district government to establish 2 advisory groups on the co-management regime development and planting forest development. One group includes members of commune departments and the commune's vice chairman as leader, and other group includes members of the commune departments and the commune's vice chairman as leader. Through meetings with stakeholders, we received positive and initiative opinions; all of them are responsible made our works effective.

The process of building the co-management regime included the following steps: (1) meeting and discussing with the commune and district governments; (2) interviewing the locals and village communities; (3) observing the field and behaviors of the communities on allocated forest land in relation to exploitation and usage; (4) enhancing the ability and improving the ownership and responsibility of the locals toward allocated forest land resources (is considered as common pool with the agreement among the users); (5) making action plans of regime building with the participation of specific stakeholders; (6) sharing

information among stakeholders; explaining the situation for them to understand in order to reduce the conflicts stemming from the encroachment onto allocated forest land and discussing about the management responsibility of the local government; (7) identifying and partitioning boundaries of the unit area of co-managed forest land of the commune (Photo 2); (8) analyzing the content of the co-management regime and drawing the management decentralization framework; analyzing bundle of rights in co-management regime with the positively participation of local people and local authority; (9) testing the implementation of co-management and unifying the combination among stakeholders on allocated forest land; (10) empowering and deciding the regime for volunteer households participating in model building; (11) evaluating the model and learning experiences.

Through the implementation steps and model building process, the results showed that 100% of the participating households totally agreed with the co-management manner proposed by the research group and local authorities. 100% households the participating discussed co-management regime prepared by the research group and local authorities in their native language translated by their leaders who are knowledgeable about Vietnamese and Pa Co languages. Therefore, the selection of the leaders had to based on specific criteria such as prestige, enthusiasm and knowledge of 2 languages. The results also showed that 100% of participating households were all positive and eager to join the meeting to discuss the regime and also to go to the field in order to reaffirm their land position and the boundaries of adjacent households, editing the position on the map (*Photo 3*). Boundaries of each hill and boundaries of adjacent households were unified in the field; estimating the area of each household participating in co-management. In parallel, the research group and local authorities compared the existing area according to PFMB's map of land allocation and identified the area which had been encroached on to plant acacia or for others purposes.



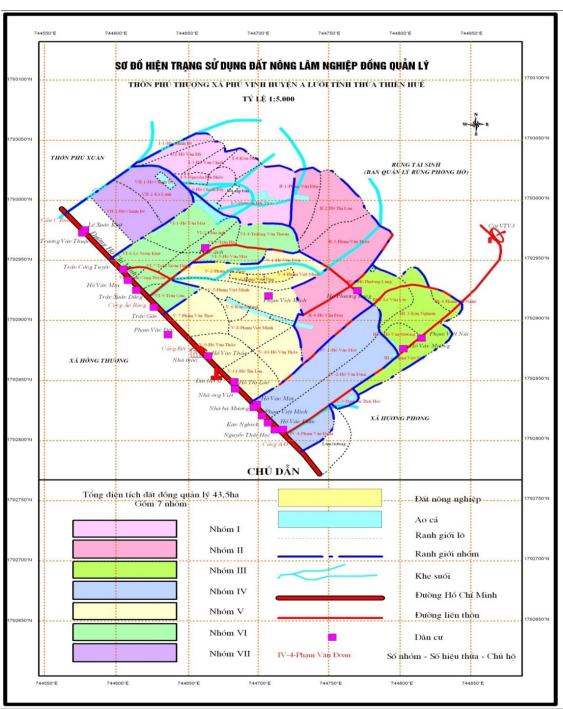


Photo 2. The local people drew co-management forest land map inside house and in the field





Photo 3. Local people themselves identified their boundaries and boundaries of neighbors to participate in the co-management regime



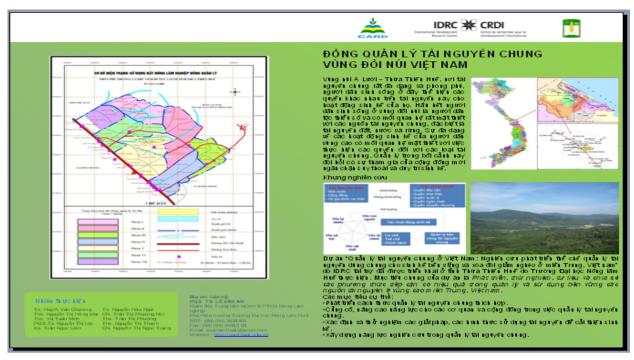




Photo 4. Area map and co-management regime will be directly given to participating local people

7 groups were established in the process of building the co-management regime on 43.5 ha of allocated forest land (*Photo 4*). With 34 participating households, the co-management regime based on the adjacent plots in the same hill and the unity of households' partnership.

Co-management and using the regime on allocated forest land at Phu Vinh commune was established based on the combination of conventions and formal law. This regime was unified by local people, governments of villages, communes and the district and was signed by these stakeholders. This regime will be directly given to participating households through origin file including the decision, the regime; status area map of co-management groups; the regime will be transferred to a leaflet before being giving to the locals for them to easily understand (picture 7). The regime's contents are divided into groups of influenced objects; they are the responsibility and for the benefit of participating households and household's groups, the responsibility and benefit of the village head and village management board, the responsibility and benefit of the

commune government and the commune management board; the responsibility and benefit of the district government and district management board.

#### 3.1.2. General Evaluation on Model Building Process

### a. The direct participation of the locals and local communities

In the process of implementing this research, the research group realized the participation of the locals in the management model of allocated forest land was positive; however, the locals have medium awareness about the issue and sometimes the representative of each household is different at each meeting so they cannot thoroughly know the issue. For example the wife often attended meetings but sometimes, the husband attended, which took time for the research group and local authorities to explain again for the husband what we had done and the next activities. Specifically, participating household members: (1) Are invited to attend all "advisory meetings" from the beginning of the model implementation; (2) Contribute opinions on building the land map and implementing the identification of boundaries and the owner of each land; (3) Assign and elect representatives of each group to participate in the common community of 34 households; (4) Understand the responsibility toward related issues to build the model and co-management regime; (5) Contribute labor to participate in the survey at the field many times and positive raising of opinions on the identification of rights and responsibility of each household in the process of co-management participation.

With this new co-management model, the responsibility of the community and each household was specifically assigned clearly but their ownership wasn't clearly described although they have significantly contributed. The communities' awareness of property rights (ownership) to traditional models analyzed above is clearer than the new model. Because with new model, local government or state organizations seem to be the real owners of allocated forest land resources and they decide the effect time of this regime. The role of community in the process of decision-making on forest land management was clearly reflected in the new model. However the limited ability made the locals can rarely participate in decision-making in higher level such as discussing with the commune, district specific and clear about using planning or transferring usage purpose; and they seem to be imposed from government because of that.

#### b. The regime support

Although the "community" regime hasn't been formally legislated clearly in relevant laws, the changes in societal economy as well as global development in general have promoted the survival and development of land and forest resources management based on communities. Besides the support from projects and rural development programs, the active interventions of local governments at all levels especially at commune and district level is very important to ensure the participation of the locals in the management and

using forest land at each village and commune. Research at Phu Vinh commune showed that in some cases of building process, the commune and district People's Committee decided the promotion of making early decisions and implementing the model, which is very important. If the local government delays or obstructs the process, the success of the participatory model will be difficult to achieve.

## c. Capacity and resource mobilization to participate in model building

Capacity is one of the determinants that has important influence over the communities' participation in resource management of forest land at Phu Vinh commune, particularly in the decision-making process. The research showed that communities and local government could assist with this as outlined below:

Contributed opinions about the community plan on participation in forest land resource management during community advisory meetings are are sometimes too general or not pertinent to the central issues and expected results of the meetings.

Capable people participate with the advisory board in order to advise the government to make the right decisions; however, the advisory board is busy so sometimes, they couldn't carefully prepare the contents made the opinions lack of deepness though they were very positive.

The indigenous knowledge system also plays an important part in participatory co-management of forest land resources, especially the experiences and technologies of local people in watershed forest protection, water intake and water and wood source protection by transmitting ethics faith in god or soul.

The lack of clarity (transparency) on the ownership of the locals regarding the co-managed land area affects the process of mobilizing the community to contribute to building the model; and also causes misunderstanding and controversy among stakeholders while participating in model building. The reason is households who participated in the co-management regime have encroached onto unallocated land before; while households who respected the direction of the district and commune didn't encroach onto forest land belonging to the management of the commune and they couldn't participate in co-management regime now.

## 3.2. Discussion and Lessons Learned on Building Co-management Model

Mountainous land in the Central region of Vietnam in general, and Phu Vinh commune in particular, suffers from the problem of many management systems such as the household model, community, afforestation yards, company, and forest management board. In addition, it is potential relationship with each other. Sometimes, this relationship is good when implementing the policies, institutions specifically and clearly. However, it will become complicated due to the overlap and unspecific policies and institutions. Typically, the term "resource management based on community" is still pretty new to local governments.

Although, some law have mentioned, it is still vague. Therefore, the promotion and implementation of resource management processes is not easy and each local government has own management style. Until now, there has not been much synthesis of experiences or lessons on resource management based on community, so that there are many different opinions. In addition, even in a conference, there are also supported group, exploratory group, hesitated group and opposed group. For this reason, there is one lesson to be learned from this research that is not to apply a rigid resource management model based on community for mountainous area, and that need to be flexible and active on adjusting the contents of co-management regime in order to be appropriate for each specific village, commune and region.

Although the management regime of households, community or company, forest land resource management is necessary to consider how to increase the sustainability of forest land and forest. It should have a management plan and specific development orientation and should not pull about the immediate economic needs and long-term needs on forest land resource management and protection in mountainous area. In order to solve this issue, there is a lesson to be learned from the research in Phu Vinh commune that is coordinating closely with the concerned parties such as local people, village community, and enthusiasm support of village, commune and even district authority. Consequently, the effect after allocating forest land to the users will become more practical and being interested in by the local people. Ultimately, sustainable livelihoods and the environment are the issues which are seen most clearly by local people because they are always exist in the locality. Establishing forest land use rights which are transferred to the village community through planning land use in the village and commune level and regime, planning construction process need to pay attention to conventions of ethnic minorities and formal laws. Application of formal laws for the ethnic minorities is too rigid so that it makes them feel that few hundred local knowledge and conventions have been less focused while sometimes they can not understand the formal laws because of limiting language and education level. Moreover, we have to increase the time spent developing propaganda tools, diversify the forms of propaganda and translate propaganda law into ethnic minority's language then the degree of success will be much greater. This is particularly the case for propaganda targeting forest land users' understanding of their rights as well as their obligations when participating in co-management regimes to enjoy the benefits of this regime for a long time.

In the legislature, the government should take into account the unique quality of conventions on considering the community to be a subject who adjusts directly the policy; concede the positive elements of conventions on managing and using natural resources in order to enforce law effectively in the community. Local authorities should have suitable policies to encourage the ethnic minorities on managing and protecting forest land resources in particular

and natural resources in general by their conventions.

## 4. Conclusions and Policy Implementation

#### 4.1. Conclusions

The forest land allocation from the protective forest management board (representative agency of State) to locals for their direct management and use for creating livelihood opportunities and increasing incomes at Phu Vinh commune in particular and A Luoi district in general, still suffer from complicated relationships and meet with some difficulties. Transferred forest land is still seen as common pool resource due to lack of planning, dividing into plots as well as allocating the right address for the users in the villages and commune. Therefore, encroaching occurs with different encroached area of each household to cause having potential conflicts and contradiction. For this reason, constructing the transferred forest land model and co-management regime in this research is considered successful and has had a great effect on the awareness, attitudes and policies of local authorities as well as local people, especially ethnic minorities. A Luoi district desired to expand this model for other communes in the district. The high degree of unanimity among the parties such as local people, the protective forest management board, local government in the process of constructing the model and co-management regime is a great success so far in bringing about decisions related to forest land management and usage in this region.

In fact, after transferring forest land, the specific guidelines related to policy, organization and technique regime to implement management based on community and household groups are not completed. At present, the issue facing many challenges is how to manage the forest land after transferring and formatting co-management community, how to use sustainably after transferring, how to bring the benefits to the ethnic minorities and its long-term contribution to the livelihoods of the management community.

#### 4.2. Policy Implementation

The government, especially local authorities, needs to recognize the forest land co-management model after transferring from the protective forest management board to the local people, in addition to bringing out technical solutions, simple institution which is applied in forest land management according to community model. The models should be established by district and province authorities and need to be approved by the appropriate authorities to create trust for local people after participating in the management community.

Local government should have a plans for forest land-use after transferring it to local people and bring about equal benefits for local people explicitly involved in the community, with long-term stability of at least 10 years to make the community feel secure for investing and

developing production.

#### REFERENCES

- [1] Bao Huy, 2005. Building forest and forest land management model based on Jrai and Bahnar ethnics, Gia Lai province. Department of Science and Technology, Gia Lai province People's Committee.
- [2] Ho Dac Thai Hoang, 2009. Forest cover changes: A case study on changing land use and forest cover in Phu Vinh commune in 20 years from 1989 o 2009. Year 1 report of IDRC project, Hue.
- [3] Huynh Van Chuong, 2010. Research on the situation of and the rights on the forest land, allocated from the state to households for management and use at the mountainous area in the Central: a case study in Phu Vinh commune, A Luoi district, Thua Thien Hue province. Year 2 report of IDRC project, Hue, 25 pages.
- [4] Nguyen Thi Hong Mai et al, 2008. Different benefits of ethnic groups in approaching and managing agriculture forest land in Phu Vinh commune, A Luoi district, Thua Thien Hue province. Center for Agriculture Forestry Research and Development (CARD), Hue University of Agriculture and Forestry, 27 pages.
- [5] Nguyen Van Manh, Nguyen Xuan Hong and Nguyen Huu Thong, 2001. Conventions of Ta oi ethnic, Co tu ethnic, Bru-Van Kieu ethnic in Quang Tri province and Thua Thien Hue province. Thuan Hoa Publishing House: Hue.
- [6] Nguyen Xuan Hong, 2002. Experiences on managing

- Human-Ecosystems in the area of the Ta Oi, Co Tu, Bru-Van Kieu in Thua Thien Hue province. Nationalities Publishing House: Hanoi.
- [7] Ostrom, E., J. Burger, C. B. Field, R. B. Norgaard, and D. Policansky. 1999. Revisiting the commons: local lesions, global challenges. Science 284:278-282.
- [8] Thua Thien Hue Department of Natural Resources and Environment, 2008. Guideline no 30/HD-TN &MT of Resources and Environment Department on agriculture forest land, Hue, 2008.
- [9] Thua Thien Hue province People's Committee, 2008. Decision no 1784/QD.UBND of Thua Thien Hue province People's Committee on withdrawing land from A Luoi PFMB allocating to people for production. Hue, 2008
- [10] Tran Duc Vien, 2010. Community forests management in mountainous area of Vietnam: a case study at the Ca river valley. Sciences and development journal, Hanoi University of agriculture, No. 1, 2010, page 50-58.
- [11] Tran Duc Vien, 2010. Decentralization in managing natural resources in Vietnam: a case study at the Ca river valley. Sciences and development journal, Hanoi University of agriculture, No. 1, 2010, tr. 43-49.
- [12] Tran Ngoc Liem et al, 2010. Study on livelihood of different social groups at Phu Vinh commune. Year 2 report of IDRC project, Hue, 25 pages.
- [13] VNMARD, 2009. Transformation guiding circulars of protective forest and special use forests which are planned into productive forest and vice versa from planned productive forest into protective forest and special use forest after reviewing to re-plan 3 types of forests according to the instructions no 38/2005/CT-TTg, Ha Noi, 2009.