# Gender Participation in Forest Resource Management

Benefit Sharing Mechanisms in Thuong Nhat Commune, Bach Ma National Park Buffer-zone, Thua Thien, Hue, Vietnam

Nguyen Thi Hong Van







# **Consortium of Development Studies in Southeast Asia** (CDSSEA)

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The Consortium of Development Studies in Southeast Asia has drawn on primary postgraduate research undertaken for theses from the master's programs of Asian Institute of Technology's Master of Science in Gender and Development Studies (MGDS), Chiang Mai University's Master of Arts in Social Science (Development Studies) (MASS); and the Chulalongkorn University Master of Arts in International Development Studies (MAIDS). Scholarships for the students of CDSSEA has been generously provided by the International Development Research Centre (IDRC) of Canada. With a diversity of academic approaches (gender studies, political science, social sciences), the individual works of this collection have in common a focus on the increasing interconnection and regionalization of the five mainland Southeast Asian countries (Myanmar, Thailand, Laos, Cambodia and Vietnam), and examine these exchanges and encounters within the context of the Greater Mekong Sub-region (GMS).

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### Gender Participation in Forest Resource Management: Benefit Sharing Mechanisms in Thuong Nhat Commune, Bach Ma National Park Buffer-zone, Thua Thien Hue, Vietnam

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#### **Series Foreword**

The Regional Center for Social Science and Sustainable Development (RCSD) at Chiang Mai University has extended its publication program to include Master's dissertations from The Consortium of Development Studies in Southeast Asia (CDSSEA). The CDSSEA series covers mainland Southeast Asia: Myanmar, Thailand, Cambodia, Laos and Vietnam, and regionalization, development encounters and exchanges within the Greater Mekong Sub-region (GMS).

The CDSSEA program brings together resources and expertise from three of Thailand's leading institutions offering Master's degrees in development studies: Chiang Mai University's Master of Arts in Social Science (Development Studies) (MASS); Chulalongkorn University's Master of Arts in International Development Studies (MAIDS); and the Asian Institute of Technology's Master of Science in Gender and Development Studies (MGDS). Although the Consortium's program focuses on the relationship between development studies and social sciences, each of the programs has a different emphasis. The Chiang Mai degree focuses on social sciences and anthropological perspectives, with research interests in environmental and resource management, food security and local livelihoods, labour migration and trans-border issues, ethnicity and development, health, tourism, and agrarian transitions. Chulalongkorn's program concentrates on the political dimension of development, including democratization, human rights, conflict resolution, international and civil society development organizations, community development and globalization. The Asian Institute of Technology focuses on the relationships between gender and development—including women's rights, civil society, and gender dimensions of urbanization and industrialization.

The CDSSEA program has a practical dimension, building leadership capacity in mainland Southeast Asia's regional development, bringing together postgraduate students, encouraging debate, and promoting the rethinking of development alternatives in such areas as social equality, justice and participation, environmental and economic sustainability, and community development. In this regard, a major objective is to develop the knowledge and skills of development practitioners and to enhance the quality and effectiveness of policy-making and its implementation in the region.

The publications in this series—selected from the CDSSEA Master's program—are designed to express this diverse range of interests in development studies and regionalization, and to emphasize the relationships between empirical and theoretical research, policy-making and practice.

Victor T. King, Senior Editorial Adviser, Critical Perspectives on Regional Integration Series

## **Contents**

|            | Series Foreword  | V    |    |
|------------|--|------|----|
|            | List of Figures and Tables   | viii |    |
|            | Abbreviations  | ix   |    |
|            | Acknowledgements   | xi   |    |
|            | Map of Region  |      |    |
| Chapter 1: | Introduction   |      | 1  |
| Chapter 2: | Review of the National and International Policies on the 17 Benefit Sharing Concept      |      |    |
| Chapter 3: | Methodology  |      |    |
| Chapter 4: | Profile of Study Area and Respondents  |      | 45 |
| Chapter 5: | Gendered Participation in Benefit Sharing Mechanisms 6                                   |      |    |
| Chapter 6: | Gendered Benefits in Collecting Non-timber Forest Products 81 from Bach Ma National Park |      |    |
|            | Bibliography   | 100  |    |
|            | Index  | 107  |    |

## **List of Figures and Tables**

| Figure 1.1 | Map of study area  | 9  |
|------------|--|----|
| Figure 2.1 | Conceptual Framework   | 35 |
| Table 3.1  | Household Respondents  | 41 |
| Figure 3.2 | Flow of Data Collection  | 42 |
| Figure 3.3 | Research Process   | 43 |
| Table 4.1  | Land Use and Forest Land in Thuong Nhat Commune                                  | 47 |
| Table 4.2  | The Management and Monitoring of BSM Chart                                       | 48 |
| Table 4.3  | Gender Distribution of Respondents   | 57 |
| Table 4.4  | Age Distribution of Respondents  | 58 |
| Table 4.5  | Marital Status of Respondents  | 58 |
| Table 4.6  | Education Level of Respondents   | 59 |
| Table 4.7  | Level of Education by Gender of Respondents                                      | 60 |
| Table 4.8  | Family Size of Respondents   | 60 |
| Table 4.9  | Head of Household by Gender  | 61 |
| Table 4.10 | Household Income Sources   | 61 |
| Table 4.11 | Categorization of Respondents Based on<br>Household Income                       | 62 |
| Table 4.12 | Gain and Loss Income Sources: Between, Before and After BSM Introduction in 2013 | 63 |
| Table 5.1  | NTFP Harvesting Pattern of Men and Women in Respondent's Household               | 67 |
| Table 5.2  | Gender Division of Labor in Daily Reproductive Activities                        | 68 |
| Table 5.3  | Person Responsible for Reproductive Work in Respondents Household, by Village    | 69 |

| Table 5.4  | Gender of Division of Labor in Daily Productive Activities  | 70 |
|------------|---|----|
| Table 5.5  | Person Responsible for Productive Work in<br>Respondents Household, by Village  |    |
| Table 5.6  | Contributing Ideas in Village Meetings on BSM Process by Sex of Respondents   | 76 |
| Table 5.7  | Decision Making at Household Level Regarding<br>Participation in BSM  | 78 |
| Table 5.8  | Reason Why Respondents Participated in BSM, by Sex of Respondents   | 78 |
| Table 6.1  | Average Household Income from Different NTFPs:<br>Before and After BSM Introduction by the Main Person<br>Who Collects Respective NTFPs                     | 83 |
| Table 6.2  | Number of Households Receiving Animals Distribution<br>and Trainings on Raising Livestock and Plants, by Gender<br>and within Commune and Selected Villages |    |
| Table 6.3  | Household Respondents Still Raising Livestock from the BSM Program  |    |
| Figure 6.4 | Average Household Income Sources: Before and<br>After BSM Introduction  | 93 |

#### **Abbreviations**

BSM Benefit Sharing Mechanism

BSA Benefit Sharing Agreement

BMNP Bach Ma National Park

CBD Convention on Biological Diversity

CMFP Commune's Monitoring and Forest Protection Team

CIDA Canadian International Development Agency

CIFOR Center for International Forestry Research

FAO Food and Agricultural Organization

FSIV Forestry Science Institute of Vietnam

FMC Forest Management Council

GSRV Government of Socialist Republic of Vietnam

GMS Greater Mekong Sub-region

Ha Hectare

IDRC International Development Research Centre

IUCN International Union for the Conservation of Nature

ICCO International Communications Consultancy Organization

JFM Joint Forestry Management

LFPDA Forest Protection and Development Act

MARD Ministry of Agriculture and Rural Development

NTFPs Non-timber Forest Products

NRM Natural Resource Management

Nrs Nepali Rupees

PAs Protected Areas

PCs People's Councils

4Rs Rights, Roles, Responsibilities and Revenues

SUFs Special Use Forests

SIDA Swedish International Development Agency

UNEP United Nations Environment Program

UNDP United Nation Development Program

USD United States Dollar

VCF Vietnam Conservation Fund

VMFP Village's Monitoring and Forest Protection Team

VND Vietnamese Dong

WB World Bank

WCU World Conservation Union

WWF World Wildlife Fund

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Nguyen Thi Hong Van

#### Chapter 1

#### Introduction

#### **Background of Forestry Sector in Vietnam**

Vietnam is a culturally and ecologically diverse country, located in the Greater Mekong Sub-region (GMS) and with a forest coverage of 38% of the land area in 2006 (Food and Agriculture Organization [FAO] and (Forestry Science Institute of Vietnam [FSIV], 2009). According to FAO, Vietnam covered 14.3 million hectares (ha) of forest in 1943, which decreased to 11.1 million ha of forest in 1976 (FSIV, 1996). However, the forest area fell rapidly after the Vietnam War, and between the years 1976 and 1995, the forest coverage decreased by up to 8.15 million ha, with a deforestation rate of 1.27% due to illegal timber extraction for domestic consumption and export (FSIV cited in McElwee, 2004; Hoang Hoe cited in McElwee, 2004). In 1991, the Government of Vietnam issued the Forest Protection and Development Act (LFPDA) with the aim of protecting and developing the forest of Vietnam. Since 1995, the government has invested in different national programs and projects, which includes the Five Million Hectare program and "Greening the Barren Hills" (Program 327)<sup>1</sup>. As the result, the forest area increased to 10.9 million ha by 2000 and 12.9 million ha by 2006 (FAO and FSIV, 2009).

<sup>1</sup> Program 327 (Decision No. 327/CT, dated 15th September 1992) concentrates on two main components: protecting existing forest from shifting cultivation; and rehabilitating bare land and hills in mountainous, midland and plain areas although the focus would be in the mountainous and midland areas (MPI, 1996).

Forestry is a sector that is largely influenced by socio-economic changes in rural areas of Vietnam. It determines the purpose of land use, creates jobs and improves the livelihoods of the 25% of Vietnam's population who live inside or near forest areas (FAO and FSIV, 2009). They are ethnic groups, except for the small number of Kinh people (the majority group) who migrated to highland areas during the Vietnam War and after country reunification in 1975 (Persoon, 2004, p.50). They depend on forest resources for their daily livelihoods; It is estimated that, Vietnam's forest-dependent people depend on forest resources for an average 20% of their total (monetary and non-monetary) income (Jong et al., 2006). Women in upland areas are engaged in housework, farming and collecting forest resources. According to Locke, women are more dependent on natural resources and regarding the gender division of labor; they are mostly responsible for collecting fuel wood, wild food and planting crops for household subsistence while men are mostly responsible for cash crops (Locke, 1999).

In general, forest products are an important source of livelihood for many rural farmers in different countries, in fact, non-timber forest products (NTFPs) are the main source of income for millions rural households who live inside or nearby forests in Vietnam (McElwee, 2010). Depending on specific conditions, forest products may provide both "daily net" and a "safety net" to local poor people in rural areas. While the "daily net" includes forest products for daily use to meet the immediate household needs, including fodder for animals, and offers available income to purchase agricultural inputs, the "safety net" plays a role when households meet food shortages or are in urgent situations (Shackleton cited in Coad et al., 2008; Coad et al., 2008, p.5). Achieving a fair and equal balance between the rights and needs of local people in using forest products, and forest protection and conservation efforts is a difficult exercise. According to McElwee, modern conservation approaches are changing by moving away from advocating for strictly Protected Areas (PAs) to an acceptance that the resources-dependent communities around PAs are part of the ecosystem and should have access to those resources (McElwee, 2010). However, PA management in Vietnam, for a long time focused on law enforcement to forbid the harvesting of any forest resources (Quan and Suriya, 2011). As based on the FPDA in 1991, no exploitative activities are allowed in the highest protection category, the special use forests (SUFs), which includes most of the International Union for the Conservation of Nature (IUCN)PA categories² (GSRV, 199). This strict policy was enforced in a 2001 decision made by the Government of Vietnam on the protection status of SUFs. Thus, the Government of Vietnam restricts changes to any environment which impacts on wild habitat, plants or animals; imports any animals or plants that are not related to previously found fauna and flora systems; forbids the exploitation of any natural resource; and the grazing animals in PAs, and so on (Government of Social Republic of Vietnam [GSRV], 2001 cited in McElwee, 2004). This policy affects millions of Vietnamese people living in and around the 2.3 million ha of SUFs. These communities, who traditionally depend on natural forest resources for their livelihood, lost their legal access to those resources when PAs were established (Quan and Suriya, 2011).

The Government of Vietnam realizes that the forestry sector plays a significant role in the elimination of poverty and the socio-economic development in remote areas. They have already implemented several strategies to increase the area for forest plantations and improved the management of production forests. On the other hand, these remote forest areas are the last refuge of Vietnam's very unique biodiversity, with many endangered species of fauna and flora. It is reason why the government has developed a system of 164 PAs which include national parks, natural reserves, and protected areas for the conservation of existing fauna and flora. According to FAO and FSIV, the PAs (known as SUFs) account for 11.7% of the forest area in Vietnam (FAO and FSIV, 2009). Furthermore, to support the management of these SUFs, the government also has promulgated legal documents on the protection of the environment and biodiversity such as the Forest Protection and Development Act (1991), and amended it again in the Law on Environment Protection (2004), Forestry Development Strategy for period 2006-2020 (2006), Law on Biodiversity (2008) and the Decree on the Policy for Payment for Forest Environment Services (2010). These policies support implementation and effective management of biodiversity conservation at different levels of government, especially promoting understanding of the importance of PA's

<sup>2 &</sup>quot;IUCN protected area management categories classify protected areas according to their management objectives. The categories are recognized by international bodies such as the United Nations and by many national governments as the global standard for defining and recording protected areas and as such are increasingly being incorporated into government legislation." (IUCN, 2017)

biodiversity conservation at the local level. Nevertheless, among those policies and decrees, none are covering gender issues except for the Forestry Development Strategy of the period 2006-2020, which includes some minus attention to women issues. According to the government, the Law on National Gender Equality (2006) must be included in all ministries, institutions, organizations and sectors in order to engage and implement gender mainstreaming and gender issues in their work. There are still many barriers for both women and men's participation in forest management activities. The gender dimension of forestry management, in regard to rights and access to forest resources between women and men, is still not a focus of national policies. Therefore, it is necessary to consider and address policies and development interventions which impact women and men, to bring equal benefits when managing and conserving forest.

The Vietnamese government recognized the vital role of forest resources in rural livelihoods, so they decided to pilot a new policy which shares benefits from forest products to local people living around the SUFs. The goal was to improve the forest condition and promote people's involvement in sustainable forest protection and management. More than two decades after the Forest Protection and Development Act was issued in 1991, the "Piloting Policy on Benefit Sharing Mechanism (BSM) in Management, Protection and Development of SUFs" was approved in 2012. It allows local people who live around SUFs to harvest a limited amount of products in a sustainable way. This legal framework for the introduction of a BSM, determines the rights and responsibilities of SFU's authorities, People's Committee and local communities based on principles of co-management, in the harvesting of NTFPs as a means to generate local peoples income and improve their livelihoods. The individual households agreed with SUF authorities to sign a benefit sharing agreement (BSA) which is a document presenting the consensus among different stakeholders on their roles and responsibilities in managing and protecting forest resources. The local residents who sign this agreement and follow the regulations mentioned in the BSA, are allowed to collect NTFPs and participation in BSM development interventions. Generally, BSM mentions the rights, roles and responsibilities of local village, households and individuals, however it does not specifically discuss women's role and rights in participation in the BSM.

Traditionally, women play a significant role in forest protection and conservation. They not only have greater responsibility in securing seeds, medicinal plants, wild animals, species, keeping genetic resources, and food, but their knowledge and skills are also important for the sustainable supply of biodiversity. Thus, they play a vital role in conserving biodiversity. "Since women are seen as being the most appropriate participants in environment", the policy on forest protection and development must be aimed towards three interrelated goals: effective biodiversity protection, addressing the multiple needs of natural resource dependent communities and achieving socially inclusive and equitable development outcomes for both women and men, especially for those living around PAs (Shah and Shah, 1995).

Women and men traditionally show differences in forest use, tenure and power, which leads to gendered impacts on people living nearby PAs. In mountainous areas, women mostly depend on forest resources to meet their food and socio-cultural needs, while men mostly collect forest products for commercial purposes (Khadha and Verma, 2012). Women do not utilize the same forest resources as men. Hence, resource use restrictions in PAs affect the livelihoods of men and women differently (Coad et al., 2008). Moreover, the linkages between men's tenure rights and the devolution of PA management to local communities also prevent women's participation in forest planning and management at village and commune levels. This can further increase the gap between men and women in regard to their political power in society. As BSM is in a pilot phase in some PAs in Vietnam, it is most important to integrate the gender aspect into the piloting procedures in order to improve equality in sustainable forest management and conservation in the future. Negligence of gender issues may lead to the discouragement of women from actively participating in BSM and managing forest resources.

#### Introduction to Study Area

The Bach Ma National Park (BMNP) was established in 1991 and including an extension in 2008, covers 12 communes in two provinces, namely Thua Thien Hue province and Quang Nam province. After expanding the area, the park became a hub for protection of the ecosystems along a "green corridor" of forest, along with several nature reserves nearby the border with Lao PDR. In 2005, scientists found that Bach Ma has a very diverse flora and fauna system.

The main ethnicity of people in the area - Kinh, Co Tu, Van Kieu and Muong - have lived there for several centuries and number approximately 65,000 inhabitants residing around the PA (Ninh et al., 2005). Almost all local people living in this area are poor; their average income is approximately around US\$ 37 per month. The main income sources are agriculture, forest plantations, natural forest resources, labor and other services, of which natural forest resources contributes to most their income (Hoa and Chau, 2012). There are still poor households that do not have enough agricultural land to produce food, thus they rely heavily on illegal extraction of timber and the hunting of wild animals and collecting NTFP from BMNP for their household's consumption (Hoa and Chau, 2012). As infrastructure is poorly developed and the connection with provincial centers is limited in the area, people living in BMNP's buffer-zone<sup>3</sup> have less opportunities to access national economic development programs in order to reduce their poverty (Ebregt and Greve, 2000). Hence local people living around the buffer-zone cut timber and collect NTFPs as the second major source of household income (Ninh et al., 2005).

In 2012, BMNP was selected to pilot the BSM, which initiated a completely new approach to forest management in order to reduce unregulated pressure on natural resources and to improve biodiversity conservation in Vietnam. It was the first time that regulated sustainable extraction of NTFPs by local residents was allowed in the ecological restoration zone, one of the two zones of SUFs in Vietnam. Seven villages in Thuong Nhat commune adjacent to BMNP were selected to participate in the BSM. By establishing the high value species which locals can legally harvest inside SUFs, BSM creates a suitable model of collecting and managing forest resources for local people. The compilation of this list is a joint effort of local people, scientific staff and the management board of the SUFs based on the individual conditions of the natural resources. At Thuong Nhat commune, Co Tu people, BMNP staff and scientists developed a plan for harvesting NTFP species such as rattan, linh chi mushroom, honey, uoi seed, snails and wild pigs, which local people were allowed to collect (Hoa and Chau, 2012). The BSM's regulations specified the exact quantity, seasonal harvesting and location to each harvester's household.

<sup>3 &</sup>quot;Buffer-zones are areas created to enhance the protection of a specific conservation area, often peripheral to it. Within buffer- zones, resource use may be legally or customarily restricted, often to a lesser degree than in the adjacent protected area so as to form a transition zone." (UNEP, 2015)

Everybody who signed the agreement with BMNP and Thuong Nhat commune authorities, is entitled to collect resources according to the plan. Through the agreement, people have the opportunity to legally collect NTFPs through the sustainable harvest method. Furthermore, the policy promoted a sense of ownership and responsibility for harvesting NTFPs and their habitats. Thus, BSM does not only share co-management and responsibilities, but it also shares NTFPs with local people living nearby the SUFs.

At the time of this research, BMNP was one of the three protected areas in Vietnam, where BSM policy was being piloted. The area has a lot of biodiversity and is home to hundreds of species of fauna and flora, a total land area of 37,487 ha, located in two provinces, and approximately 65,000 inhabitants living in the buffer zone in two towns and nine communes. BMNP faces a lot of challenges in their efforts to protect biodiversity. Since land for agricultural cultivation is scarce for households, there is high pressure to exploit forest resources. The conflicts between the BMNP Management Board and local people living around BMNP has increased due to strict national forest policies in forest management and conservation at the SUFs. Hence why the BMNP is a suitable site for doing research on assessing the participation of local people in benefit sharing of forest resources.

Thuong Nhat commune was chosen as a project site for collecting information and holding interviews. It is home of Co Tu and Kinh people, of which the Co Tu are the majority group and have lived there the longest. Most of the income of the Co Tu ethnic group depends on forest resources, while the Kinh group's income is from trading and salaries from working with the government. Traditionally, Co Tu women depend on forest resources for their family subsistence, medicine for child care and fuel wood. According to Hoa and Chau, 90% of women in Thuong Nhat mainly collect herbal medicine, firewood, bamboo and snails in the national park to provide for their household, while 95% of men collect timber, rattan, honey and uoi seeds, etc. for commercial purposes (Hoa and Chau, 2012). Co Tu women are heavily burdened with childcare, reproductive responsibilities and housework so they spend less time collecting NTFPs compared to men. Since roles of Co Tu women and men in forest resource use and, in the household, are different, the BSM affects them differently.

In 2008, Thuong Nhat was included in BMNP after the park was extended. The commune was the first site to be selected to apply the BSM pilot policy in BMNP. There are seven villages in Thuong Nhat commune namely: Ta Rin, Lap, A Tin, Ta Lu, A Sach, La Van and Hoa Hop. Under the forest administration system managed by the BMNP Management Board, the buffer-zone is divided into different zones for controlling and monitoring forest resources. During implementation of the BSM, each village was given their own forest area to manage and collect NTFPs. They now have legal rights to collect NTFPs and the responsibility to control that area in order to prevent outsider people from collecting their forest resources. Two villages, namely Ta Rin and Lap, which are located near the road going to the main gate of BMNP were selected as participants for this research. These two villages were selected because they are the poorest villages in Thuong Nhat commune and villagers' livelihoods mostly depend on the natural resources from BMNP. According to Thuong Nhat commune, the major occupation in both villages is farming, however, there is not enough land for local people to grow paddy rice and other crops. Poor and near-poor household rates in Ta Rin and Lap villages are higher compared to the other seven villages in Thuong Nhat commune. Villagers in both villages are collecting NTFPs in the areas of the three streams Tan Nan, Chan Mang and Ma Rai. Almost all villagers are from the Co Tu ethnic group and their livelihoods depend on forest resources, especially the exploitation of timber (Thuong Nhat Commune, 2010). According to BMNP records, the number of households in the two villages, who registered for BSM's membership are higher compared to the other five villages. The map below represents the study area location.



Figure 1.1: Map of study area (Source: Author)

#### Co Tu People

The Co Tu peoples, also referred to as Katu, are mainly living in Thua Thien Hue and Quang Nam provinces, which belong to Central Vietnam. Co Tu is one of Vietnam's fifty-four officially recognized ethnic minorities. The name Co Tu means "people who live in the headwaters" ("Co" indicating "people" and "Tu" meaning "head-water"). They believe that "stream sources are the home of powerful spirits and the source of the fertility of their fields" (Arhem, 2009). According to the Vietnam Ethnic Committee in 1999, Co Tu's population was around 50,458 people, their official language is Co Tuic and they are considered the oldest ethnic group living in central Vietnam. Their livelihood mainly depends on forest resources. Traditionally, they practice

swidden agriculture, collect NTFPs and hunting wild animals (Bayrak et al., 2013). Due to the government's policy on abandoning the swidden farming of dry-rice as a means to avoid deforestation, Co Tu people nowadays focus on paddy rice, corn, bean, cassava, sweet potatoes, banana, vegetable, fruits and mono-crops in the fertility-limited lowlands and uplands. However, the area for paddy cultivation is very small and there is no intensive farming for efficient lowland agriculture model applied to this area (Arhem, 2009). The Co Tu's daily household income is from forest resources, the paddy harvest plays an important role in their livelihood. The Co Tu have their own culture and religion. However their culture has changed due to migration during the Vietnam War and country reunification in 1975 (Persoon, 2004). To adapt to the changing society and environment, Co Tu people settlements are handed over from generation to generation, and over time have developed a specific moral, physical and social culture (Bayrak et al., 2013).

Historically, the Co Tu society is based on clan and kinship and it maintains social ties with other villages. The village is the grassroots administrative unit in their traditional society and boundaries of the villages and their land are clearly defined. The different clans and families in each Co Tu village are administrated by a village patriarch, who is selected by the village's elders. At village level, the patriarch has a leading role in Co Tu society and natural resource management, as well as being responsible for solving problems or conflicts. He plays an important role in the existence of the village and is a village spirit symbol (Bayrak et al., 2013). Nowadays, the patriarch only has the role of a spiritual person to other villagers. Instead, the headman will manage the village and he is selected by villagers and officially endorsed by the Commune People's Committee. Due to the loss of various traditional customs and activities, as well as rapid changes in social structure, the patriarch now plays a minor role in Co Tu society. The local government system authorizes all activities in the village and the community and often makes top-down decisions to solve problems and conflicts (Tuan, 2006). Co Tu people believe in the spirit of the forest and the forest being the spiritual essence of all things (Bayrak et al., 2013). Like other ethnic groups living in range of Truong Son mountain, the Co Tu's customary laws deal with forest management and is integrated into their whole way of living. They divide the forest into four types: "Ghost forest", which has to do with their spiritual believes; "spirit forest" where their gods and spirits live; "headwater/water protection forest" that are used

to protect water resources; and "forest for exploitation" where it is allowed to cut wood for house construction and other uses (Tuan, 2006, pp.169-206).

In Co Tu society, common property and private property are clearly divided. Usually, common property can be given to the community, the clan or family, and family branch levels, while the Ghost, spirit, headwater and grasslands from forests are owned and managed by the village. Privately owned property is land for swidden cultivation, gardens and residential land. In the village, the patriarch distributes the forest land to clans and clan-heads, who have to distribute it among the village households. Co Tu people care about their NTFPs sites, where they have their own principle on collecting: "first come, first served", thus in the past, Co Tu people have their own system for reserving areas for collecting NTFPs (Tuan, 2006).

The traditional administrative management system of Co Tu people only includes men. They play the most important roles in the community and in household activities which creates discrimination between the genders in Co Tu society. Their society is a patriarchal society where men control and make decisions for the household. As such, women have to stay at home for giving birth, caring for children and doing domestic work in the family. The Co Tu cultural society has many strict customary laws which rule over women. According to these customary laws, men can participate in all the important worship ceremonies of the village, whereas women rarely get permission to attend. Men can benefit from inheritance, divorce or remarriage but women cannot. These customary laws make Co Tu women more vulnerable in their society and, as a result, they have a lower position than men. According to customary law, before getting married, the bridegroom has to pay dowry to the bride's family. This money or gift is considered as payment for caring for their daughter and the amount of dowry often creates a challenge for the future husband to provide. In traditional Co Tu society, women are perceived as the main labor force at home and in the field, and Co Tu women have to work hard for their husband's family to compensate them for the value of the dowry that their parent received before (An, 2002). In case their husband dies, they will live with their son until they die.

Nowadays, the administrative management system brings more opportunities for Co Tu women. They have their own women's union in each village and commune where they can raise their concerns. Furthermore, women

can participate in the commune authority's management system and have access to social welfare. Both Co Tu women and men share household and commune responsibilities. Women still bear the burden of farming, gardening and household work. Their life depends heavily on natural resource exploitation. After Doi Moi<sup>4</sup> (Huan, 2013), the Government of Vietnam had programs which resettled ethnic groups to more convenient locations for administration management and allowed ethnic groups to have access to roads, markets, schools and health care centers. The Co Tu people in Nam Dong district had to move out of the primary forest areas and were resettled to new areas in Thuong Nhat commune which nowadays belongs to BMNP. Strict policies on forest management prohibited exploitation activities inside BMNP, and this led the Co Tu people to face challenges in collecting food and products from the forest. As there is not enough land for agricultural cultivation, local people illegally log timber and hunt wild animals for their family's survival during times of food shortage. As food shortages are increasing, as are the rates of illegal exploitation of forest resources in Thuong Nhat commune. Conflicts between the BMNP Management Board and local people are common and the local people believe that they are the ones to pay the cost of protecting the biodiversity in the area. To improve this situation, the Government of Vietnam piloted a policy on BSM which allows local people of Thuong Nhat commune to collect NTFP's species in BMNP. This is the first policy on forest management to allow the collection of NTFPs inside PAs in Vietnam.

#### Statement of the Research Problem

The Government of Vietnam has approved policies which allow people to participate in forest and rehabilitation management programs over the last last three decades. As a result, the forestry sector has created income for millions of people. In 2006, the forest areas had grown, and now made up to 38% of land cover in Vietnam and the growth of forestry production value is, on average, 2.8% per year (FAO, 2007; GIZ, 2006). At the time of research, forest policies strictly prohibited residents to collect any forest resources from SUFs, as all exploitation activities in PAs were illegal. These policies pay no attention to the needs and rights of indigenous people living near PAs. As policy makers

<sup>4</sup> Doi Moi, meaning renovation, is the name given to the economic reforms initiated in Vietnam in 1986 with the goal of creating a socialist-oriented market economy.

underestimate the role of forest resource in the lives of local people, they force forest dwellers to illegally exploit or face adverse effects on their livelihoods and welfare (McElwee, 2010). People lose their access to forest resources needed for family consumption and cash income due to strictly enforced forest conservation policies. Therefore, interest and participation of local people in conservation activities is limited and conflicts between forest users and authorities of PAs are inevitable.

The lack of gender approaches and the neglect of the specific views and needs of women and other marginalized groups in planning and implementation of natural resource management (NRM) programs, results in mistreating communities as homogenous groups (Agrawal, 1997; Mearns et al., 1998, cited in the Mikkelsen, 2005). As a result, women do not have equal access or benefits from these resources (Mikkelsen, 2005). Traditionally, women are the main food producers and collectors of forest products and they know how to use the different kinds of species for food or for medicine, and where they can collect it in the forest (Krishna, 2004). As such, women play vital roles in NRM and they have the potential to be strategic actors in sustainable development and environmental conservation (Mikkelsen, 2005). However, due to social constructs and cultural norms, women living in mountainous areas have no rights and limited access and control over land, thus they are still depending on their husbands for activities related to land use. Therefore, all policies regarding the collection of forest products are affecting women's rights to forest resource use and benefits.

Many environmental agencies nowadays have taken the rights-based approach World Wild Fund (WWF), United Nation Environment Program (UNEP) and IUCN for granting indigenous people the right to manage their own forest resources, nonetheless, legal frameworks still constrain most integrated development and conservation projects established in buffer zones of PAs and National Parks (Mikkelsen, 2005). The implication is that local people are not recognized as stakeholders with rights and responsibilities, who are able to share the benefits from natural resource use. This negligence brings conflicts in many cases between the governments and local people, regarding the use of forest resources around the world.

In Vietnam, the Law on Gender Equality (2006) and National Strategy on Gender Equality for period 2011- 2020 (2011) currently require the implementation of gender mainstreaming and inclusion of gender issues in all sectors, to improve the quality of life for all Vietnamese citizens. In addition, the government has a well-established and comprehensive policy framework for biodiversity conservation. However, lack of proper implementation of the policies to ensure women's and men's access and participation in managing forestry resources, is still a problem. A gender-sensitive and gender specific approach to biodiversity conservation is needed. Since policies on forest protection and development adopted over the past few decades do not reflect gender issues, women are not considered as individual stakeholders to participate in forest management programs in PAs.

In order to find solutions for local people and help them to gain benefits from forest resource use, the pilot BSM policy was introduced in 2012, which piloted the regulated sustainable extraction of NTFPs in ecological restoration zones (PAs), conveying a new approach on forest management and conservation in Vietnam. Benefit sharing in the context of Vietnam should be understood as actively engaging local people living nearby PAs in the participation of conservation programs and allowing them to collect NTFPs for food security and income, while considering the balance among biodiversity conservation and forest resource use. Furthermore, the legal and sustainable harvesting of NTFPs can improve the motivation of users to engage in conservation management strategies. This new pilot policy brings an opportunity for local people living nearby SUFs to legally access and collect NTFPs, which was prohibited to them for many years. By participating in the BSM, local people can collect NTFPs for their household following exact guidelines.

After the Vietnam War, demand on timber for construction decreased forest areas considerably. Many policies, regulations on forest management and conservation were promulgated to save the remaining forest resources and introduce a more sustainable approach to forest resource use. The BSM was recently issued to encourage people's participation in sustainable harvest of NTFPs inside SUFs. This approach not only gives opportunity to local people who live nearby SUFs to collect NTFPs legally but it is also helps the government to openly communicate with local people on forest management and reduce or avoid conflicts, etc. However, there are still questions regarding the gender perspective in BSM: *Can women determine, have access to and control over forest resources for their income?* This study aims to analyze the rights, roles, responsibilities of both women and men in the exploitation of NTFPs and how they benefit from forest resources, in particular in PAs.

#### **Research Objectives**

The overall objective of this study is to analyze how the benefits of NTFP collection is distributed between women and men in the local area, and the challenges that they face in participating in the management of forest resources by examining the case of Thuong Nhat commune, one commune in the Bach Ma National Park's buffer-zone.

#### Rationale of the Study

After country reunification in 1975, the Government of Vietnam promulgated various policies on forest resources protection to involve and promote people in sustainable forest utilization and management. Many laws, decrees, regulations and forest development strategies were adjusted to encourage people's participation in managing forest and conservation and/or investments in the forestry sector over the last three decades. Through the "Five Million Forest Hectares" Program, community forest management, forest tenure reforms, forest land contracts and decentralization of forest management programs, the government handed over more rights to citizens in regard to investment and management of forest resources and forest land. This resulted in great achievements in the forestry sector and changed the perception of international institutions of the forest management system in Vietnam.

Although gender in forest management programs and policies are widely accepted in development processes, in practice, this approach is still lacking. There is still a gap in information related to women's role in managing forest resources and conservation. Thus, this research is a primary analysis of the BSM, which focuses on sharing benefits between the government and local people living around PAs in Vietnam by sustainably harvesting NTFPs. Besides this, the study also analyses the differences between women and men in the utilization of these forest resources and women's role in the management of forest resources and conservation.

The study was carried out in Thuong Nhat commune within BMNP's buffer-zone and it can be representative for similar settings. Traditionally people living in, or nearby forests, collect forest products for household daily food and cash income. Strict policies, which do not allow the collection of any forest resources from SUFs, has led to increasing numbers of illegal exploitation of

timber and NTFPs, and to conflicts between the government and ethnic groups. Therefore, co-management and co-participation in sustainable forest management of PAs is needed to create a better understanding of forest protection and conservation among local people. Currently, there is a lack of research on the gender concerns in the forestry sector in Vietnam, especially women's participation in forest resource management.

#### Chapter 2

## Review of the National and International Policies on the Benefit Sharing Concept

This chapter depicts the roles of women and men in NRM, as well as policies in forest management and conservation during recent decades in Vietnam. It also discusses the gender roles, rights, responsibilities and benefits of resource use through people, who live in or nearby protected areas; how men and women roles affect forest management and conservation; how forest resource degradation affects women; and ultimately, how to integrate gender issues into the forestry sector.

#### **Benefit Sharing: Some Concepts**

Several benefit-sharing agreements can be found nowadays in different fields all over the world, including fishery, wetland, watershed protection, hydropower projects, wildlife, forest and protected area management and it is understood to be quite differently in all sectors. The context of genetic resources in benefit sharing, discussed in the Protocol at Nagoya<sup>5</sup>, states that "benefits

<sup>5 &</sup>quot;The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, also known as the Nagoya Protocol on Access and Benefit Sharing is a 2010 supplementary agreement to the 1992 Convention on Biological Diversity." (CBD Secretariat, n.d.)

arising from the utilization of genetic resources as well as subsequent applications and commercialization shall be shared in a fair and equitable way with the Party providing such resources" (CBD, 2011).

Benefit sharing was defined by Food and Agriculture Organization (FAO) as "unique agreements between stakeholders, such as the private sector, local communities, governmental bodies and non-profit intermediaries, concerned about the equitable distribution of benefits related to the commercialization of products" (FAO, 2003). Thus, "trading in wood products, non-wood products and forest services can be applied through mechanisms such as trust funds, ethical trade agreements, certification, charitable donations, taxes and producer-trader partnerships" (Ibid).

The World Bank (WB) notes that benefit sharing arrangements are distinguished from partnerships in that stakeholders (e.g. government, communities and the private sector) can receive a share of the benefits without being engaged in productive activities (WB, 2009). Benefit sharing arrangements include a mechanism for collecting and redistributing a ration of revenues to affected communities. Those arrangements ensure direct benefits for people, and limit authorities' ability to deviate funds to undesired ends (Fisher, 2007).

According to Borrini-Feyerabend, a famous scholar and advocate of the benefit sharing concept, in BSM, it is necessary to recognize and incorporate stakeholders with different roles to use and explore natural resources in order to meet the goal of environmental conservation (2000). Particularly, the governments need to consider local people's rights and responsibilities in equitable sharing of the natural resource. However, Borrini-Feyerabend emphasizes that the co-management process is an important step of BSM, which allows stakeholders to fully access necessary knowledge and relevant information concerns. According to Borrini, people have rights to negotiate and gain the confidence to respect all agreements (Borrini, 2000).

In Vietnam, Ministry of Agriculture and Rural Development (MARD) and Vietnam Conservation Fund (VCF) use 'BSM' as the preferred term for forestry sector management. The concept behind this term is co-management or participatory management, and a partnership arrangement which is based on sharing of responsibilities, rights and benefits (Bechstedt et al., 2010). Since 2008, VCF supported the Forestry Protection Department (FPD), belonging to MARD, in the 'piloting' of the BSM, by negotiating agreements between

SUFs-Management Boards and local communities to help local people mitigate losses in their access to forest resources, and enhance biodiversity conservation activities. This BSM (legal document No.126/QĐ-Ttg) legally allows communities living around SUFs the rights, as well as responsibilities, in BSM with special effort made on generating local income and improving household livelihood activities. People are allowed to collect NTFPs based on harvest plans of SUFs and following the national policy. It also possible solutions to forest resource problems, by balancing priorities of biodiversity conservation, with the consideration of local human needs.

Globally, there has been a lot of research already on gender and NRM which provides lessons learned on forest resource management in forest communities. In Vietnam, the government has made progress towards adopting benefit sharing practices in communities through the BSM model. It shows the government's efforts to incorporate people into forest resources management and avoid conflicts, which results in improved conservation. However, the form of BSM used in Vietnam, is still not clear. Preparations for potential BSM agreements show that there are hidden drawbacks in sharing benefits with communities. Responsibilities, rights, concrete and real benefits, as well as information on BSMs needs to be shared equally between the key comanagement partners in a clearly spelled out and agreed upon framework. Furthermore, community contributions to forest protection and sustainable use can only be established once the Government of Vietnam has demonstrated, in practice, its commitment to enforce its own forest laws and is showing serious efforts in "fighting environmental corruption" (Bechstedt, 2009, p.12).

These issues on forest management and development can be solved if the Government of Vietnam involves itself in extensive consultations with local people living around SFUs, through facilitation of their participation in the design of management actions. Furthermore, the recognition of men and women's rights to harvest forest products for household subsistence and generating income, as well as their roles and responsibilities, will greatly relieve tensions between the local people and SUFs authorities, and will likely open new approaches on forestry management in Vietnam. However, there are still limitations in mainstreaming gender issues and the gender perspective in NRM in Vietnam, which need to be urgently improved in order to bring better cooperation between local people living around PAs.

#### Gender in Natural Resource Management

Women and men play important roles in NRM via different roles, tasks and responsibilities in the family and community. Evidently, women and men have different opinions, attitudes, needs, priorities, knowledge and power over resources in environmental protection and management. Thus, they interact with the environment in different ways which provides them with different opportunities to protect and manage it more sustainably.

Historically, cultural and social factors influence men and women to determine their different roles and responsibilities in using natural resources within households and communities. Men utilize it and influence the condition of the environment; while women normally spend most of their time collecting forest products for family subsistence and domestic use, men collect timber and NTFPs for income generation.

Influenced by social constructs and norms, women and men are not equal regarding access and control over land. Many women from different countries and ethnic groups have no rights to own land or secure land rights, except for user rights, mediated by men, and those rights are highly precarious to women. In mountainous areas, landless women often depend on common property resources, such as fuel wood and wild foods. Since men also control the common property resources in the commune, it may make women face more difficulties in finding food Without secure land rights, women have very limited access to credit to invest in improved management and conservation practices.

Men often make decisions at household and community levels in regard to managing or controlling natural resources. Social and cultural barriers prevent women from access to higher education, which affects their confidence in raising their voices, share their concerns and detains them from participation in decision making processes. Many studies have focused on gender and forestry conservation management, covering various aspects including participation in recent years, and identification and classification of forest products which are collected by men and women. The findings show that distribution of benefits among both sexes is unequal, and a review of various policies and strategies is needed to address the gender specific relationship between natural resource use and management. In fact, the policies state that women and men equally manage forestry conservation.

Many cases highlight the gender aspect in using forest resources, which brings attention to unequal access to forest products between men and women. As a result, women lack the ability to raise general income and to further their economic independence. In turn, this leads to women losing opportunities to perform their roles and actively participate in community activities (Agrarwal, 1997). For this reason, policy implementation and development interventions in biodiversity conservation in Vietnam have to consider and address the impacts on both men and women.

Globally, local authorities and institutions in the field of forestry lack female staff. It is a reality that men dominate forestry organizations, especially those in developing countries (Mishra-Panda, 2001). Many projects and programs have been heavily criticized for not giving attention to gender issues. For example, in the government project, Joint Forestry Management (JFM)6, in India, the roles of female JFM staff were not considered as important as those of the male staff at national and community project levels (Kulbhushan, 2002). Women were considered in different groups of beneficiaries instead of looking at them as potential stakeholders in forest management (Locke, 1999). Even though, at community project level, gender budgeting and planning in JFM has concentrated on two issues: increasing women's representation in local institutions and gaining recognition of their special knowledge in using forest products, in reality women participated in JFM without support mechanisms that empowered their rights and roles in forestry management and rural development (Locke, 1999). Planning techniques and approaches in JFM neglected gender disaggregation and failed to understand gendered strategies in using livelihood resources from the forest. This negligence impacted women and gender relations in social forestry, where women are not included and/or their participation in community institutions under JFM is made impossible. In addition, women were reluctant to attend JFM meetings due to existing time constraints in fulfilling their household obligations. At the community project site, gender inequality was obvious, as men dominated decision-making on collecting and using forest resources. Other reasons, such as a lack of gender

<sup>6</sup> JFM is a partnership in forest management among state forest departments and local communities in India. The policies and guidelines of the JFM were enunciated in the Indian National Forest Policy of 1988 and JFM guidelines of 1990 proposed by the Government of India.

studies in the JFM planning process, resulted in gender relations in the forestry society of India "still incompletely addressed" and failure to "operationalize commitments to women's welfare" (ibid). Without understanding women's roles in the forestry sector and lack of serious response to implementing commitments by involving women in the environmental project, the JFM could not address gender inequality, and increased the unpaid contribution of women in forestry management (Mayoux cited in Locke, 1999).

Similarly, in Vietnam, almost all forestry institutions are male dominated (Dzung, 2006). The personnel system for PAs consists of five levels, in which 95% are male (Appleton et al., 2012). According to Dzung, the recruitment process for working in PAs discriminates against women as the work is considered "too hard for women" or not suitable for women (Dzung, 2006). Due to that perception, women working in PAs always take part in the restaurants, cleaning dishes or selling tickets instead of being involved in managerial positions or in designing and planning forest intervention programs. Furthermore, low literacy rates and levels of education are barriers which limit female and male staff to be promoted to higher positions. Lack of equal women's representation at all levels of decision making related to gender in the forestry sector is a setback in policy development processes, and thus, resulting policies are mostly male-oriented. For that reason, gender mainstreaming in forestry conservation necessarily includes changing the policy framework to encourage women's participation in conservation management and interventions.

Community forest management was introduced in Vietnam in 2004. These reforms moved the country's forests from state management to private individual management. It was the first time that communities could gain legal recognition as forest managers. The Community Forest Management program was piloted in 64 villages in 10 provinces in Vietnam during the 1990s and early 2000s under different donors, national programs and projects. Technical guidance was provided through a handbook for Community Forest Management to forest communities, and households and individuals were given the legal rights to manage the forest at their village. Besides the success of recognizing local people as forest owners, there were still limitations in Community Forest Management in the pilot areas, such as insufficient time to fully field-test the model, overly complex technical guidelines, procedures and regulations, and a focus only on timber products which neglected the important roles of NTFPs, as well as ignoring gender issues.

In Vietnam, there are only a limited number of studies focusing on gender in the forestry sector. The National Forest Strategy 2006-2020, was the first policy in the forestry sector where gender issues were discussed and attention was paid to women as stakeholders in forest management. However, gender issues are still behind the strategic plans in the forestry sector, especially in community forest management. At community level, women can be involved in protection and utilization of forest resources but in reality, decision-making in meetings and management of the forest at community level is led by men. Results from studies show that women have not been encouraged to participate in sustainable forest management programs at community level. Their access to forest land and forestry credit loans is still limited due to lack of proper policy mechanism to ensure their rights to land (Dzung, 2006). Lack of gender planning in community forest management in Vietnam has led to gender inequality in managing forest resources.

The Government of Vietnam recently piloted the BSM which allows people living in and around SUFs to collect NTFPs, and participate in the planning and managing of forest resources in collaboration with the PAs Management Board. This policy emphasizes rights, roles and responsibilities of stakeholders and their participation in forest management and NTFP collection inside the SUFs. This is the first time the government has used the benefit sharing concept in forest management, allowing local people to legally harvest NTFPs in SUFs. However, as with previous forest management policies, the BSM format is a centralized form of forest management. In the BSM policy, gender issues are not mentioned, and women's concerns in the participation of the BSM program are totally ignored. Giving rights to women in accessing forest resources and encouraging them to actively participate in NRM will contribute to balanced gender relations in the household and society. It is not easy to overcome the gendered social context without addressing gender inequality in NRM, because Vietnamese women still "have to deal with cultural constraints of their having been excluded from such forums by tradition" (Sarin, 1995 cited in Locke, 1999). Changing ideologies on gender in the forestry sector will need some time to elude constraints in Vietnam, since there is still lack of serious attention to operationalizing or monitoring commitments to involve women in NRM, and safeguard their needs is not sufficiently given to the political economy of development (Locke, 1999).

#### Women's Access to Non-timber Forest Products

Non-timber Forest Products are defined as: "goods of biological origin other than wood derived from forests, other wooded lands and trees outside forests" (FAO, 1999). NTFPs have long been an important part of the livelihood resources for people living in or nearby forest areas (Younging et al., 2006). They are diverse and comprise a variety of products which provide daily food, including wild foods, medicines, and construction materials (Quang and Anh, 2006). In recent decades, interest in NTFPs has rapidly increased among conservation and development institutions (Arnold and Ruiz-Perez, 1998). Understanding the important role of NTFPs, many international agencies, such as WB, Canadian International Development Agency (CIDA), International Development Research Center (IDRC), Center for International Forest Research (CIFOR) and IUCN, etc., have incorporated the concept of NTFPs into their research and development programs to reduce poverty, promote sustainable use of NTFPs and encourage forest conservation around the world. Therefore, as a result, the concept of NTFPs became an economically acceptable ecological option of development (Ahenkan and Boom, 2011).

Traditionally, NTFPs play a significant role in local poor people's livelihood generation. NTFPs provide various sources of food and household income for millions of indigenous and rural women and men in some of the most remote areas of developing countries. It has been estimated that there are more than 60 million indigenous people in Latin America, West Africa, and Southeast Asia who are highly dependent on forest resources. Besides that, an estimated 400-500 million people are directly dependent on forest products (IUCN, 2008). In Vietnam, more than 24 million people live nearby SUFs and are dependent on forest resources, more than 30% of the country's overall population (Beer, 1993). They depend on forest resources for their livelihood. Similar to other countries, NTFPs in Vietnam provide food, fodder, medicines, and fuel and building materials. Therefore, the harvesting of NTFPs significantly contributes to poverty reduction, securing both food and income for local communities living in mountainous areas, and especially creating income and real employment for indigenous women.

There are gender differences in knowledge and perceptions of forest management and conservation. As both sexes have different roles, they also have specifically gendered needs, interest and knowledge. Collecting NTFPs for family subsistence, women play roles as food producers and protectors of the environment. In addition, there are distinct and gendered differences in preferences in relation to useful forest products; women's preferences for various forest species are based on their multipurpose household uses while men prefer to focus on extracting timber for cash income and construction purposes (Byer and Sainju, 1994). Moreover, knowledge about species and their uses between ethnic women and men are different, as women are more knowledgeable about medicinal plants for maternal health care, caring for sick children and other illnesses of their families and communities (Rijal, 2008). Those differences in roles, tasks, references, responsibilities and knowledge related to NTFPs are also linked to the degree and rights of men and women to harvest and access forest resources.

In most South Asia and Southeast Asia countries, gender-sensitive biodiversity conservation, sustainable use and benefit sharing are influenced by formal and customary rights, land ownership and the market (Khadha and Verma, 2012). Since land and tenure rights are mostly controlled by men, and given the earlier mentioned preference towards products which provide cash income, men decide to plant economically valuable trees rather than species which provide food, medicine and fodder. As a result, women not only lose their rights to use or access NTFPs for their family income, food security and medicine for caring for their family's health, they also lose autonomy and experience a feeling of disempowerment (Otzelberger, 2011).

#### Market Orientation: Non-timber Forest Products and the Poor

According to IUCN, about 30% of Vietnam's population and 80% of Laos PDR's population utilized NTFPs for their livelihoods in 2007 (2008; Warner et al., 2008). However, concerns have been rising in regards to whether poor households have equal access to markets. Furthermore, have attempts made in developing NTFPs for poverty alleviation really reached the poorest of the poor?

Experiences from all Southeast Asians countries show that the NTFPs were sold through middle-men channels. Besides that, there have still been constraints that limit poor households from getting benefits from NTFPs, thus little value was added to the products. NTFPs have been sold per bundle and

not according to weight, and poor households did not have access to good prices due to lack of adequate market information (Warner et al., 2008, p132).

In response to the question, "how much can NTFPs contribute to poverty alleviation?"; the true extent of NTFPs contribution is hard to quantify, but roughly estimated, on the average, NTFPs are worth a total of almost US\$ 320 per year for each rural household, contributing to about 44% of subsistence value, 55% of cash income, or 46% of the total household economy (Baird et al., 1999 cited in Foppes and Ketphanh, 2000) Obviously, NTFPs are important for the poor. However, trading NTFPs through long market chains, mostly dominated by middlemen, left little information on price, quality standard and international market feeding back to the local people.

In another case of the cultivation of medical and aroma plants in Nepal, carried out by Rajendra and Krishna, it was reported about 2-10% of the total income was shared with community forests and more than 90% went to the users, whether they are leasehold forests (landless people) or the poor, vulnerable and socially excluded groups (Rajendra and Krishma, 2008). Another study done by Choudhary et al., reported that 50% of household income was derived from the harvest and sale of high-value MAPs which helped poor people raise their annual income from 4,227 Nepali Rupees (Nrs) in 2005 to 5,800 Nrs in 2006 (Choudhary et al., 2008).

In Vietnam, a study by Sharon Brown and Fernando Potess analyzed different NTFP dependent groups, revealing that upper income households mostly played the roles of traders, while middle income households were more reliant on NTFPs for consumption, and the poorest households were typically the most dependent on NTFPs; 78% of poor people exploited forest resources at compared to 63% of non-poor households (Sharon and Fernano, 2008). Another small case study evaluated the role of medicinal crops in different group's income in the Bach Ma buffer zone, showing that the rich households were 0.54% dependent on NTFPs for their income, wealthy households were 1.85% dependent, average households were 1.33% dependent and the poorest households were 3.9% dependent (Dien and Thang, 2008). Yet another study also confirmed that poorer households were more dependent on NTFPs than wealthier households (Quang and Anh, 2006). Even though NTFPs are very important resources for poor households, great challenges remain in the lack of market information and pricing policies associated with them.

There is a dilemma existing in this approach as despite a lot of reports revealing the positive contributions of NTFPs to the poor, a RECOFT, WWF and SNV report pointed out that in Vietnam, poor functioning local government bodies and insufficient incentives given to poor households has meant that poor households have been excluded, including ecotourism opportunities (RECOFT, WWF and SNV, 2007). Moreover, at the community level, those who have strong entrepreneurial skills will be chosen to participate in training programs, resulting in further isolation for the poor who do not fit this category.

However, successful practices were seen in Laos; poor households in Nam Pheng village could get higher prices for NTFPs as they established marketing groups that could help them better negotiate bamboo prices, and therefore, they were able to increase their income by at least 6-fold. In another successful case in Pathoumphone District of Champasak Province, poor people gathered honey together and after involvement with a local NGO and a private company, could get a 3-fold higher price (RECOFT, WWF and SNV, 2007). Thus, it is necessary to pay attention to developing the market for NTFPs in Vietnam, to help ethnic groups.

# Participation and Benefit Sharing in Forest Resource Use in Protected Areas

Due to high demands for timber for house construction after the Vietnam War, forest resources were exploited heavily leading to an immense loss of the forested area in the country (McElwee, 2004). In the early 1990s, the Government of Vietnam therefore changed the forest management policy from timber extraction to a more protection-focused approach, which was strongly supported, financially and technically, by donor agencies and international non-governmental organizations (Sowerwine, 2004). The PAs became main hubs for biodiversity conservation around the country, emphasizing pristine areas without considering the human disturbance of using forest resources (Wolfram et al., 2013). While social scientists challenged the ethical and pragmatic value of "people-free" nature, governmental authorities and conservation agencies opted to exclude villagers from access and use of forest resources and resettlement of local communities living within PAs was discussed. (MARD, UNEP and WCU, 2006). The implications of such an approach were significant given the substantial increase in the number of PAs

from 73 to 128, increasing the area from 880,000 ha in 1986 to 2.3 million ha in 2006 (McElwee, 2010, Wolfram et al., 2013).

The Government of Vietnam recently started to give more attention to local people by encouraging them to participate in conservation programs in some pilot protected areas (Quan and Suriya, 2011). In doing so, the government led a fundamental change in forest management in line with the national drive to preserve biodiversity and consolidate conservation and development goals (McElwee, 2011). By recognizing the important role of people living inside and nearby PAs, the international, national and local stakeholders in biodiversity conservation have also had to change their approaches to include local people's participation (Zinggerli, 2005). By including local people at different steps of planning, decision making, monitoring, evaluation and benefit sharing of development processes in the PAs, the government avoids conflicts and increases cooperation between local people and management boards of PAs, and overall improving the conservation status. Through this process, an improved level of understanding of the benefits of conservation can be achieved among participants, as well as an acceptance of measures such as harvesting quotas and special seasonal protection efforts. This is first inclusion process for community people in conservation in Vietnam. (Quan and Suriya, 2011). However, despite continuing efforts to involve all local people living nearby PAs, the participation of women, poor and marginalized groups in forest management activities are still far behind local people's needs.

In recent years, a lot of research has focused on understanding which differences the contributions of forest goods - whether they are NTFPs or payment of environmental services or other methods of environment income - make to the millions of people who live near the forests (McElwee, 2010). Through these studies, scientists have tried to identify forest species which local people harvest in order to distinguish categories which support decision makers strategy plans for forest management (Wundern, 2001). "Benefit sharing" has become a useful term for a new forest management model, ever since the Nagoya Protocol in 2011 explicitly outlined benefit sharing, alongside the CBD, which was formed in 1991. Along with the objective of biodiversity conservation and sustainable development, both platforms are strongly emphasizing "the fair and equitable sharing arising" from various fields such as "biodiversity, ecosystems, species, genetic resources and ex-situ biological materials", especially focusing on the rights of beneficiaries "with the aim of

ensuring that benefits arising from the utilization of genetic resources that are held by indigenous and local communities" are shared (CBD, 2011). The concept of a fair sharing benefit from CBD and the Nagoya Protocol distribute bargaining power to concerned stakeholder's (Richerzhagen and Holm, 2005).

Participation and benefit sharing are related issues, as regulations on benefits should be clear and transparent (Quan and Suriya, 2011). There are several factors playing an important role in determining whether local people participate or not in conservation programs, forest protection activities and discussions on issues such as rights, responsibilities, and benefits. Local people are not interested in participation of any programs from protected areas if they don't see benefits. However, the success of local participation in getting equitable benefits is still questionable, since it is mostly powerful actors who work in conservation and practical forest management, rather than community people, and it seems connections to political power and financial benefits are the driving motivations. (Nightingable, 2002; Wolfram et al., 2013).

In the discussion about understanding power issues in stakeholder's roles, Dubious emphasizes the use of the 4Rs tool to analyze "rights, responsibilities, revenues and relationships of various stakeholders involved in forest management" (Dubious, 1998, p.78). A case study in Cameroon showed that benefit sharing's decisions must be based on principles which pay respect to the stakeholders' rights in accessing forest resources and their responsibilities in managing forest resources (Tekwe and Percy, 2001). Furthermore, the 4Rs create connections regarding who benefits, who has rights, who takes responsibility and who utilizes forest resources. This participatory tool can be widely applied in required situations for a more organized and equitable NRM.

BSMs in Vietnam is a forest resource conservation and development policy which acknowledges the role of local people in managing forest resource from SUFs. The rights to participate and share benefits from harvesting NTFPs inside PAs may allow local peoples participation in designing management actions, which could be accepted in Vietnam's policy framework. There are still issues missing which should promote the empowerment of local communities to conserve their traditional knowledge in managing natural resources, and to communicate this information to PA Management Boards.

Access and control over resources are very important for almost all people living inside and around PAs in Vietnam. The new approach to use forest resources could bring many advantages to indigenous and rural people living in the mountainous areas of Vietnam. It could improve not only their welfare, gender relations and livelihoods but also enhance their rights and benefits by actively participating in designing and planning to manage resource use in PAs.

### Forest Management in Vietnam

Many countries around the world are committed to biodiversity and sustainable forest management (Phung et al., 2012). Accordingly, the Government of Vietnam already incorporated forest management and participatory governance concepts to manage the forestry sector after country reunification in 1975. The State promulgated different policies on forest management and conservation which were designed to strengthen forest protection and biodiversity conservation. However, these forest policies in 1990 mainly focused on two new concepts: "forestry socialization" (the Vietnamese term emphasizes stakeholder participation to achieve "good forest governance") and "sustainable forest management" (Phung et al., 2012).

The deforestation rate increased in Vietnam due to a high demand for building materials, timber exports, migration and natural disasters after the war (Hoang Hoe cited in McElwee, 2004). Accordingly, forest resources became exhausted and there was a serious loss in biodiversity. Forest areas dropped during 1976-1995 (8.25 million ha) alongside high deforestation rates (1.27% per year) (FIPI, 1996 cited in McElwee, 2004). Confronted with the situation of forest degradation, the government promulgated a logging ban and LFPD in 1991 to protect and manage the forest resources. During this time, many donor agencies and non-international organizations (such as United Nations Development Program [UNDP], WB, CIDA, WWF and IUCN) introduced a new global forest concept which included decentralization and good governance through sustainable development (Wolfram et al., 2013 and Phung et al., 2012). As a result of these efforts, forest areas increased from 27.2% in 1990 to 38% in 2006 in Vietnam (FAO and FSIV, 2009).

Since 1990, donors such as UNDP and SIDA assisted the Vietnamese Ministry of Agriculture to present the "Vietnam Forestry Development Master Plan" which strategized moving from state forestry to social forestry by engaging different stakeholders from multiple economic and social sectors. After decades

of centralization in the state forestry sector, this was first law to grant forest area to local owners, including non-forest actors and this was considered as a key solution for improving forest management (Phung et al., 2012). However, the law did not clearly identify an issue of what "forest ownership" should imply nor a clear definition of what forest ownership should mean.

One problem was the ambiguous legal base, which still gave the state property rights and did not make clear which benefits local people could gain from the ownership of forest (Mai, 1997 cited in Phung et al., 2012). As such, the law stated that "the overall management of forests and forest plantations lies with the State" and "all organizations and individuals now legally using forests and forest plantation land shall continue to do so following the provisions of this Act" (SVR, 1991, p.7 cited in McElwee, 2010).

Furthermore, it was emphasized again in the Land Law (1993) that "natural forest and state funded forest plantations are the property of the state" (SVR, 1993a, p.7). As a famous scholar focusing on Vietnam policy's forest management, McElwee, in one article discussed; the State has control over most forest areas, despite the move of recent years away from government planning into other economic sectors (McElwee, 2004).

Between 1992 and 1997, the Government of Vietnam implemented National Program 327, which applied a participatory approach to forest management. The program involved organizations, households and individuals in forest management through land allocation contracts with strict rights and benefits (Nguyen, 2008). The main purpose of this program was to afforest bare land and denuded hills and increase the overall forest cover. Nevertheless, the program was much too optimistic since scope for participation was unclear and unfair; the government still managed forest enterprises and had taken a leading role in controlling almost all forest resources and wood exploitation in the country (Cai, 1999; San and Quan, 2001). Through the Land Law (1993) and two decrees: Government Decree 02/CP (1994) and Government Decree 01/CP (1995), long term land allocation from 20-50 years, introduced to local people to call investment from different sectors into the forestry sector (McElwee, 2004). Again, the term "forest owner" still did not mean that they actually "owned" their forests, as they did not have real decision-making power nor could they transfer, exchange, inherit, or even sub-lease the land (Phung et al., 2012). Women's lands rights did not exist since the land title certificate was issued for heads of households, who were mainly men. Social construction in Vietnam obstructed women from exercising their land rights and challenged their chances to live independent of patriarchal structures (Ha, 2007).

By the end of the 1990s and early 2000s, forest management by communities and groups of households emerged in Vietnam, and these groups were issued forest certificates There were several projects supported by WWF, Japan International Cooperation Agency, and Forest Stewardship Council, to present forest certificates as market instruments to develop sustainable forests in Vietnam (Phung et al., 2012). However, the framework of these projects was not institutionalized in the national forest policy and was in conflict with the civil law because the level of "community" was not recognized as a legal entity in its own right (ibid; Vickers and Dickinson, 2006). Up until mid-2006, guidelines for implementation of community forest management were introduced as pilots in 64 villages in 10 provinces. During this time, devolution of forest to communities and the community management of forest was established as an innovative approach to manage the forest resources of the country. However, community management of forests still remains a sensitive policy issue in Vietnam, despite it having been formally carried out in some pilot projects (Anon, 2000).

The strict management of SUFs which impacts local livelihoods brought many criticisms among forestry institutions, researchers and decision makers. They claimed that even though they were expanding PAs, Vietnam's biodiversity still declined and ecosystems were in unsustainable conditions (Phung et al., 2012). Besides that, SUFs Management Boards did not seriously take account of the needs of the indigenous people living there, and did not consider the main factors influencing socio-economic and sustainable forest management. From the 2000s, many researchers and policy makers called for attention to diversify local livelihood income sources and reconsider plans and policies which extended SUFs and PAs without feasible studies and which prevented benefits reaching the communities in question. A review of the forest management and development laws, especially re-regulation of the structure of forest categories was needed (Thuan et al., 2005). Since local people living nearby PAs or SUFs faced limitations in the availability of land for cultivation, it was necessary to address and diversify livelihood activities and encourage communities' active involvement in policy reform. Furthermore, it had to take account of the balance between conservation and local livelihoods, gender equality and gender relations in forest resource management.

Over many decades, the Government of Vietnam promulgated and implemented policies, rules, regulations and guidelines to manage and develop forestry programs, which brought both great achievements and challenges to the forestry sector. Evidently, those efforts have increased the forest areas, created millions of jobs and reduced the poverty rate in some areas of Vietnam, changing Vietnam's forest situation on the world map. Besides those achievements, many studies in the forestry sector found that almost all policies are neglecting human concerns in ecology management, misunderstanding human's resource needs, lacking proper gender planning at central and grassroots levels and failing to support the participation of women in the forest sector (McElwee, 2010; Anon, 2000; San et al., 2001). This created serious problems and conflicts in forest conservation and management between the state and local people living nearby SUFs, regarding forest resource use and forest land allocation.

Many scholars and researchers in other regions have done studies on gender and NRM, bringing the attention of policy makers to local livelihoods, recognition of human rights in NRM and development, gender sensitive planning and understanding of women's resource needs, and so on. As a result, there are many practices and lessons learned in models of forest management and development, community forest management, decentralized forest management, and benefit sharing mechanisms which include the gender perspective.

Since the 1990s, the Government of Vietnam, with support from donors, applied participatory approaches to forest management with the objective of involving many stakeholders in forest management, through land allocation contracts, community forest management programs and decentralized forest management strategies etc. However, those programs could not solve the deeply rooted cause of conflicts and challenges in forest management and forest conservation in Vietnam. The most important concern, pointed out by McElwee, was that forest ownership and forest's property was still under management of the State, hindering people from having adequate benefits from forest resources (McElwee, 2004). Power issues in stakeholder's roles were misunderstood or ignored intentionally in the forestry sector. As a result, the participatory approach implemented in forest management in Vietnam didn't seriously take into account the local people's rights, roles, responsibilities and failed to engage them really into the above- mentioned forest management programs.

In response to these urgent needs and criticisms, several decree and decisions were issued to show a "signal" of movement in the legal framework towards managing forests and conservation in sustainable ways. The legal decision No.186/QD-Ttg (in 2006) and Decree 117/2010/NĐ-CP adjusted the regulations and policies that prohibited local people from forest resource use (GSRV, 2010). It allowed the PA's Management Boards to develop projects which ensured development of sustainable forest resource use plans within their conservation efforts, as well as involvement of both women and men in comanagement and development of conservation plans. Recently, the pilot BSM policy No.126/QD-Ttg on management, protection and development of SUFs was approved by the Prime Minister (GSRV, 2012). According to this pilot policy, communities and Management Boards of SUFs, based on co-management principles together manage and protect SUFs. Local people now have rights to harvest and use NTFPs in a sustainable way without causing negative impacts on the targeted conservation of SUFs.

There is no doubt that the piloting of BSM will open a new way for forest management and conservation efforts. Meanwhile, research on BSM within either of these contexts has not yet started in Vietnam. One important question is, how many households benefit from NTFPs collection, while balancing harvest levels between the needs of conservation and households? Therefore, this research aims to analyze how women and men benefit from collecting NTFPs, as well as how BSM influences men's and women's rights, roles, responsibilities and their participation in forest management in two villages belonging to SUFs in Vietnam, and identify how participation in BSM changes gender relations and women's position in households and society.

## **Conceptual Framework**

The conceptual framework of the research was developed based on the literature review. It focuses on participation in and benefitting from forest resource use by local people who live nearby PAs. At the local level, these aspects are measured through various factors. By exploring different rights, roles, responsibilities of men and women through their participation in PAs, will help research determine how women's rights impact on the traditional and cultural norms existing in the study area (See figure 2.1).

Gendered benefit sharing is dependent on other regulations and mechanisms, social and financial factors. Those factors significantly contribute to generate income, create more jobs while collecting forest resources and develop the value chains for NTFPs. The roles and responsibilities of stakeholders (households, park management board, community's authorities, etc.) in benefit sharing aspects needs attention paid in terms of equitable share of benefits.

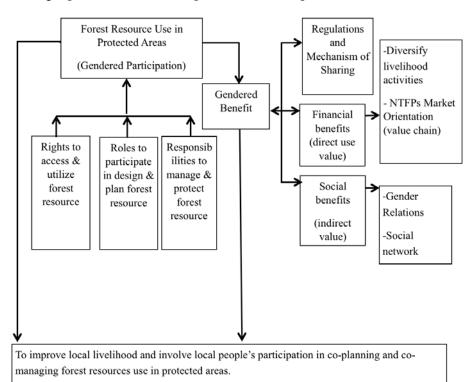


Figure 2.1 Conceptual Framework

#### GENDER PARTICIPATION IN FOREST RESOURCE MANAGEMENT

## Chapter 3

## Methodology

This chapter describes the methodology used for data collection in the field. The data were collected through both qualitative and quantitative methods from primary and secondary sources. This chapter also provides information related to the characteristics of Co Tu people living in the study areas.

## Type of Research and Research Design

This research assesses a participatory benefit sharing mechanism for forest resource use of local people living near PAs in Vietnam. The study primarily analyzes BSM management, women's and men's rights, roles and responsibilities and access to and management of forest resources within the context of the BSM by assessing the NTFPs collection patterns between men and women in the project site and how they contribute to household income. The research uses both qualitative and quantitate data through a combination of case studies and surveys. Information on participation and benefit sharing in resource use was collected in the field and complemented by the case studies and articles. The survey data was collected by using semi-structured interviews for information on access and management, participation, decision making and benefit sharing in forest resource use.

## Research Design

The research was carried out in Ta Rin and Lap villages, Thuong Nhat commune, Vietnam. The objective of this study was to understand the local people's income situation, rights, roles and benefits before and after implementing the pilot BSM. Another objective was to find out how women and men's participation in forest management, as well as its benefit sharing mechanism, brought about changes in gender relations and women's position in the household and society.

#### **Data Source and Collection Methods**

#### Reconnaissance

A pre-survey was conducted in June 2013 before developing the thesis proposal and strategy for data collection to know the field site, test the data collection tools, develop the research plan and make arrangements for data collection. Some key informant interviews were conducted during this time, which was helpful for the researcher to get initial ideas before fully developing the household questionnaire.

## Secondary Data Collection

Secondary data was collected from different sources. Different policies, guidelines, decrees, strategies and plans formulated during different periods for the protection, management and conservation of forest resources in Vietnam were collected and reviewed from publications, reports and other related documents. Journals, articles and other publications about community forest management and benefit sharing from different countries were also reviewed.

## **Primary Data Collection**

During primary data collection, different types of tools were used such as the key informant interview, in-depth interview, focus group discussions and a questionnaire. The data were collected at different levels, including district level, BMNP's Management Board, commune, village and household levels. The data collection was done over a two- month period at the end of 2013.

#### Stages of Data Collection

The primary data collection included four sequential steps. In addition, field observation was an integral part of the information collection and it was performed throughout the field work.

#### Step 1: Key Informant Interview

The key informant interviews were conducted with different stakeholders at district and commune levels. At BMNP, the author interviewed the Director of BMNP and rangers working in Thuong Nhat commune. At the district level, the vice chairwoman of the District's Women Union was interviewed. At commune level, the chairman, vice chairman, leader of commune's women union and environmental officer were all interviewed. In the villages; the head man, head of the women's union and village committee members were interviewed. The results of these interviews helped the author to understand the general economic, cultural and social situation of the study area, as well as provide information on how the district, commune and village's administration authorities were involved in the BSM. The interviewees also shared how they encouraged local people's participation in piloting the BSM and how it worked in the villages.

#### Step 2: In-depth Interview

In-depth interviews were conducted with people who were living in the two villages and participating in the BSM. They included both males and females who actively participated in the BSM and collected NTFPs. The interviews provided in-depth information about the situation before and after implementation of the BSM in the commune. This information covered concerns related to rights, roles, responsibilities and benefits from collecting NTFPs, as well as women's and men's roles in community forestry management. The respondents for the in-depth interviews were identified by a questionnaire. The target number of in-depth interviewees was four men and four women of different ages in each village, with varying experiences in collecting different species of NTFPs, married or widowed, from poor and near-poor households (based on a list of poor households identified by the commune administration).

#### Step 3: Focus Group Discussion

The focus group discussions were conducted in separate groups of women and men in each village. The members of the group discussions were selected from the questionnaire respondents. Each group included 10 people; ranging from youth to elderly, from poor and non-poor households, active or non-active in collecting NTFPs from BMNP, but all participating in BSM intervention activities. The results from these interviews assisted the researcher in understanding the attitude and priorities of women and men while collecting and using NTFPs. What were the challenges they faced when collecting NTFPs and how were they participating in forest management and conservation activities at village level.

#### Step 4: Household Survey

The household survey targeted individual households. Discussions with respondents in both villages revealed almost-poor and near-poor households participated in the BSM because they were interested in collecting and harvesting NTFPs inside BMNP. There were some non-poor households actively participating in the BSM but they didn't collect NTFPs, or collected less NTFPs compared to other BSM members. It was found that wealthy households generally participated in the program only because they wanted to learn about the new pilot policy, as well as to contribute their ideas to discussions with the BMNP Management Board. Some appreciated the trainings on income generation measures which were conducted at the villages by BMNP. Half of the villagers didn't register for BSM because cash income from newly established rubber tree or acacia plantations was enough for them at the time. Several households didn't participate because their members were considered too old to be collecting NTFPs.

There was a close cooperation with the Thuong Nhat ranger station and headman in each village to identify BSM household members, prior to going to each household for interviewing. Overall, there were 46 households in Ta Rin and 47 households in Lap who participated in the BSM.

The respondents were selected in line with criteria differentiating poor, near-poor to non-poor households, and male and female. The purpose of this selection was not only to get the opinions and information between men and women on how they collect NTFPs, but also to know how much they can earn

from NTFPs, which kinds of species women and men often collect, how men and women spend their time collecting NTFPs, how they plan to collect forest products and make decisions to utilize them, as well as understand their participation in BSM meetings and trainings. Based on the household economic situations of the participants, the study could identify motivating reasons to participate in the BSM for collecting NTFPs. From these results, the study could gain an overall picture of respondent's rights, roles and responsibilities when participating in he BSM.

Male respondents more actively participated in this study when compared with the female respondents. During the interviews at the field site, several females from BSM-participating households did not agree to be interviewed, nor did they answer the research questions citing that they did not know enough about the BSM or that they did not feel confident to answer. Hence the number of male respondents was higher than female respondents in this study. In addition, some women hesitated to participate in the interviews because their husbands were involved in group illegally extracting timber so they wanted to avoid sharing this kind of information. In total, the study conducted household surveys with 50 male and 34 female respondents in the field areas (Table 3.1).

Table 3.1: Household respondents

| Village | No. of<br>house-<br>holds | No. of<br>BSM<br>members | No. of respondents | Male respondents | Female respondents |
|---------|---------------------------|--------------------------|--------------------|------------------|--------------------|
| Ta Rin  | 87                        | 46                       | 42                 | 26               | 16                 |
| Lap     | 68                        | 47                       | 42                 | 24               | 18                 |

Source: Field Survey 2013

## **Data Analysis**

Qualitative and quantitative analysis techniques were applied to analyze the data for this study. Qualitative methods focused on analyzing key informant interviews, in-deep interviews and outcomes of the focus group discussions while a mixed method of analysis concentrated on the household level information survey. For quantitative analysis the Statistic of Package for Social Sciences (SPSS) was used. Multiple-variables were applied.

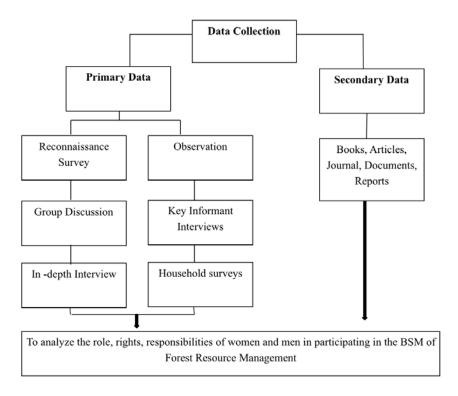


Figure 3.2: Flow of Data Collection

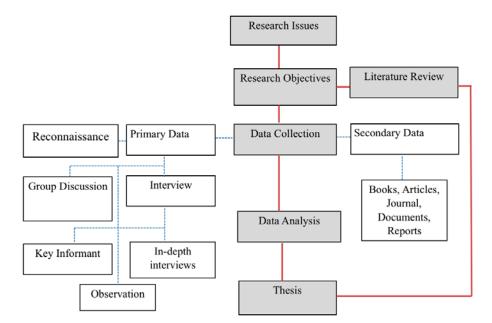


Figure 3.3: Research Process

#### GENDER PARTICIPATION IN FOREST RESOURCE MANAGEMENT

## Chapter 4

## **Profile of Study Area and Respondents**

This chapter profiles the study area and its respondents. Related information on geography, administration, socio-economics and forest resources of the BMNP, Thuong Nhat commune and villages, and profiles of respondents including gender, marital status, education levels, occupations and social-economic characteristics of households were presented accordingly.

## **Profile of Study Area**

#### Bach Ma National Park

## Geographical Aspects

BMNP was establish in 1991 and extended its geographical area in 2008 with the aim of conserving the only green transect left in Vietnam. In total, BMNP's area covers 37,487 ha and it is 40 kilometers from of the old imperial city of Hue, located in between the two provinces of Thua Thien Hue and Quang Nam. The main environmental habitats are tropical forests in the lower areas and subtropical forest in the central region. The BMNP has been identified as one of the last remaining primary forests in Vietnam.

According to a survey in 2003, an estimated 1,548 flora species are living in Bach Ma National Park, representing 19% of the entire flora of Vietnam (Nguyen Nghia Thin, Mai Van Pho, 2003). The BMNP is considered as the 'Floristic Biodiversity Centre' for Indochina (Ziegler et.al., 2002).

#### Administration Aspects

The BMNP covered twelve communes belonging to three districts in two provinces. The protected area covers 37,487 ha, of which buffer zone is approximately 20,234 ha. There are 65,000 inhabitants from four ethnic groups: Kinh, Co Tu, Van Kieu and Muong, which are spread across 12,285 households (BMNP, 2010).

#### Socio-economic Aspects

The livelihoods of the people living in BMNP's buffer-zone are reliant on agricultural crops, forest plantations and forest resources, labor and other services, of which income from forest contributes a large amount of their total income. In terms of the socio-economic situation in the buffer-zone, local average income per head is low, at around US\$ 250 per person, per year; this is the equivalent to 70% of the minimum national income, and which makes 40% of households living along the buffer-zone classified as poor. Moreover, the land for agricultural cultivation is not enough for their subsistence; hence without alternatives and economic incentives, many households living in the buffer-zone continue illegally using and commercializing forest products such as timber, firewood, and NTFPs.

#### Natural Resource Aspects

The BMNP comprises both tropical and subtropical forests, a typical characteristic for the ecology system in the central region of Vietnam. According to Vietnamese scientists, there are 1,548 plants belonging to 165 families, of which rattan (Calamoideae) is known as the largest family, with 18 species living in the BMNP (Nink et.al., 2005).

## Thuong Nhat Commune

## Geographical Aspects

Thuong Nhat commune belongs to Nam Dong district, in Thua Thien Hue province, central Vietnam. As of 2008, Thuong Nhat also belongs to BMNP since the national park extended their buffer-zone. The commune covers a total area of 19,658 ha which is divided into two parts, including 812 ha of agricultural land and 15,424 ha of forest land. The agricultural land covers 28 ha of lowland crop land, mainly paddy, 254 ha of upland crop land and 530 ha of plantation

forest land (Bechstedt et al., 2010) (also refer to Table 4.1). Thuong Nhat commune partly covers the Huong River watershed areas, and is close to BMNP's buffer zone, thus this commune is in a very important location. Protection of the surrounding ecology system is a high priority, as is the socio-economic development of Thua Thien-Hue province.

Table 4.1: Land Use and Forest Area in Thuong Nhat Commune

| Land use and forest type                                     | Area (ha) | Percentage (%) |
|--|-----------|----------------|
| Total land use area  | 19,658    |                |
| Agricultural cultivation land                                | 812       | 100            |
| Land for cultivation paddy rice                              | 28        | 4              |
| Upland crop (land for cultivation rice, maize, cassava etc.) | 254       | 31             |
| Plantation (acacia and rubber)                               | 530       | 65             |
| Total forest land  | 15,424    | 100            |
| Production Forest  | 1,676     | 11             |
| Protection Forest  | 5,947     | 39             |
| Special-use Forest   | 7,801     | 50             |
| Unused, not classified land                                  | 3,422     |                |

Source: Nam Dong District, 2010

#### Administration and Population Aspects

Thuong Nhat commune separated from Thuong Lo commune and formed its communal center in 1961. The commune authority nowadays is runs by the People Council (PC) and the PC members, who are elected by the local Thuong Nhat people. There are several units under the PC, such as the land management unit, nature resources and environment unit, agriculture and rural unit, culture, sport and information unit. The women's union assists the Thuong Nhat to run the administration. Currently, Thuong Nhat's Chairman is Vice–Chairman of the Forest Management Council (FMC), and he also represents the Thuong Nhat people in discussing and negotiating with BMNP's Management Board on how local people can collect the NTFPs inside the park.

The FMC has 12 committee members; one woman and 11 men. There are three members of FMC working on BMNP Management Board, including the Council Chairman who is director of BMNP. The committee members were

appointed by the Commune and the BMNP Management Board. Under the FMC, the Commune's Monitoring and Forest Protection (CMFP) team has 10 members from seven villages, including people from the community authority. The Village's Monitoring and Forest Protection (VMFP) team has five members from each village, who assist the BMNP Management Board and CMFP Team in protecting the forest and implementing the pilot BSM in Thuong Nhat commune. The functions of FMC, CMFT and VMFT are presented in the chart below (See table 4.2):

**FMC** (12 members) **CMFC** (10 members) VMFC VMFC VMFC VMFC VMFC VMFC VMFC Ta Lu A Sach Hoa Ta Rin Lap A Tin La Van (5) (5) Hop (5) (5)(5)(5) (5)BSMMe BSMMe **BSMMe BSMMe BSMMe** BSMMe **BSMMe** mbers mbers mbers mbers mbers mbers mbers

Table 4.2 The Management and Monitoring of BSM Chart

Source: BMNP, 2012

The committee is considered to be decentralized as the operation plan is set up by the BMNP's Board. The FMC members have a monthly meeting and an annual general meeting for planning and monitoring forest management activities and NTFPs. At the village level, discussions on collecting NTFPs are

organized and the number of women attending has increased when compared with the past.

There are roughly 2081 people residing in 485 households in Thuong Nhat, each of them primarily dependent on collecting and selling the NTFPs for their livelihoods. The commune has two main ethnic groups, namely Co Tu and Kinh. The commune consists of seven villages: Ta Rin, Lap, A Tin, A Sach, Ta Lu, La Van and Hoa Hop. villages. According to a survey conducted in 2012, the Co Tu people have stayed in Thuong Nhat for a long time; they are mainly farmers and account for 97% of population (Loi and Chau, 2012). Kinh people migrated only after the Vietnam War and they are mainly working in jobs such as as government staff, shopkeepers, traders and merchants.

#### Socioeconomic Aspects

Thuong Nhat commune is the poorest area in Nam Dong district; local people earn their incomes from agriculture products, plantations and forestry. Most households in the commune are involved in subsistence farming, like paddy fields, livestock rising and forestry plantations. Farming activities are only practiced in the rainy season, from June until December and people mainly engage in supplementary activities, such as the collection of NTFPs in the dry season, from January until May. Even though industrial mono-cropping was introduced to local people in Thuong Nhat commune in the nineties, it is not practiced effectively due to the abundance of traditional agriculture. Local people still cultivate their paddy crops and no land was devoted for mono-crops.

#### Natural Resource Aspect

Thuong Nhat is a mountainous area in the upper reaches of Huong River, Thua Thien Hue province and has belonged to the buffer-zone of BMNP since its expansion in 2008. According to the district statistics, an estimated 15,424 ha of forest land belongs to the commune, of which 51% is SUFs, 39 % is protected forest and the remaining 10% is production forest.

In the past, the local people living in Thuong Nhat commune mostly depended on forest resources. Local women collect the NTFPSs, such as bamboo shoots, snails, and palm-leaves for their household subsistence and commercial purposes, while men usually hunt wild animals and collect rattan, honey and uoi seeds for selling. The commune has potential for aquaculture production, as it is located in an area which has many streams flowing through. An estimated

water surface area of up to 60 ha, these streams are from Ta Trach and provide potential for irrigation for both agricultural cultivation and fish raising in this commune.

#### Ta Rin Village

#### Geographical Aspects

The Ta Rin village is located near the Ta Ray stream and has belonged to the BMNP's buffer-zone since the park was extended during the ecological restoration zone in 2008. The commune has an area of 362 ha, where 172.7 ha is categorized as forest land, 172 ha of industrial monoculture trees (acacia and rubber trees), 9 ha of paddy rice and 8.3 ha of garden and pond (BMNP, 2012).

The village was resettled in 1972, during the Vietnam War, after the villagers suffered mentally and physically by the American bombing and defoliant spraying. The villagers had to move away for several years before they could return in 1985. With support from the Government of Vietnam and land allocation policies, the local people abandoned their traditional swidden agriculture and began planting acacia and rubber trees under the reforestation scheme, during 1993-1998. The Ta Rin village connects with the district center and other villages by concrete road, which was built in 1999.

#### Administration and Population Aspects

The village administration is run by the village's committee, a model that is typical for all Vietnamese villages. The Ta Rin committee includes the village head, 2 deputy village heads, head of the elderly group, head of the youth union, head of the women's union, head of the famer's union and head of the veteran's union.

Village committee members are elected by the villagers, while the village's head and deputies are elected from nominations within the village. Those elected people are approved at the district level and their appointment is officially recorded. The elderly leader is selected based on their experience, education and status in the village.

The patriarchal ideology is still dominant in the village, so most leaders in each union are men instead of women. The women's union leader is voted in by women in the village and this person represents women concerns. When

it comes to decision-making regarding the rules of collecting NTFPs at BMNP, all committee members are involved; discussing together with household members and representatives of BMNP. The village has a population of 390 people, of which the majority are Co Tu people, across 87 households.

#### Socio-economic Aspects

The Ta Rin is the poorest village in Thuong Nhat commune, with about 68 households. Each household is either growing acacia or rubber trees, and these cultivations cover a total area of 172 ha, while another 15 ha is used for cassava planting and young acacia trees. Vegetables and fruits are grown in the garden. Since acacia and rubber trees need at least five to six years to harvest, most households rely heavily on the collection of NTFPs for household consumption and commercial purposes. According to the Thuong Nhat commune authority, the poverty rate in the village was 37% at the time of this research. Most Co Tu people in the village are illiterate, or have only finished primary school. Each family has an average of 0.06 ha of Hand for paddy rice which is not enough for their food security. The industrial mono-crops, such as the acacia and rubber trees, were introduced to Ta Rin in 1993 through a reforestation scheme to avoid Co Tu's traditional swidden agriculture. These plantations today are spreading all over the area, replacing former crop land, scrub and secondary forest land (Thuong Nhat, 2010).

#### Forest Management Activities

After being relocated, the Ta Rin forest area was managed by the Nam Dong Forest Protection Department (district level). It has belonged to BMNP since 2008 when the park extended its area. Since BMNP extended the area to include Thuong Nhat commune, laws to protect the forest in this area have been strictly enforced. Due to prohibited exploitation of the forest resources, local people have had to change their livelihoods and are faced with decreasing household income. The local people have started to log timber and collect NTFPs illegally for survival during times of food shortage. There are several community forest programs and projects implemented by the government and international organizations (including ICCO, WWF and GTZ) at selected villages in Thuong Nhat to improve local livelihoods and to minimize pressure and threats to the natural resources of BMNP. The main purpose of these programs was to reduce the pressure and exploitation of natural resources,

manage and control the exploitation of natural resources, maintain wild animals and improve local livelihoods by introducing new agricultural models, among others. Most of the community forest programs focused on law enforcement, awareness raising programs in schools and the community youth union, without implementing development models that support local people to change their livelihood. At Ta Rin, there was no development program to support local people, instead, the forest community management programs focused only on law enforcement, legal frameworks, and conservation education for the forest management team in the village.

Through interviews and group discussions during the field study, the author realized that less people were participating in community forest programs due to their top-down policies, local people's lack of information on natural resources, lack of rights based implementation of forest management policies, and the fact that roles and responsibilities aimed at encouraging local people's participation are still lacking. These reasons have led to increased conflict and create more problems for all stakeholders.

The pilot BSM policy was introduced to Thuong Nhat in 2012, with the aim to improve local livelihoods by encouraging participation in forest management and the legalization of NTFPs in BMNP. Like with previous forest management policies, the BSM did not acknowledge gender issues. As a result, there is no gender division of labor in forest management activities. While FMC provided the operational plan with guidelines to collect NTFPs inside BMNP, CMFP and VMFP take on the overall forest management activities at the commune level, such as implementing the BSM and following up with local people collect the NTFPs.

## Benefits from the Collected NTFPs

BSM members can legally collect NTFPs inside BMNP, with permission for collecting each time. In the beginning, BSM members must submit the collection request form to the village's headman for endorsement. In the second step, BSM members must send this form to the commune's chairman for endorsement once again. After they have received the endorsement from both village and commune levels, the BSM members have to send this form to Thuong Nhat Ranger Station, where the leader of the ranger station will check the species and quantity, as the requested duration of the collecting process. All NTFPs must belong to the list of permitted species and the duration of collecting

the NTFPs should meet with the harvesting calendar requirements from BMNP. The leader of Thuong Nhat's ranger station will then give permission to collect the NTFPs inside BMNP if the application meets all the requirements in line with the BSM guidelines. The process sometimes takes longer than local people expected, hence during the interview phase the Ta Rin's respondents complained about the overly complex administration processes. Even if respondents are registered BSM members, when they collect NTFPs inside BMNP without permission, those collected products become illegal and rangers have the right to confiscate them anytime.

Ta Rin villagers can collect the NTFPs on the bank of Tan Nan, Chan Mang and Ma Rai streams alongside Lap villagers. The distance from the village to the core-zone<sup>7</sup> is around five km and it takes at least two hours to walk there. Women usually catch snails and collect bamboo shoots for family consumption. Hunting, trapping wild animals and collecting the honey is done by groups of two to three men at a time. As usual, men sold at the market rather than using the products for household consumption because these products hold high value.

As per the agreement, Ta Rin villagers can keep 95% of the value of the NTFPs for themselves, and must contribute the remaining 5% to the village budget which is used to support poor households, funerals in the village and forest management and protection.

The benefits from NTFPs contribute greatly to the income of Ta Rin villagers and help them overcome food shortages, which occur at least three months out of the year.

## Lap Village

## Geographical Aspects

Lap village is located nearby Ta Rin village and is close to BMNP's forest gate. The village was established in 1962 and it has belonged to BMNP's bufferzone ever since the park extended their ecological restoration zone in 2008. The distance from the village to the park's core-zone is about 8 km and it takes three to four hours to walk. The village land covers 2,864 ha, of which 170 ha

<sup>7</sup> Core-zone is a reference point on the natural state of the ecosystems, represented by the biosphere reserves.

belongs to forest land and 110 ha is for acacia and rubber trees. The village has less lowland crops for growing paddy rice when compared with other villages in Thuong Nhat commune, and these villagers are hardly able to meet their staple food needs every year.

#### Administration and Population Aspects

Similar to Ta Rin village, Lap village has the same village administration system which is mainly run by the village committee. The head of Lap village is also a member of FMC and is responsible for assisting FMC to implement the pilot BSM policy in the village. Lap's has a population of 295 people from 68 households. There are 95 people who are the main laborers of the village, of which 50 of them are men and 45 are women.

#### Socio-economic Aspects

The Government of Vietnam has provided free education for ethnic groups, however, it is rare that someone from Lap village has higher education. Most of the elderly people in the village are illiterate, while the young generation have mostly just finished primary or intermediate schooling. As mentioned earlier, the Co Tu society is still patriarchal - they preferred to send their sons to school rather than their daughters, hence there are more males studying at school than females.

Once again, the lowland crops for rice cultivation is not enough. The villagers joined the program 327 during the 1990s to fix their cultivation and move towards swidden cropping cycles. They started growing acacia and rubber trees in their former uplands. Nowadays, more than 40 households are involved in rubber tree plantations, while another 20 households grow acacia. Like other villages at Thuong Nhat commune, Lap villages food security relies on the sale of their harvest from plantation crops and they are extremely vulnerable to price variations. Furthermore, the village is located in the sloping mountainous area where natural disasters affect the acacia and rubber trees, further affecting the prices and the quantity of the harvest. However, the price for rubber in recent years has been good, so food shortages have been reduced. Despite this, 28% of households in the village are still poor (Thuong Nhat, 2010).

Villagers in Lap collect NTFPs at the bank of Tan Nan, Chan Mang and Ma Rai streams, where Ta Rin villagers also collect. They collect them all year round, except during the raining season, from September until December. The

women are often collecting snails, fish and bamboo shoots, while men are involved in hunting and trapping wild animals. As hunting and trapping usually takes more time, men go in groups of at least two to three people and stay in the forest for five to seven days. Women rarely stay in the forest as they have to care for the children and do household work.

#### Forest Management Activities

Since its establishment in 1962, Lap moved several times due to the Vietnam war and various natural disasters before it was resettled in the currently location. Since BMNP extended its area to Lap village in order to protect and conserve fauna and flora inside the park, it has changed the local people's livelihood. This moving brought challenges to the Co Tu people as it forced them to leave their traditional NRM-based livelihoods and consequently face food insecurity. The strictly enforced forest management policies did not allow them to practice shifting cultivation, timber logging or collection of NTFPs inside the SUFs, forcing the Co Tu people to find alternative livelihood models for overcoming their poverty.

There have been some forest management programs implemented in the village since the village has belonged to the BMNP buffer-zone. The focus of these programs was on capacity building and sustainable use of natural resources to improve the biodiversity conservation in BMNP. The main activities concentrated on training to enhance awareness of conservation, law enforcement, research on the BSM and study tours. In general, those programs only benefited BMNP's staff, the headman of the village and VMFP of the seven participating villages, rather than local people.

The BSM program provided trainings on raising livestock, such as chickens, goats, fish, pigs and planting bananas in the seven pilot villages in Thuong Nhat commune. The aim of these trainings was to improve local people's livelihoods and reduce pressure on the natural resources of BMNP. After training, participating households received animals and plants to raise. However, the support did not cover all households in Thuong Nhat due to funding limitations. At Lap, BMNP conducted training on sustainable harvesting of NTFP, as well as trainings on raising livestock, to selected households of BSM members.

There was not one female member among VMFP members in Lap. During the interview process, participants shared that male members can patrol the forest resources better than the females.

#### Benefits from the Forest

Traditionally, Lap livelihoods are based on forest resources. They collect NTFPs and hunt wild animals from the forest for their family's consumption and for selling. Their livelihoods have changed since their village has belonged to BMNP's buffer-zone. As with Ta Rin, Lap villagers have to follow strict administration processes for getting permission to collect NTFPs inside BMNP when participating in the BSM. Without permission, the BSM members cannot collect or remove products from the forest for selling.

Women in Lap village also collect bamboo shoots and fuel wood for family consumption and snails for selling in the day time, before returning to their house in the evening. Hunting, trapping wild animals and collecting the honey is also done by groups of two or three men. Once again, Lap men sold it their products at the market rather than using them for their household consumption. According to information gathered in the field, Lap villagers contribute 10% of the value of their collected NTFPs to the village's fund. This contribution helps poor households and goes towards organizing funerals for the eldest people in the village.

The benefits from the NTFPs contributes to the income gap of Lap villagers and helps them overcome food shortages, which occur for at least three months every year.

## **Profile of Respondents**

## Sex, Age, Marital Status of the Respondent

## Sex of Respondents

The respondents in this study are all BSM members. This study planned to interview and equal number of male and females across both villages, however, women were not confident to participate in the study and could not answer all the questions. The data in Table 4.3 presents the distribution of

respondents by gender. The findings show that more than half of respondents (59.5 %) in both villages were male. The number of female respondents in Lap village (42.9%) is higher than female respondents in Ta Rin village (38.1%).

At the village level, the percentage of male respondents from Ta Rin is different to female's respondents. Male's respondents from Ta Rin are almost two third of the total respondents (61.9 %), while female respondents from Ta Rin village only accounted for 38.1%. On the other hand, the percentage of male respondents from Lap village is more than half of all BSM members (57.1%), whereas the percentage of female respondents from the village is only 42.9%.

**Table 4.3 Gender Distribution of Respondents** 

| Sex of respondents | Ta Rin village<br>( n= 42) |                 | Lap village (n=42) |                 |                | Total<br>( n=84) |
|--------------------|----------------------------|-----------------|--------------------|-----------------|----------------|------------------|
|                    | Frequen-<br>cy             | Percent-<br>age | Frequen-<br>cy     | Percent-<br>age | Frequen-<br>cy | Percent-<br>age  |
| Male               | 26                         | 61.9            | 24                 | 57.1            | 50             | 59.5             |
| Female             | 16                         | 38.1            | 18                 | 42.9            | 34             | 40.5             |
| Total              | 42                         | 100.0           | 42                 | 100.0           | 84             | 100.0            |

Source: Field Survey, 2013

## Age of Respondents

According to the General Statistics Office of Vietnam standard, the age of respondents in the study area ranged widely between 15 and 65 years. In order to examine whether the age structure was different in the two villages, respondents were divided into four groups as shown in Table 4.4:

Table 4.4 Age Distribution of Respondents

| Age     | Ta Rin Village |          | Lap Village |          | Total    |          |
|---------|----------------|----------|-------------|----------|----------|----------|
| (Years) | Frequen-       | Percent- | Frequen-    | Percent- | Frequen- | Percent- |
|         | cy             | age      | cy          | age      | cy       | age      |
| 15-24   | 5              | 11.9     | 4           | 9.5      | 9        | 10.8     |
| 25-49   | 31             | 73.8     | 30          | 71.4     | 61       | 72.6     |
| 50-64   | 6              | 14.3     | 6           | 14.3     | 12       | 14.2     |
| 65+     | 0              | 0        | 2           | 4.8      | 2        | 2.4      |
| Total   | 42             | 100.0    | 42          | 100.0    | 84       | 100.0    |

Source: Field Survey, 2013

In general, most respondents aged between 25 and 49 years participated in the survey and provided useful information, while 14.3% respondents at age of 50 and 64 years, mostly gave information related to their experiences. Through field observations in the study areas, most BSM household members are young to middle-aged – healthy enough for collecting NTFPs in the park.

#### Marital Status

Regarding marital status, Table 4.5 shows that most respondents in both villages (90.5%) were married. In Ta Rin village, 97.6 % of respondents were married, and in Lap village married respondents accounted for 83.3%. Only a small amount (2.4%) of the total respondents were widowers and no respondents were widows in Ta Rin village, while 14.3 % of respondents in Lap village were widowed.

Table 4.5 Marital Status of Respondents

| Marital | Ta Rin Village |          | Lap Village |          | Total    |          |
|---------|----------------|----------|-------------|----------|----------|----------|
| Status  | Frequen-       | Percent- | Frequen-    | Percent- | Frequen- | Percent- |
|         | cy             | age      | cy          | age      | cy       | age      |
| Married | 41             | 97.6     | 35          | 83.3     | 76       | 90.5     |
| Widow   | 0              | 0        | 6           | 14.3     | 6        | 7.1      |
| Widower | 1              | 2.4      | 1           | 2.4      | 2        | 2.4      |
| Total   | 42             | 100.0    | 42          | 50.0     | 84       | 100.0    |

Source: Field Survey, 2013

## **Education Level of the Respondents**

Education is considered the most important factor influencing the level of participation in community resource management. Table 4.6 (below) illustrates that of the studied villages, a total of 32.1% completed primary school and 20.2% went on to complete intermediate level education. Only a small amount of the total respondents (4.8%) completed their study at tertiary level, while 28.6% were illiterate.

In Ta Rin village, less than one-third of respondents (31.0%) completed primary level education and 26.2% of the respondents from the village were illiterate. There were two respondents (4.8%) from Ta Rin who graduated from tertiary education and another seven people completed their education at secondary level.

Similarly, 33.3% of respondents from Lap village had primary level education, and less than one-third (31.0%) of respondents were illiterate. Two people had studied to tertiary level.

**Table 4.6 Education Level of Respondents** 

| Level of                  | Ta Rin Vi | llage | Lap Village |       | Total |       |
|---------------------------|-----------|-------|-------------|-------|-------|-------|
| Education                 | Fre.      | %     | Fre.        | %     | Fre.  | %     |
| Illiterate                | 11        | 26.2  | 13          | 31.0  | 24    | 28.6  |
| Primary level             | 13        | 31.0  | 14          | 33.3  | 27    | 32.1  |
| Intermediate level        | 9         | 21.4  | 8           | 19.0  | 17    | 20.2  |
| Secondary<br>level        | 7         | 16.7  | 5           | 11.9  | 12    | 14.3  |
| College and<br>University | 2         | 4.8   | 2           | 4.8   | 4     | 4.8   |
| Total                     | 42        | 100.0 | 42          | 100.0 | 84    | 100.0 |

Source: Field Survey, 2013

The research showed that men had higher education levels overall than women. Table 4.7 presents illiterate female respondents as 38.2% of both villages (compared to 22% of men) and no female had received tertiary-level education.

Table 4.7 Level of Education by Gender of Respondents

| Level of               | M    | ale   | Fen  | nale  | Total |       |  |
|------------------------|------|-------|------|-------|-------|-------|--|
| Education              | Fre. | %     | Fre. | %     | Fre.  | %     |  |
| Illiteracy             | 11   | 22.0  | 13   | 38.2  | 24    | 28.6  |  |
| Primary level          | 20   | 40.0  | 7    | 20.6  | 27    | 32.1  |  |
| Intermediate level     | 9    | 18.0  | 8    | 23.5  | 17    | 20.2  |  |
| Secondary level        | 6    | 12.0  | 6    | 17.6  | 12    | 14.3  |  |
| College and University | 4    | 8.0   | 0    | 0     | 4     | 4.8   |  |
| Total                  | 50   | 100.0 | 34   | 100.0 | 84    | 100.0 |  |

Source: Field Survey, 2013

#### Social-economic Characteristics

#### Household Size

The household size of the sampled respondents varied between 4.36 to 4.64 persons per household, with an average of 4.5. The biggest family size was seven members and the smallest family size was two (refer to Table 4.8).

Family size can have a positive effect on the participation level in forest management and NTFPs collection in BMNP as it increases the number of household members available for contributing to such activities. Nevertheless, household productivity also depends on population structure such as age distribution, gender distribution and other factors.

Regarding gender distribution among family members, the average number of male and female members is similar. This means that the labor force is equally contributed to by both male and females and that both sexes have equal opportunities in forest management and NTFPs collection.

**Table 4.8 Family Size of Respondents** 

| Family Size (persons) | Ta Rin Village | Lap Village | Total |
|-----------------------|----------------|-------------|-------|
| Average family size   | 4.64           | 4.36        | 4.5   |
| Maximum               | 7              | 7           | 7     |
| Minimum               | 3              | 2           | 2     |

Source: Field Survey, 2013

#### Household Heads

The gender distribution of the heads of households shows that most are male in both villages. There were no female-headed households at Ta Rin village while in the Lap village, six houses were headed by widowed females.

Table 4.9 Head of Household Distribution by Gender

| Heads of households    | Ta Rin Village |      | Lap Village |      | Total |      |
|------------------------|----------------|------|-------------|------|-------|------|
| rieads of flousefloids | Fre.           | %    | Fre.        | %    | Fre.  | %    |
| Female                 | 0              | 0    | 6           | 14.3 | 6     | 7.1  |
| Male                   | 42             | 100. | 36          | 85.7 | 78    | 92.9 |

Source: Field Survey 2013

#### Source of Income and Poverty Rate

#### Sources of Income

Table 4.10 illustrates the distribution of income sources among BSM members in the two villages. It shows that agriculture is a main source of income (100%), followed by the collection of NTFPs (98.8%) and mono-crop plantations (81%). Almost 60% of households also receive income from salary or labor wages (labor wages include harvesting acacia or rubber latex in the commune).

Table 4.10 Household Income Sources (Multiple response)

| Source of Income      | Total            |            |
|-----------------------|------------------|------------|
|                       | No. of household | Percentage |
| Agriculture           | 84               | 100.0      |
| Mono- crop plantation | 58               | 69.0       |
| Livestock             | 57               | 67.9       |
| NTFPs                 | 83               | 98.8       |
| Salary and wage       | 49               | 58.3       |
| Business              | 3                | 3.6        |
| Others                | 23               | 27.4       |

Source: Field Survey, 2013

#### Household Poverty Rate

In 2010, the General Statistics Office of the World Bank in Vietnam updated the new poverty lines with different categories (2012):

- extremely poor income under VND 653,000/person/month (US\$ 33.47/person/month),
- near-poor between VND 653,000 to 845,000/person/month (US\$ 33.47- US\$ 43.7 /person/month) and
- non-poor above VND 845,000/person/month (above US\$ 43.7) (WB, 2012).

Following the General Statistics Office of WB's guidelines on poverty, Table 4.11 illustrates the distribution of poverty of the respondents in both villages in 2012 and 2013. In general, the rate for poor households accumulated for both villages dropped from 57.1% to 47.6%; the rate of non-poor households dropped from 35.8% to 22.6%, and the rate of near-poor households sharply increased from 7.1% to 29.8%, respectively.

Table 4.11 Categorization of Respondents Based on Household Income (as a percentage)

|            | In 2012           |                |       | In 2013           |                |       |  |
|------------|-------------------|----------------|-------|-------------------|----------------|-------|--|
| Categories | Ta Rin<br>Village | Lap<br>Village | Total | Ta Rin<br>Village | Lap<br>Village | Total |  |
|            | (n=42)            | (n=42)         |       | (n=42)            | (n=42)         |       |  |
| Poor       | 50.0              | 64.3           | 57.1  | 50.0              | 45.2           | 47.6  |  |
| Near- poor | 4.8               | 9.5            | 7.1   | 19.0              | 40.5           | 29.8  |  |
| Non-poor   | 45.2              | 26.2           | 35.8  | 31.0              | 14.3           | 22.6  |  |
| Total      | 100.0             | 100.0          | 100.0 | 100.0             | 100.0          | 100.0 |  |

Source: Field Survey, 2013

In Ta Rin village, the poor income rate remained unchanged in 2013 and the near-poor respondents rate suddenly increased (9.5% to 19.0%), perhaps relative to natural disasters and acacia cultivation not yielding enough to harvest.

The category of non-poor households from the sample is shown as decreasing over time, from 45.2% to 31.0% in 2012 in Ta Rin and from 26.2% to 14.3% in 2013 in Lap. Similarly, poor household respondents in Lap village also decreased from 64.3% to 45.2%.

These changes in distribution of the poverty categories can be explained by the results in Table 4.12, which show statistically significant differences between income sources such as paddy rice, honey, wild pigs and uoi seeds, before and after BSM introduction (p< 0.05). According to respondents in 2013, more honey could be harvested due to a long summer, which also meant that the season for hunting wild pig was longer. This explains why the total number of poor household respondents dropped and the number of near-poor

households increased. On the other hand, the paddy rice harvest in 2013 was very low due to insect attacks which caused the decline in non-poor households. In addition, it was not possible to harvest uoi seeds after the BSM introduction in 2013 due to the unsustainable harvesting methods of Co Tu people, hence it has also contributed to making the number poor, near and non-poor households fluctuate in the two-year timeframe.

Table 4.12 Gain and Loss in Income Sources: Between, Before and After BSM Introduction in 2013 (Currency: VND)

| Income<br>sources | Numb<br>house |      | Average income before | Average income after | Average income gain or loss after | T -test (Sig.) |
|-------------------|---------------|------|-----------------------|----------------------|-----------------------------------|----------------|
|                   | 2012          | 2013 |                       |                      | BSM intro-<br>duction             |                |
| Paddy rice income | 64            | 63   | 3,442,500             | 2,682,845            | 759,642                           | .008           |
| Honey income      | 62            | 60   | 1,995,333             | 2,840,582            | 845,247                           | .001           |
| Wild pig income   | 29            | 36   | 1,207,083             | 2,313,791            | 1,106,709                         | .012           |
| Uoi seed          | 36            | 0    |                       |                      |                                   |                |

Source: Field Survey, 2013 Note: Significant at P<0.05

#### **Summary**

This chapter discussed various aspects of the two selected villages, Ta Rin and Lap. In terms of BSM management, selected CMFP and VMFP teams at commune and village levels focused mainly on monitoring forest protection rather than paying attention to developing an operational plan for BSM implementation. These teams only followed the initial planning from the BMNP Management Board, instead of collectively designing and co-managing their own BSM plan for their village. This may explain why less households participated in the BSM, as well as why only a limited number of women were involved n the development of the programs at the commune level. Consequently, there is a lack of a gender lens and its perspective in both management and

operational levels in the BSM. Women could not benefit from the BSM development programs and it affected their rights, roles and responsibilities when participating in the BSM. These aspects are discussed in more detail in Chapters 5 and 6.

In Co Tu society, most decisions in the household are made by men. Furthermore, in Co Tu culture, sons are more likely to get higher education because they stay with their parents. Daughters are not encouraged to seek higher education because Co Tu cultural and social norms consider daughters as belonging to her future husband's family, so it is not necessary to invest in education for them. Thus, the numbers of male respondents having college or university certificates reached 8%, while there was no female respondent having such a certificate.

The number of poor-households decreased in Lap villages and the number of near-poor households increased after BSM introduction, but reasons for this was likely better weather conditions for harvesting forest products, rather than the introduction of the BSM.

Middle income range (near-poor) household respondents still lacked capital to afford healthcare for their family members, education and investments to diversify their crops. Besides that, due to cultural norms, young girls and women in the Co Tu ethnic group lack opportunities to attend school or study up to a high education level. Thus, even though the number of middle income households increased in the commune (increased from 7.1% in 2012 to 29.8% in 2013), it could not help young girls or women to enhance their capacity for human capital.

#### **Chapter 5**

# **Gendered Participation in Benefit Sharing Mechanisms**

This chapter discusses the BSM member's level of participation and benefits from collecting NTFPs, in regard to their rights and responsibilities. The effectiveness of the BSM in the inclusion of women, as well as the gender division of labor and decision- making processes between men and women at commune and household levels, are discussed in detail. In depth interviews illustrate the obstacles facing Co Tu which prevent them from fully engaging in the BSM.

### Gender Division of Labor in Collecting Non-timber Forest Products

Women and men in the study area collect NTFPs based on their traditional roles within the family. Co Tu men cut timber for house construction and hunt wild animals for family consumption and for selling, while women collect NTFPs nearby the village for the family 's daily food.

Before the introduction of the BSM, men and women were not allowed to collect any species or hunt wild animals from BMNP due to the strict laws on forest protection in Vietnam. All extractive activities were forbidden, however, data from the study clearly shows that local people still harvested NTFPs for their household consumption and commercial purposes. As such,

men and women still maintained their traditional roles in collecting NTFPs and other forest resources.

After BSM introduction, men and women could legally collect NTFPs. Table 5.1 shows that men focused on products such as rattan, honey, uoi seed, wild pigs and linh chi mushroom while women collected fuel wood, bamboo shoots and snails. The species collected by men have a high value in the market and grow extensively inside the core-zone of the BMNP, so it took a long time to collect them. This job required physical strength and independence from other duties, as the collectors stayed inside the forest for five to seven consecutive days. Women harvested NTFPs for their household's daily food so collecting bamboo and catching snails nearby the village was their priority. For the women, this role gave them more time to take care of their children and do the housework. Therefore, there is a clearly gendered division of labor between men and women in collecting NTFPs under the BSM.

Women and men maintain close cooperation while collecting NTFPs, as they make plans together, including on the duration of stay in the forest, preparation of food for the stay, on post-harvesting activities and eventually selling the NTFPs to middlemen or directly on the market. Male respondents indicated that their wives prepared all the food, medicines, raincoats, and other necessary items for. After harvesting, if they could not sell their products to middlemen or in the market, women then played a significant role in keeping NTFPs safe by using traditional post-harvesting methods. Both men and women cooperate and divide labor in the NTFPs collecting process.

Table 5.1 NTFP Harves Patterns of Men and Women in Respondent's Household (In percentage)

| NTFPs<br>category | No<br>collect<br>NTFPs | Preferences in collecting NTFPs  (include no collection under this header) |    |                  |    |      |   |     |    |     |
|-------------------|------------------------|--|----|------------------|----|------|---|-----|----|-----|
|                   |                        | Male Female Both Total   |    | Male Female Both |    | tal  |   |     |    |     |
|                   | F                      | %  | F  | %                | F  | %    | F | %   | F  | %   |
| Rattan            | 11                     | 13.1   | 70 | 83.3             | 3  | 3.6  | - | -   | 84 | 100 |
| Bamboo            |                        |  |    |                  |    |      | 7 |     | 84 | 100 |
| shoots            | 13                     | 15.5   | 11 | 13.1             | 53 | 63.1 |   | 8.3 |    |     |
| Honey             | 24                     | 28.6   | 51 | 60.7             | 6  | 7.1  | 3 | 3.6 | 84 | 100 |
| Snails            | 15                     | 17.9   | 9  | 10.7             | 56 | 66.7 | 4 | 4.8 | 84 | 100 |
| Linh chi          |                        |  |    |                  |    |      | - |     | 84 | 100 |
| mushrooms         | 46                     | 54.8   | 36 | 42.9             | 2  | 2.3  |   | -   |    |     |
| Uoi seeds         | 48                     | 57.1   | 34 | 40.5             | 2  | 2.4  | - | -   | 84 | 100 |
| Wild pig          | 48                     | 57.1   | 33 | 39.3             | 3  | 3.7  | 1 | -   | 84 | 100 |
| Others            | 11                     | 13.1   | 60 | 71.4             | 10 | 11.9 | 3 | 3.6 | 84 | 100 |

*Note: Others mean foil hat, herbs and broom plant (for making broom)* 

#### Gender Division of Labor in Reproductive Work

In Co Tu traditional culture, division of labor is deeply influenced by the patriarchal system where men make most decisions in the household. In terms of the division of housework, Co Tu people have the idiom: "men make the house women keep the kitchen", thus Co Tu women are mainly responsible for housework. The gendered division of labor in domestic work is clearly divided in Co Tu society. Domestic work includes caring for children, washing, cooking, and fuel wood collection. According to respondents, after working in the field, women spend their remaining time on housework, making them feel overburdened. In comparison, men's main domestic work after coming back from field work is house maintenance, repair of equipment, and supporting children with their homework assignments.

Table 5.2 Gender Division of Labor in Daily Domestic Activities

| No | Activities                    | Labor of division, main responsible |       | •    | Notes              |
|----|-------------------------------|-------------------------------------|-------|------|--------------------|
|    |                               | Men                                 | Women | Both |                    |
| 1  | Child care                    | X                                   | X     | X    | Men do sometimes   |
| 2  | Cooking                       | X                                   | X     | X    | Men do sometimes   |
| 3  | Washing                       | X                                   | X     | X    | Men do sometimes   |
| 4  | Fuel wood collection          | X                                   | X     | X    | Women collect most |
| 5  | House cleaning                |                                     | X     |      | Usually            |
| 6  | House maintenance             | X                                   |       |      | Sometimes          |
| 7  | Support home work of children | X                                   | X     |      | Usually            |
| 8  | Repair of equipment           | X                                   |       |      | Sometimes          |

This study could only quantify the contribution of Co Tu women and men in major house-related work such as cooking, washing, caring for children and collecting fuel wood. Table 5.3 shows which household members are responsible for housework in, by village. Only some men participated in child care (6%), cooking (3.6%) and washing (3.6%), while women mainly take on these domestic roles.

Table 5.3 Person Responsible for Housework in Respondents' Household, by Village

| Housework's          | Ta Rin |      | Lap |      | Total |      |
|----------------------|--------|------|-----|------|-------|------|
| responsibilities     | Fre.   | %    | Fre | %    | Fre.  | %    |
| Child care           |        |      |     |      |       |      |
| Male                 | 4      | 9.5  | 1   | 2.4  | 5     | 6.0  |
| Female               | 34     | 81.0 | 31  | 73.8 | 65    | 77.4 |
| Both                 | 4      | 9.5  | 10  | 23.8 | 14    | 16.6 |
| Total                | 42     | 100  | 42  | 100  | 84    | 100  |
| Cooking              |        |      |     |      |       |      |
| Male                 | 2      | 4.8  | 1   | 2.4  | 3     | 3.6  |
| Female               | 37     | 88.1 | 36  | 85.7 | 73    | 86.9 |
| Both                 | 3      | 7.1  | 5   | 11.9 | 8     | 9.5  |
| Total                | 42     | 100  | 42  | 100  | 84    | 100  |
| Washing              |        |      |     |      |       |      |
| Male                 | 2      | 4.8  | 1   | 2.4  | 3     | 3.6  |
| Female               | 38     | 90.5 | 37  | 88.1 | 75    | 89.3 |
| Both                 | 2      | 4.8  | 4   | 9.5  | 6     | 7.1  |
| Total                | 42     | 100  | 42  | 100  | 84    | 100  |
| Fuel wood collection |        |      |     |      |       |      |
| Male                 | 16     | 38.1 | 2   | 4.8  | 18    | 21.4 |
| Female               | 24     | 51.7 | 37  | 88.1 | 61    | 72.6 |
| Both                 | 2      | 4.8  | 3   | 7.1  | 5     | 6.0  |
| Total                | 42     | 100  | 42  | 100  | 84    | 100  |

#### Gender Division of Labor in Productive Work

Traditionally, Co Tu men take part in field clearance, burning, and tree chopping for crop cultivation. Their work is finished after they have cleared the field. However, since the cultivation of rice is not allowed in the upland areas, men's occupation shifted to rubber tree plantations, raising livestock at

home and planting paddy rice and cassava. Table 5.4 below presents the gendered division of labor among the Co Tu people.

Table 5.4 Gender Division of Labor in Productive Work

| No | Activities           |     | Labor of division, main response |      |  |
|----|----------------------|-----|----------------------------------|------|--|
|    |                      | Men | Women                            | Both |  |
| 1  | Field clearance      | X   |                                  |      |  |
| 2  | Burning the field    | X   |                                  |      |  |
| 3  | Tree chopping        | X   |                                  |      |  |
| 4  | Weeding              |     | X                                |      |  |
| 5  | Planting paddy rice  |     | X                                |      |  |
| 6  | Planting cassava     |     | X                                |      |  |
| 7  | Planting rubber tree | X   |                                  |      |  |
| 8  | Planting acacia      | X   |                                  |      |  |
| 9  | Raising pig          |     | X                                |      |  |
| 10 | Raising chicken      |     | X                                |      |  |
| 11 | Raising cattle       | X   |                                  |      |  |

Source: Field Survey, 2013

This study collected information about the distribution of labor, in planting paddy rice, cassava, rubber trees and acacia and raising pigs, fish, chickens and cattle. Table 5.5 illustrates the number of males and females in these different sectors of productive work, by household.

Not all household respondents were involved in planting acacia or rubber tree as some did not have enough land. Since rubber trees and acacia are considered as high value products, propagation of these trees was very fast in this area. The results from the study show that men focus on planting trees such as the rubber tree (62.9%) and acacia (86.3%) (Table 5.5). Rubber trees can provide rubber latex after six to seven years and acacia can be harvested after at least five to six years. This confirms earlier findings that men focus on the collection of high value species. According to respondents, land for cultivation of paddy rice was insufficient, hence cassava replaced paddy rice as their main agricultural income source. Women mainly do the planting of paddy rice (84.4%) and cassava (85.7%) and raise livestock.

In Co Tu culture, women are the main contributors to crop production, which satisfy household subsistence purposes. This is the reason why women play a vital role in ensuring food security for their household. Observations from the field show that women and young girls usually carry baskets on their back for going to work in the field or carrying fuel wood back home, while men and young teenage males meet and drink alcohol. This may be influenced by Co Tu customary law that says before getting married, Co Tu men must pay dowry, such as buffalos or other valuable gifts, to the bride's parents. In many cases, the bridegroom's family faces food shortages after a wedding as they pay off the debt for several years. This customary law is not as commonly enforced as it was in the past, although it still exists in the Co Tu community. Women feel a special burden to compensate the husband's family for the dowry given to her parents when she was married.

Table 5.5 Person Responsible for Productive Work in Respondents' Household, by Village

| Productive work       | Ta Ri | in   | Lap |      | Total |      |
|-----------------------|-------|------|-----|------|-------|------|
|                       | Fre.  | %    | Fre | %    | Fre.  | %    |
| Planting paddy rice   |       |      |     |      |       |      |
| Male                  | 0     | 0    | 1   | 4.0  | 1     | 1.6  |
| Female                | 33    | 84.6 | 21  | 84.0 | 54    | 84.4 |
| Both                  | 6     | 15.4 | 3   | 12.0 | 9     | 14.1 |
| Total                 | 39    | 60.9 | 25  | 39.1 | 64    | 100  |
| Planting cassava      |       |      |     |      |       |      |
| Male                  | 0     | 0    | 1   | 2.4  | 1     | 1.2  |
| Female                | 40    | 95.2 | 32  | 76.2 | 72    | 85.7 |
| Both                  | 2     | 4.8  | 9   | 21.4 | 11    | 13.1 |
| Total                 | 42    | 50.0 | 42  | 50.0 | 84    | 100  |
| Planting rubber trees |       |      |     |      |       |      |
| Male                  | 30    | 75.0 | 14  | 46.7 | 44    | 62.9 |
| Female                | 0     | 0    | 5   | 16.7 | 5     | 7.1  |
| Both                  | 10    | 25.0 | 11  | 36.7 | 21    | 30.0 |
| Total                 | 40    | 57.1 | 30  | 42.9 | 70    | 100  |

| Productive work  | Ta Rin |      | Lap |      | Total |      |  |
|------------------|--------|------|-----|------|-------|------|--|
|                  | Fre.   | %    | Fre | %    | Fre.  | %    |  |
| Planting acacia  |        |      |     |      |       |      |  |
| Male             | 32     | 86.5 | 31  | 86.1 | 63    | 86.3 |  |
| Female           | 1      | 2.7  | 1   | 2.8  | 2     | 2.7  |  |
| Both             | 4      | 10.8 | 4   | 11.1 | 8     | 11.0 |  |
| Total            | 37     | 50.7 | 36  | 49.3 | 73    | 100  |  |
| Raising pigs     |        |      |     |      |       |      |  |
| Male             | 0      | 0    | 1   | 4.0  | 1     | 2.8  |  |
| Female           | 7      | 63.6 | 18  | 72.0 | 25    | 69.4 |  |
| Both             | 4      | 36.4 | 6   | 24.0 | 10    | 27.8 |  |
| Total            | 11     | 30.6 | 25  | 69.4 | 36    | 100  |  |
| Raising chickens |        |      |     |      |       |      |  |
| Male             | 2      | 9.5  | 0   | 0    | 2     | 4.5  |  |
| Female           | 15     | 71.4 | 23  | 100  | 38    | 86.4 |  |
| Both             | 4      | 19.0 | 0   | 0    | 4     | 9.1  |  |
| Total            | 21     | 47.7 | 23  | 52.3 | 44    | 100  |  |
| Raising cattle   |        |      |     |      |       |      |  |
| Male             | 2      | 14.3 | 1   | 14.3 | 3     | 14.3 |  |
| Female           | 6      | 42.9 | 6   | 85.7 | 12    | 57.1 |  |
| Both             | 6      | 42.9 | 0   | 0    | 6     | 28.6 |  |
| Total            | 14     | 66.7 | 7   | 33.3 | 21    | 100  |  |
| Raising fish     |        |      |     |      |       |      |  |
| Male             | 3      | 18.8 | 1   | 50.0 | 4     | 22.2 |  |
| Female           | 6      | 37.5 | 1   | 50.0 | 7     | 38.9 |  |
| Both             | 7      | 43.8 | 0   | 0    | 7     | 38.9 |  |
| Total            | 16     | 88.9 | 2   | 11.1 | 18    | 100  |  |

Due to a lack of knowledge on animal hygiene and vaccinations, Co Tu people in the study area do not keep livestock like other ethnic groups or Kinh people. They raise animals such as chickens, pigs, and fish for providing food for their family and raise cattle only for community celebrations and festivals. Mrs. V from Lap's women union shared that: "Women mostly decide to raise

fish in their ponds and raise chickens at home because it can help us to provide balanced nutrition to our family. Several women in the village cook local wine for selling and keep wort for raising pig". Thus, livestock is an important food source for Co Tu household. However, not many household respondents raise chicken, pigs or fish. There was only one household in Lap raising fish; Lap village is located in a very mountainous area and digging a fish pond is very difficult. From data analysis of the research, women still play the main role in raising livestock: raising pigs (69.4%), chicken (86.4%), cattle (57.1 %) and fish (38.9%).

During discussions with groups of men and women in Ta Rin and Lap, participants shared that they are both involved in decision making regarding crop production activities, tree plantations and livestock raising. Women make decisions on crop production activities, such as planting paddy rice or cassava (providing food for family), while men decide on planting rubber or acacia plantations which are high economic value products.

#### Gendered Rights, Roles and Responsibilities in Collecting Nontimber Forest Products

Conservation and forest protection policies in Vietnam prohibit the exploitation of any forest resources from PAs (Quan and Suriya, 2011). These strict regulations lead to the burdening of local people living around SUFs with the costs for protecting their natural resources. They create problems and lead to conflicts between authorities and local people living around the SUFs. Following world-wide conservation approaches, the Government of Vietnam recently developed a new policy encouraging and advocating for communities to participate in environmental conservation. At the same time, these policies facilitate consideration of equitable sharing of resource related benefits and responsibilities, as well as recognition of the roles and rights of local people in managing natural resources. Through this modern conservation concept, a government is able to open up dialogue, and therefore, help to improve relations and reduce conflicts with local people living around SUFs. This cooperation between government and inhabitants of SUFs will help to improve conservation efforts and reduce the extraction of endangered species. To meet these objectives, the pilot BSM policy was promulgated and implemented in BMNP as a pilot activity connecting biodiversity conservation and forest management in Vietnam.

The pilot policy is guided by the operation plan of the Management Board of National Park. The Management Board performs the role of 'owner' of the SUF according to legal policies and regulations. BMNP performs different tasks regarding the implementation of the BSM in the villages, such as providing support to the MFC, is responsible for implementing the BSM scheme and setting up awareness training on forest management and conservation to the communities. As stated, the councils have to ensure that local villages in the forest community can fully access all necessary information related to the BSM and regulations on forest management in SUFs.

The BMNP sets up operational regulations and plans for the BSM and MFC execute them under the guidance of the BMNP Management Board. Among 12 MFC members, nine belong to the commune and villages, and the other three MFC members are from BMNP. They supervise the execution of the BSM to make sure that all BSM members harvest NTFPs and perform forest management activities according to the plan. Furthermore, they provide suggestions on implementing the BSM at the commune level, especially during harvesting season, quantity and location for harvesting NTFPs. Roles and responsibilities of FMC, CFMP and VFMP are defined according to their position in each team. Each team has specific responsibilities and roles for implementation of the BSM at village and commune levels.

The MFC organizes one meeting per month to evaluate the results in implementing the BSM and discuss issues within the villages. These meetings are expected to correspond to the demands and needs of local people and BSM members. As with most forest protection and development policies in the past, the pilot policy on BSM does not mention anything regarding gender. It does not contain any specific provisions for attendance of either men or women, from poor or non-poor households participating in the BSM.

According to the BSM, men and women have the same rights to collect NTFPs in SUFs. Among BSM managerial teams, there only three women involved as council member and two secretaries. This shows that only a few women at commune and village levels take part in BSM management, thus giving some explanation as to why gender concerns are not taken into serious consideration in BSM implementation.

BSM members can collect seven species, a selection, which was initially agreed upon with BMNP. These seven species are rattan, honey, bamboo shoots,

snails, uoi seed, linh chi mushrooms and wild pigs. They were chosen because they are the most valuable products inside the national park, and can still be harvested in a sustainable way. In the BSM, female and male members have the same rights to legally collect NTFPs, however, results from the survey show that most of women members only collect NTFPs such as bamboo shoots and snails for family consumption, while male members concentrate on collecting high value NTFPs like rattan, honey, linh chi mushrooms and wild pigs for commercial purposes (refer to Table 5.1). These preferences are influenced by Co Tu traditional gender roles, and therefor mean that men and women access and control NTFPs in a gendered way.

Collection patterns of NTFPs determine the decision-making processes around them. Products like bamboo shoots, snails and fuel wood are decided upon almost entirely by women. While the decisions regarding collection and utilization of rattan, honey, wild pigs and linh chi mushrooms is done by men. Gender roles in the society have generated the roles and responsibilities for women's and men's rights in accessing, collecting and utilizing NTFPs.

Since females focus on collecting low value products for direct utilization within the household (bamboo shoots, snails and fish) and only sell them when they have excess, and men focus on harvesting high value products primarily for selling (rattan, honey, uoi seed, linh chi mushrooms and wild animals) (see table 5.1); thus, men contribute the cash income generated from selling NTFPs to the household. Even though collecting NTFPs for household consumption is an indirect contribution to family income, the opportunity of cash income for men through forest products could also influence the decision-making power of men and women at the household level.

Another NTFP collection pattern connected with the traditional roles of women, is that most women involved in harvesting NTFPs do this nearby their villages because they have to be back home before the evening to care for their children, prepare food and do other housework. As men extract NTFPs far away from their villages, they group together with at least two to three people for five to seven consecutive days. Their work is finished after they carry their harvest back home or sell it at the market. They have more time to relax or gather with friends in other villages and drink alcohol. According to the discussions with respondents, men are physically stronger than women and their responsibility in harvesting the high value NTFPs and hunting of wild

animals adds another dimension to the perception of gender imbalance in the NTFPs collection.

# Participation of Local People in Decision-making Processes of Benefit Sharing Mechanisms

#### At Village Level

Before BSM introduction to the villages, a survey was conducted to establish a list of the NTFPs that local people were interested in collecting. During this survey, meetings were conducted with villagers to give them the opportunity to contribute ideas on which species to collect, location, seasons for harvesting and quantities. Through these meetings, local people learned how the benefit sharing mechanism would be implemented. Findings of the survey were discussed with the Thuong Nhat authority and the local people in seven villages, and awareness was created about which benefits members would enjoy when they participated in the BSM. The FMC, CMFC and VMFC managerial teams were also established and consulted at this time.

The results from the field study indicate that less women participated in the meetings of the BSM processes. However, bearing in mind the generally low participation of women in public meetings, a relatively high number of women participated in the BSM meetings (refer to Table 5.6).

Table 5.6 Contributing Ideas in Village Meetings on BSM Process, by Sex of Respondents

| Contribution ideas for      | M    | ale  | Female |      | Total |       |
|-----------------------------|------|------|--------|------|-------|-------|
|                             | Fre. | %    | Fre.   | %    | Fre.  | %     |
| Seasonal harvesting         | 44   | 88.0 | 30     | 88.2 | 74    | 88.1  |
| NTFP's species              | 39   | 78.0 | 27     | 79.4 | 66    | 78.6  |
| Quantities                  | 40   | 80.0 | 25     | 73.5 | 65    | 77.4  |
| Location of harvest         | 44   | 88.0 | 28     | 82.4 | 72    | 85.7  |
| Total sample of respondents | 50   | 59.5 | 34     | 40.5 | 84    | 100.0 |

Source: Field Survey, 2013

Results from discussions with local women show that Co Tu women are interested to know about the BSM and its operational regulations. According to Mrs. B, who attended the meetings: "the meetings helped me to understand how the BSM regulations on collecting NTFPs will be in future". Thus, the meetings indeed raised women's awareness of their rights, roles and responsibilities when participating in the BSM. By encouraging women's participation in future BSM meetings, gender role changes far beyond the BSM might be possible, and Co Tu women can get another perception of their role within commune activities.

However, women 's participation in the BSM meetings was not reflected in the BSM plan, such as in the development activities, and as a result there were very few numbers of women participating in these trainings. That is, the intervention plan under the BSM did not include gender issues and use gender lens to strengthen capacity for women, or pay less attention to gender differences in Co Tu society. As a result, women could not attend the trainings of the BSM development interventions in the village. This issue will be discussed further in Chapter 6.

#### At Household Level

The study also surveyed the decision-making processes around participating in the BSM at the household level. Table 5.7 presents the results - that it was mainly the men who decided to participate in BSM (71.4%). Only in a small number of cases, did both wife and husband (13.1%) decide together to participate in the BSM. The findings from Table 5.7 indicate that females are interested in the BSM because the number of females (13 people) who did make the decision to participate in the BSM is double the number of female heads of family (6 people) in the study area. Additionally, the findings in Table 5.1 show that men collect the NTFPs which have high value for cash income. They need to go further into the core-zone of BMNP to find these NTFPs and are more at risk of being caught by forest rangers. As a result, they are likely to be more interested in legalizing the harvesting of NTFPs.

Table 5.7 Decision Making at Household Level Regarding Participation in BSM

| Decision making                       | Ta   | Rin  | La  | ap   | Total |      |  |
|---------------------------------------|------|------|-----|------|-------|------|--|
| at household level                    | Fre. | %    | Fre | %    | Fre.  | %    |  |
| Make decision to participation in BSM |      |      |     |      |       |      |  |
| Male                                  | 33   | 78.6 | 27  | 64.3 | 60    | 71.4 |  |
| Female                                | 4    | 9.5  | 9   | 21.4 | 13    | 15.5 |  |
| Both                                  | 5    | 11.9 | 6   | 14.3 | 11    | 13.1 |  |
| Total                                 | 42   | 100  | 42  | 100  | 84    | 100  |  |

## Motivation and Barriers of Women's Participation in Management of the Benefit Sharing Mechanism

Villagers are motivated by different reasons to participate in the BSM, which directly or indirectly affects their rights and responsibilities in collecting NTFPs inside BMNP. The direct benefits are in the form of food, medicine or cash income and are very important for them. As illustrated in chapter 4, NTFPs give income to 98.8% of respondents.

One main reason for the interest in NTFP is that they are easy to collect (88.1% of respondents cited this as a reason). Women are especially depended on NTFPs for collection of fuel wood (97.0%). According to the traditional roles of Co Tu people, women are responsible for collecting fuel wood, a very laborious work, which is the reason for their special concern in this product.

Table 5.8 Reasons Why Respondents Participated in BSM, by Sex of Respondents (Multiple responses were permitted)

| Reasons                         | Male |      | Fem | ale  | Total |      |
|---------------------------------|------|------|-----|------|-------|------|
|                                 | F    | %    | F   | %    | F     | %    |
| Easy to collect NTFPs           | 47   | 94.0 | 27  | 79.4 | 74    | 88.1 |
| Need of fuel wood               | 32   | 64.0 | 33  | 97.1 | 65    | 77.4 |
| NTFPs for household consumption | 42   | 84.0 | 25  | 73.5 | 67    | 79.8 |
| NTFPs for sell                  | 33   | 66.0 | 18  | 52.9 | 51    | 60.7 |

| Protect and management of forest                      | 15 | 30.0 | 13 | 39.4 | 28 | 33.7 |
|---|----|------|----|------|----|------|
| Flood control   | 31 | 62.0 | 16 | 47.1 | 47 | 56.0 |
| Acquired knowledge on sustainable harvesting of NTFPs | 31 | 62.0 | 17 | 50.7 | 48 | 57.1 |
| Control of illegal collection of NTFPs                | 25 | 50.0 | 15 | 44.1 | 40 | 47.6 |
| Total   | 50 | 59.5 | 34 | 40.5 | 84 | 100  |

The findings show that fuel wood was a significant reason for women to participate in the BSM, followed by the collection of NTFPs for household consumption (73.5%) and selling (52.9%). In contrast to women, male respondents considered the easy collection of NTFP's as their priority (94.0%) for participation in BSM. They also appreciated NTFPs for household consumption (84.0%) and sale (66.0%).

Women were not so concerned about ecosystem services, like flood control, or the aspects of sustainable use. The control of illegal use was not as important to them as to the responding men. The figures show that villagers are aware of the functions of the forest resource for their daily life. However, there was a lack of attention to forest protection and management issues among respondents (33.7%), which may bring negative impacts to forest management activities and conservation plans at BMNP. There is still a substantial need for awareness raising programs on forest protection and management. Men see the necessity to gain knowledge on sustainable harvesting methods and the control of illegal NTFP exploitation, more so than women, as their preferred products are already under high pressure and they already experience the impact of unsustainable harvests.

#### Summary

This chapter assessed the gender division of labor in NTFP collection, domestic and productive work at the household level, and the gendered rights, roles and responsibilities involved in collecting NTFPs. Decision making

processes at commune and household levels to participate in the BSM, and reasons why local people decided to participate in the BSM, was also discussed.

Despite BSM members having the same rights to collect NTFPs when participating in BSM, regardless of gender, the findings showed that men and women's roles and responsibilities to access, utilize and control NTFPs were more influenced by Co Tu peoples traditional harvesting pattern. As such, the gender division of labor in collecting NTFPs is also influenced by cultural norms.

In Co Tu society, women face the double burden of domestic and productive work within their families. They are considered as the main daily food contributors and a such, they must work hard to provide food to feed their families. Social and cultural norms see women mainly acting within their families, however, at the village level, women also had opportunities to contribute their ideas to the BSM planning process. This had the potential to raise women's awareness of their rights and responsibilities in the BSM and motivate them to participate.

Nevertheless, the lack of gender lens or focus on gender differences in the BSM for Co Tu women, was a result of gender not being discussed in planning or development activities of the BSM and consequently, gender issues were excluded from implementation altogether. Therefore, the BSM program could not address the specific interests or demands of the local women participating in it.

#### Chapter 6

### Gendered Benefits in Collecting Non-timber Forest Products from Bach Ma National Park

This chapter describes the benefits to the BSM members collecting NTFPs inside BMNP after implementing the BSM. Other benefits from participation in the BSM's development activities, including gender benefits, are also discussed in this chapter, providing an overall description of BSM's operation steps at the commune level. The findings from this section can provide valuable suggestions for effectively implementing the BSM while expanding the pilot policy to other locations.

### Benefits of the Benefit Sharing Mechanism Program at the Household Level

The sampled households benefitted not only from collection of NTFPs, but they also gained other benefits by participating in trainings on livestock raising and from receiving animals from BMNP. The purpose of conducting those trainings and distributing the animals was to reduce people's dependence on NTFPs and diversify their income sources. The benefits of the BSM program at household level is discussed below.

#### Gendered Benefits in Collecting Non-timber Forest Products

The local people in Thuong Nhat commune collect NTFPs all year round depending on the seasonal harvesting time of each species. Usually, they collect these products in their free time, from October to February in BMNP. Some species are collected during specific months such as bamboo, uoi seeds, mushrooms and honey in spring. Before introduction of the BSM, local people tried to collect as much as they could with their traditional harvesting methods, which included both sustainable and unsustainable methods, and which threatened the existence of forest resources.

The results in Table 6.1 show that men specifically target five species of NTFPs, that have high value in the market (rattan, honey, uoi seed, linh chi mushrooms and hunting wild pigs), whereas women, mainly collect two species (snails and bamboo shoots) for household consumption and selling when there is excess. Due to over-harvesting in previous years, the species collected by men are no longer easy to get nearby the village. If local people want to get them, they have to go a long distance inside the core-zone. Collection work can only be done by men because it requires physical strength. This could explain why men have more access to and control over products from NTFPs than women, which results in a higher average income (Table 5.1). Observations from the field study show that no uoi seed products were collected in 2013 due to unsustainable harvesting of this species in previous years. Local people have to wait another four years until uoi trees grow mature before they can harvest them.

According to Table 6.1, more people collected NTFPs before the BSM was introduced to the commune. The average income from each species after BSM introduction was slightly increased, however, there was no statistical evidence that total cash income was any different before and after BSM introduction.

Table 6.1 Average Household Income from Different NTFPs Before and After BSM Introduction by the Main Person Who Collects Respective NTFPs (Currency: VND)

| Species             | Average income before BSM introduction |         |            | Average inco | ome after I | BSM introduc- |
|---------------------|--|---------|------------|--------------|-------------|---------------|
|                     | Male                                   | 70      | 1,440,000  | Male         | 67          | 1,639,850     |
| Rattan              | Female                                 | 3       | 1,500,000  | Female       | 3           | 1,500,000     |
|                     | Male                                   | 11      | 155,640    | Male         | 9           | 262,220       |
|                     | Female                                 | 53      | 177,250    | Female       | 46          | 211,350       |
| Bamboo              | Both                                   | 7       | 125,710    | Both         | 7           | 195,710       |
|                     | Male                                   | 51      | 2,007,060  | Male         | 54          | 2,911,410     |
|                     | Female                                 | 6       | 2,306,670  | Female       | 6           | 2,400,000     |
| Honey               | Both                                   | 3       | 1,173,330  | Both         | 2           | 2,250,000     |
|                     | Male                                   | 9       | 669,330    | Male         | 7           | 447,140       |
|                     | Female                                 | 56      | 1,290,680  | Female       | 51          | 1,335,490     |
| Snail               | Both                                   | 4       | 1,106,00   | Both         | 2           | 2,550,000     |
|                     | Male                                   | 36      | 1,802,780  | Male         | 32          | 2,293,750     |
| Mushroom            | Female                                 | 2       | 1,500,000  | Female       | 2           | 3,500,000     |
|                     | Male                                   | 34      | 1,514,410  |              |             |               |
| Uoi seed            | Female                                 | 2       | 1,100,000  |              |             |               |
|                     | Male                                   | 33      | 1,285,000  | Male         | 26          | 2,434,620     |
| Wild pig            | Female                                 | 3       | 350,000    | Female       | 3           | 366,670       |
|                     | Male                                   | 60      | 369,750    | Male         | 52          | 357,880       |
|                     | Female                                 | 10      | 585,000    | Female       | 9           | 433,330       |
| Others              | Both                                   | 3       | 400,000    | Both         | 3           | 400,000       |
| NTFPs (2012/2013)   | Mean 20                                | 12: 6.1 | 88,238     | Mean average |             | Significant   |
| Mean 2013: 6533,190 |  | 33,190  | 344,952 .2 |              | .257        |               |

Note: (1) calculated only for those who are collecting the respective NTFP

(2) "male", "female", "both" refer to people who are the main persons to collect the respective NTFPs.

(3) Significant P<0.05

According to Co Tu culture, men play an important role in collecting NTFPs and hunting animals. During the field site study, most male respondents said that they like to gather NTFPs and hunt wild animals in the forest. Thus, it could be assumed that the forest is associated more with men than with women. Furthermore, men are heads of households and they are responsible for earning money for their families. By collecting and then selling NTFPs, the income raised can help to cover their family expenses, especially during times of food shortage. In the meantime, women stay at home to take care of heavy domestic and productive tasks in the household. This division of labor in the family is divided by natural notions of gender and is determined by the physical ability of each sex (femininity and masculinity). Thus, it is believed that men can get more cash income from collecting NTFPs than women.

Men almost solely focus on collecting high value NTFPs and this has an impact on biodiversity conservation. By encouraging women's and men's participation in all management levels of the BSM, the mechanism can initiate appropriate development models to diversify livelihood activities in the community and generate income at the household level. This can minimize unbalanced harvesting of NTFPs and extraction of timber inside BMNP. Balancing sustainable harvesting of NTFPs can encourage, not only the equal sharing of benefits from forest resources, but also promote gender equity and equality in forest management.

#### Gendered Benefits by Participating in Benefit Sharing Mechanism Intervention Development Activities

A two-pronged strategy of training was used to introduce the BSM to the members at the village level for improving their knowledge and skills on developing their livelihoods activities: 1) providing trainings on raising livestock and planting fruit trees and 2) providing input on animal raising and seedlings to the households. The trainings were conducted to poor and near-poor household members in Thuong Nhat commune and focused on raising pigs, chickens, fish, goats and planting bananas.

Due to the lack of gender lens for trainings in the commune, the BSM did not develop a training plan which focused the necessary attention on gender differences and specific needs of the BSM members. Thus, mostly men attended the trainings rather than women (Table 6.2). Table 6.2 illustrates the number of households by village and commune, which received animals, trainings on

livestock and banana seedlings from the BSM's intervention program, disaggregated by gender. It shows that women had less opportunity to participate in the BSM intervention trainings.

Table 6.2 Number of Households Receiving Animal Distribution and Trainings on Raising Livestock and Plants, by Gender and within Commune and Selected Villages

| Animals<br>and plant<br>provided | Та   | Rin    | L:   | ар     | No of<br>HH<br>receive<br>animal/<br>attend<br>train-<br>ing | Male | Female |
|----------------------------------|------|--------|------|--------|--|------|--------|
|                                  | Male | Female | Male | Female |  |      |        |
| Goat                             | 3    | 0      | 1    | 0      | 9  | 9    | 0      |
| Fish                             | 14   | 0      | 0    | 0      | 43   | 43   | 0      |
| Pig                              | 9    | 0      | 5    | 2      | 50   | 44   | 6      |
| Chicken                          | 12   | 3      | 10   | 0      | 80   | 71   | 9      |
| Banana                           | 7    | 0      | 7    | 0      | 50   | 44   | 6      |

Source: BMNP report, 2012

As discussed in Chapter 5, women mainly take the role of raising livestock in their households, however, they missed opportunities to participate in the relevant trainings. Thus, they could not improve upon their existing knowledge on raising livestock at home unless their husband shared the information with them at home. This prevents women's access to information, which could otherwise have helped them to diversify their livelihood activities to overcome poverty and cope with the current difficulties of climate change in upland areas.

The results from the women's group discussions showed that women play a significant role in improving family income conditions through raising livestock. According to Co Tu social and cultural norms, women must do both domestic and productive work to compensate for the amount of assets (dowry) that their parents received when getting married. As such, women could not leave their household for a long time due to their domestic tasks. Thus, raising small livestock nearby their homestead was a suitable job for women.

The provision of animals and seedlings to the households was done after the trainings. Due to the limited budget, a very small number of animals and seedlings were given to the local people. Furthermore, some households required inputs like animal sheds, ponds and food for raising the animals, adding on unaffordable expenses for already poor households. One female respondent from Lap shared that: "the animals are not available to poor or near-poor households and distribution is biased in favor to wealthier households"; while one old man in Lap said: "The animals or seedlings provided were not suitable for the climate of the mountainous areas". Mrs. B from Lap village complained that: "There were many cases of bias in selecting poor BSM member households, who could attend the trainings and got animals. Some non-poor households could also attend the trainings and receive animals". In addition, she criticized: "the illiterate people get no opportunity to participate in these trainings, especially illiterate women as they have limited knowledge to join such activities". One more respondent in Ta Rin shared: "I could not attend these trainings as I was too busy with my household and farming works". However, some households, who did not belong to the BSM, had success when raising pigs. Mrs. B from Lap shared:

Our family has no land for growing paddy rice and as the government does not allow cultivating upland rice, we have to buy rice from the market every month. I want to raise hybrid pigs like Kinh people to generate family income but my family doesn't even have enough food for us, how can we raise pigs? One Kinh family shared their experience to raise hybrid pigs at their farm with me, so I decided to make wine for selling in the village or district's town and spend some of that money to buy feed for the pigs. Income from selling the pig will help me to buy rice and food for my family. (42-year-old woman)

When local people actively pay attention to innovative ways to generate household income, they can overcome poverty, instead of waiting for the government to support them with poverty reduction programs.

Another challenge to the successful implementation of the development activities was a low awareness of animal hygiene. There was a serious lack of knowledge in vaccinating and applying medicines, as well as a lack of trained veterinarians in the villages. Most of the chicken, pigs and goats that were

distributed grew slowly or died from diseases. Traditionally, Co Tu people raise their animals without vaccination, but they also do not know how to prevent their livestock from getting diseases. If animals died, they believe that "Giàng" (Co Tu's ghost) wanted to take them away. Many poor households, who had support from the BSM development interventions in the beginning, failed in raising chickens, pigs and goats because they had no capital to purchase vaccinations or medicine. Mrs. V from Ta Rin said: "they gave us chickens for raising but they died due to flu during the cold weather". Mrs. V from Ta Rin said: "I got a pig from BMNP but I didn't have enough money to buy bran for feeding it so it grew up slowly". Yet another respondent from Lap shared that:

There were non-poor households who received goats for raising because they could meet the criteria such as having a barn, vaccinations and feed. Goats can give birth after fourteen months and provide high income to families. (45 year-old man)

#### However, he did also say:

Only one household still raises goats. All the goats in the other households got diseases such as bacillus anthracis or rinderpest or acetonemia. Animals usually die during raining season and cold weather in mountainous areas.

Therefore, it is important to diversify livelihood activities for local people, but it is equally as necessary to choose suitable models which match local culture, climate and soil conditions.

Table 5.4 reflects the livestock raising situation after BSM introduction and whether respondents are still raising the livestock or not. It shows that the number of households raising livestock received from the BSM development interventions has declined. According to Mr. A of Lap village: "they didn't continue to raise them because small goats are too expensive. Those raising chickens were faced with birth flu". In discussions with the head of Ta Rin, he said that:

There are not many households in the village continue raising fish, chickens or pigs from the BSM program at their household because they didn't have money to continue buying small fish, chickens or pigs for raising. They do not know to prevent sickness in their animals by vaccination.

Table 6.3 Household Respondents still Raising Livestock from the BSM Program

| Animals and plant still   | Ta Rin |        | Lap  |        |  |
|---------------------------|--------|--------|------|--------|--|
| remain raising at village | Male   | Female | Male | Female |  |
| Goat                      | 1      | 0      | 1    | 0      |  |
| Fish                      | 5      | 0      | 0    | 0      |  |
| Pig                       | 2      | 0      | 2    | 2      |  |
| Chicken                   | 3      | 3      | 4    | 0      |  |
| Banana                    | 7      | 0      | 7    | 0      |  |

Source: Field Survey, 2013

In general, the development activities under the BSM program implementation in the villages, to eliminate poverty and minimize pressure on forest resources, were not provided to all BSM members; instead, the development models were piloted at certain households in each village. However, those households failed to continue keeping livestock beyond the initial support from BMNP so the development models could not be expanded to all households in the villages. Reduction of poverty and pressure on natural resources through the BSM development programs failed. Further, there was less participation from women in the development activities under BSM program, which may have hampered the effectiveness on forest resource management and on improving gender concerns.

#### Benefits of the Benefit Sharing Program at Commune Level

High demands on households for NTFP's domestic and commercial use lead to the unbalanced harvesting of species inside SFUs. Rapid losses of NTFPs have affected local people's basic needs and income in recent years in the project areas. To minimize the rapid loss in forest resources in BMNP and encourage local people to participate in NRM, the CMFC and VMFC committee also actively participated in the BSM. The benefits that the commune expected from the BSM were: contributions from harvester to the village fund, improved capacity building for the commune and the villages' leaders, especially to CMFC

and VMFC members, and increased awareness of people in the commune on the sustainable harvesting of NTFPs.

The contribution of benefits from BSM members to the village fund were not implemented in the commune, hence there was no funding for supporting social activities at the village level. According to an in depth interview with an 68 year old man in Ta Rin:

BSM members are not voluntarily contributing their share to the village fund. They are not familiar with sharing their benefits from collecting NTFPs to the village fund. It may take time to explain to them the advantages of village funds and their responsibility in contributing back to the village when they use open access natural resources. At the moment, we decided not to collect it. (68-year-old man)

Therefore, BSM members are not committed to the agreements made when agreeing to participate in the BSM and awareness about the basics of the BSM are still lacking.

At the commune level, the BSM provided trainings for CMFC and VMFC members on forest management and implementation of the BSM, which enhanced their knowledge on forest planning and management. They cooperate with the BMNP Management Board to organize awareness programs on the BSM and forest conservation in the communities, as well as join BMNP's rangers on patrols to protect the forest resources. The BSM coordination between the BMNP Management Board and CMFC and VMFC members is very close. This actually benefits the communities as a whole, since human resource development in the villages has increased through interaction with rangers who have practical experiences in forest management. As such, they can be key persons for developing the BSM program in the future. Nevertheless, neither gender mainstreaming, or knowledge and skills in organizing and managing BSM development interventions were included in the trainings. The trainings for CMFC and VMFC members were purely on forest management. While one of the objectives in implementing the BSM was to improve co-management and cooperation between local authorities and local people to minimize pressure on forest resources and reduce poverty in the commune, however, BMNP

merely provided practical knowledge on patrolling and controlling forest resources to BSM managerial teams.

Members of CMFC and VMFC were almost all men, except in Ta Rin and Ta Lu villages, where women work as secretaries. According to customary laws, traditional administrative management system of the Co Tu people is mainly managed by men. Women are not allowed to involve themselves in commune activities, instead, men take their role in village or commune committees. Furthermore, the trend of women not working in the forestry sector also prevents them from joining the BSM management team at village and commune levels. As a result, Co Tu women rarely participate in commune activities which leads to most decisions at the commune level made by men, and thus less consideration is made to gender concerns in all BSM intervention activities. When discussed with one 40-year-old CMFC member in the study area, as to why women do not play a significant role in CMFC, he said:

Women cannot work at CMFC because they are busy with their housework in the family and farming. Sometimes, their husband will not allow them to be involved with our activities. Furthermore, we have to patrol with BMNP's rangers every quarter around the park. We have to walk inside the forest for such long days, it is very difficult for women. (40-year-old man)

Currently, the VMFC members receive support from BMNP in the form of uniforms, equipment for patrolling and an assistant fee for each time they patrol inside BMNP with rangers. The assistant fee is not high but it is an incentive, so they cooperate with rangers on managing the forest resources, especially the NTFPs, and prevent harvesters from other communes from collecting NTFPs in the area which belongs to their village.

Another benefit which the commune and the local people gained from the training, was knowledge on the sustainable collection of NTFPs. The training provided information on sustainable harvesting NTFPs methods and hunting wild animals. According to Mrs. H from Lap: "the training not only provided knowledge of how to collect NTFP species and hunt wild animals the right way, but it also raised awareness on forest management and protection". Now, participants practice proper harvesting and utilization to ensure the

sustainability of supply and they feel validated as the rightful forest inhabitants, which will further define the connection of future generations with the forest. Traditionally, the Co Tu people believe in the spiritual importance of the forest, thus if the BSM can integrate customary laws into their programmatic planning, the BSM could maximize its effectiveness.

#### Market Demand: Do Non-timber Forest Products Benefit the Poor?

The introduction of the BSM opened up a legal market by which collectors could sell NTFPs openly to middlemen. Indeed, it brought benefits to the poor households living nearby SUFs by allowing them to legally engage in the process, improving their livelihoods and encouraging conservation. However, controlling harvesting levels of NTFPs is made more complicated with open access, which can – without a strong monitoring system - lead to unsustainable harvesting practices.

In general, BSMs provide a legal framework to allow people harvesting NTFPs inside SUFs, yet it does not include any marketing orientation. The market demand decides the product needs and the price that the collectors can expect. However, in rural areas, market demand and market price are not always transparent for local people and middlemen can manipulate this situation, combined with the remoteness of some villages to "push the profits for harvesters to the minimum" (Belcher and Manual, 2005). Results from the field study show that harvesters always receive less profit when selling forest products via middlemen. Rural households often cannot access the market in the city centers as they don't have vehicles for transportation. As a result, most of the collected NTFPs are mainly sold at the forest gate or in the village. One interviewee shared that:

Despite working hard to collect and process NTFPs, we cannot receive good rates at the market as we sell it to middlemen in the commune. We can't even sell it to other middlemen because there are barriers which forbid them to buy it.

Another woman from Ta Rin village said: "There is no market or information for selling NTFPs in the village, which would prevent us from being cheated by middlemen sometimes".

Without market transparency and knowledge of value chains, harvesters of NTFPs face major disadvantages. Lack of information and market contacts, little knowledge of the market, bad infrastructure and low technical know-how on post harvesting techniques have left local people at the very end of the marketing power chain (Velde et al., 2006). Thus, NTFPs do not reach their full potential in generating income for local people. Therefore, training on marketing of NTFPs can enhance local people's capacity to play a more effective role in value chains. The same applies to processing techniques. Moreover, soft skills trainings on small and medium enterprises can help them to negotiate more successfully with middlemen, and at the same time discuss with policy makers their needs so that they can better control, influence, manage and benefit from NTFP trading. Thus, they can assert their interests and set up value chains for their commune through cooperation with the government and other traders and create jobs by processing raw NTFP materials at the commune. By doing so, they can earn more from NTFPs and manage sustainable forest resources to ensure NTFPs continue to support the livelihoods of local communities in the long term.

In addition, high demands in the market can provide strong incentives for increased collection of forest products. High demand of some species in the study areas, such as linh chi mushroom for export to China, raw rattan for selling in Hue center or Da Nang, and honey and uoi seed selling in the central market all provide good and steady income for the remote areas. On the other hand, high demand also leads to intensive extraction of NTFPs from SUFs, which has a negative impact on ecology and biodiversity conservation. Lack of monitoring of harvest levels can also lead to unsustainable extraction of NTFPs and, as a result, to unstable trade of NTFPs. Traditionally, Co Tu men extract timber for house building and hunt wild animals for consumption in the family. Since the government prohibited the cutting of timber and hunting of wild animals in the 1990's, due to rapid deforestation and the extinction of many wild animals, Co Tu men have faced challenges in changing their livelihood sources. The pilot BSM gave Co Tu men legal rights to gather NTFPs inside SUFs, allowing them to gain benefits from the forest resources. However, the BSM regulations on quantity and seasonal availability prevent them from earning the cash income that they received while harvesting illegally.

Furthermore, since upland cultivation is forbidden, Co Tu men faced yet another limitation which led to their household's income decline. Co Tu

women have already had to diversify crops and livelihood activities to generate enough household income to fulfill their family's needs. As such, women must work hard in both domestic and productive spheres. They have fewer chances to attend public events at the commune level when compared with men. Consequently, roles of Co Tu women in household livelihoods remain unchanged. Figure 6.4 illustrates the average percentage of income from various sources among household respondents, before and after BSM introduction. The results show that income from NTFPs after BSM introduction slightly increased (15%) as compared with before BSM introduction (14%).

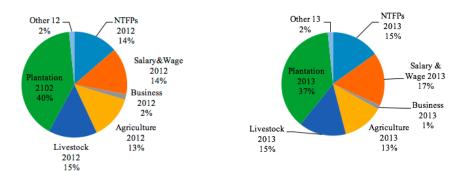


Figure 6.4 Average Household Income Sources: Before and after BSM Introduction Source: Field Survey 2013

#### **Summary**

In general, BSM members in the village have benefitted from collecting NTFPs after the introduction of the BSM. The most important benefit from the BSM is that both men and women can collect forest resources legally, without the risk of confiscation of products and fines. Through the BSM intervention development programs, both commune and household levels received benefits.

After BSM introduction, men continued to play a significant role in collecting NTFPs and contributing cash income to their families for covering household expenses, while women still collected NTFPs for direct food consumption. The average income, before and after BSM introduction, from NTFPs was similar. Nevertheless, selling products illegally without market orientation and transparency in the value chain, local people were often forced

to sell products to middlemen for very low prices. Local people in the project areas still face challenges in finding proper market information, but they are now legally allowed to sell these products openly and do not have to rely on dubious business men (middle men).

At household level, the BSM allowed its members to gain benefits from harvesting NTFPs, diversifying their livelihood income sources. The findings show that women lacked access to training opportunities attached to the BSM intervention activities, and they were not introduced to new agricultural techniques. As such, they lost opportunities to perform their roles in BSM activities and show their independence economically. This is the result of not incorporating gender issues into BSM policy, a shortfall which is also very common in forest policies related to the co-management of forests.

At the commune level, the BSM helped local authorities to develop their human resources through trainings on forest resource management. However, these trainings focused more on law enforcement and patrolling to manage forest resources than on the knowledge and skills needed to manage and implement BSM's intervention activities in the villages.

#### Chapter 7

## Summary, Conclusions and Recommendations

#### **Summary and Conclusions**

The BSM approach was first introduced to BMNP in 2012 and this research studied the initial trends in implementation of this new approach in protected area management in Vietnam. The research found that the first year of implementation did not have any significant impact on the financial benefits local people received from forest resource use. There was no change in women's and men's access to NTFPs. Reason for this can be seen partly in the open-access situation before the introduction of BSM. Forest rangers were not able to enforce the strict forest protection laws and prohibition of illegal extraction of forest resources. After BSM introduction, local people had the legal right to harvest NTFPs according to commonly agreed upon plans. Both local men and women equally appreciate this, and as such, the newfound legality had the potential to raise women's right to access forest resources and encourage them to more actively participate in NRM. Therefore, BSM indirectly stepped up the contribution to balanced gender relations in the participating households.

The Government of Vietnam designed the BSM as a new model for managing conservation areas, which is more in collaboration with local people. Accordingly, the BSM shares power and decentralizes forest management to local authorities at commune and village levels. The BSM is successful in including local people in forest management and conservation programs. However, the BSM is still similar to other forest management and development policies in terms of forest planning and management, where the government is still the most important stakeholder with ultimate decision-making power. In terms of gender aspects, BSM implementation gave space for women and men to share their ideas in the initial planning stages, however only a few women participate in the different supervising committees of the BSM. In the development activities linked to the BSM's introduction, women 's participation was not encouraged and many training programs were conducted without their target audience, including women. These shortfalls result from the BSM being in line with the National Forestry Development Strategy 2006-2020, which itself is not in compliance with the National Gender Strategy on Equality or the strategy for equality and equity in the forestry sector. As a result, the BSM did not achieve full participation of women.

By implementing the BSM program at commune level, local authorities developed their human resources through training on forest resource management within BMNP. These key people successfully supported the implementation of the BSM at commune and village levels. However, this training focused more on law enforcement and patrolling issues, which were the most important issues facing the BMNP management board. Knowledge and skills to manage and implement BSM development activities in the villages was only a minor objective of this training.

Collection patterns of NTFPs showed that women and men have different preferences in collecting forest resources. This is a result of their assumed gender roles, such as responsibility in securing food for household consumption and generating cash income. These differences often result in gendered needs, priorities, opportunities and concerns of women and men in forest resource use and management. This research found that men actively collect NTFPs for the generation of cash income for their families, while women collect only a limited amount of NTFPs for direct use in the home.

The objective of introducing development activities under the BSM was to reduce poverty and minimize pressure caused by extraction of forest resources. As already mentioned above, the lack of recognition of gender differences or identification of the right target groups for training activities meant that women did not have access to this training, and subsequently missed

the chance to diversify their livelihood strategies. Therefore, development activities under the BSM could not meet poverty reduction or food security goals. The research found that it is necessary to find proper models, in this case in the context of the socio-cultural conditions of Co Tu people, to sustainably reduce poverty in mountainous areas. Additionally, in future programs, adaptation to climate change will play an increasingly important role in upland areas.

Through the BSM introduction, local people could openly sell their NTFPs to middlemen or the market, and generate income. However, a lack of knowledge on value chains, market orientation and transparency of markets left the local people with low prices when selling raw NTFPs to middlemen. Support to help local people understand markets, and set up processing units where applicable, is necessary to improve their bargaining power and to increase the value of NTFPs. This will also maximize benefits for local people from selling forest products, and create jobs for women and men.

Cultural and social norms influence Co Tu women in collecting NTFPs, and domestic and productive work within their households; very often they face a triple-burden from their families. Furthermore, as a result of the lack of gender perspective on differences in Co Tu commune, women were excluded from training on income generation. Given the insufficient land for paddy rice cultivation and even less land for crop-plantations among the average respondent, NTFPs are not a sustainable income option by themselves, thus rubber latex and acacia trees became alternatives for generating income at the household level. Rubber trees can produce rubber latex for at least six to seven years and acacia can provide wood after six to seven years. Therefore, in the meantime, Co Tu women must also rely on food production and livestock for their families' food consumption.

Overall, the BSM highlighted a movement towards processes of sustainable forest management and conservation policies in Vietnam, which allow women and men to legally collect NTFPs inside PAs. It has further raised women's and men's awareness on their rights, roles and responsibilities in participating in the BSM. The policy at the center of this research was short and considered only as a pilot period, so it focused only on allowing collection of NTFPs in an area insufficient to fully field-test. This program could not meet its objectives. Though NTFP's cash income after BSM introduction was slightly increased, NTFPs could not be a sustainable income source for local people

living around SUFs. The lack of gender lens and gender perspective in designing trainings on raising livestock meant that there were limitations for Co Tu women to get involved in the activities of the BSM. Therefore, the BSM was not able to maximize its effectiveness to BSM members or achieve its goals, as a result.

#### Recommendations

To involve local authorities and local people more actively in the management of BSMs, and maximize the effectiveness of BSM administration, it is necessary to streamline and simplify processes, so that local people can really benefit from the policy. This is particularly the case for men and women to equally enjoy their rights to access of forest resources. Special attention aimed at increasing women 's participation in BSM committees is one potential step in addressing gender concerns within the BSM program. It is important to raise awareness and skills on gender analysis for MFC, CMFC and VMFC teams. In return, those teams would make sure women and men can equally participate in the BSM. However, even when applying a gender quota to BSM participation, social and cultural norms may still prevent women from actively engaging in the BSM. Thus, there is a real need for BSMs to adequately cover gender issues and differences in their policies.

The BMNP management board, as a key player in this BSM, did not encourage women's participation in BSM. They failed to mobilize women, particularly in the development activities. To ensure that women and men can benefit equitably from this program, it is important that the BMNP management board receives training on gender issues and takes responsibilities for gender mainstreaming within the BSM.

The impacts of climate change currently bring more risks to people in mountainous areas. BSMs theoretically allow local people to harvest NTFPs in a more sustainable way and, at the same time, involves them in protection efforts with the aim to reduce pressure natural resources in SUFs. Forest coverage is a crucial attribute in climate change adaptation and BSMs directly support policies to increase resilient ecosystems.

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### **Index Of Key Names And Terms**

| В  |  |
|--|--|
| Bach Ma National Park (BMNP)                       | 5-8, 12, 16, 38-40, 45-53, 55-56, 64-66, 73-74, 77-81, 84-85, 87-90, 95-96, 98 |
| Benefit Sharing Agreement (BSA)                    | 4  |
| Biodiversity                                       | 3, 5-7, 12-14, 19, 21, 25, 27-   |
|  | 28, 30, 32, 45, 55, 73, 84, 92   |
|  |  |
| C  | 24.20  |
| Canadian International Development Agency (CIDA)   | 24, 30   |
| Center for International Forestry Research (CIFOR) | 24   |
| Clan and kinship                                   | 10-11  |
| Co Tu people                                       | 5-12, 37, 46, 49, 51, 54-55,   |
|  | 63-65, 67-72, 75, 77-78, 80,   |
|  | 84-87, 90-93, 97-98  |
| Commune's Monitoring and                           | 48, 52, 63   |
| Forest Protection Team (CMFP)                      |  |
| Convention on Biological Diversity (CBD)           | 17, 18, 28-29  |
| Customary Laws                                     | 10-11, 71, 90-91   |
| D  |  |
| Diversification                                    | 32, 64, 81, 84-85, 87, 93-94, 97   |
| Dubious, O   | 29   |
|  |  |
| E  |  |
| Ethnicity  | 2, 5, 7-10, 12, 16, 20, 25, 27,  |
|  | 49, 49, 54, 64, 72   |
| T.   |  |
| F  | 1 0 10 10 04 00  |
| Food and Agricultural Organization (FAO)           | 1-3, 12, 18, 24, 30  |
| Forest Management                                  | 1-7, 10, 12, 14-17, 19-24,   |
|  | 27-34, 38, 40, 47-48, 51-  |

|   | 55, 60, 73-74, 79, 84, 89-<br>91, 95-97  |
|---|--|
| Forest Management Council (FMC)   | 47-48, 54, 74, 76  |
| Forest Protection and Development Act (LFPDA)<br>Forest Resources         | 1<br>2-10, 12-16, 19, 21, 23-27<br>29-33, 35, 37-38, 45-46, 49<br>51, 56, 65, 73, 82, 84, 88-90<br>92-96, 98 |
| Forestry Science Institute of Vietnam (FSIV)                              | 1  |
| G   |  |
| Gender Relations Government of Socialist Republic of Vietnam (GSRV)       | 21-23, 30, 33-34, 38, 95<br>1, 3, 12, 15, 19, 23, 27-28<br>30-31, 33-34, 50, 54, 73, 95                      |
| Greater Mekong Sub-region (GMS)   | 1  |
| н   |  |
| Harvesting  | 2, 4, 6-7, 14-15, 24, 28-29<br>40, 53, 55, 61, 63, 64, 66-67<br>74-77, 79-81, 84, 88-89<br>91-94             |
| I   |  |
| International Communications Consultancy Organization (ICCO)              | 51   |
| International Development Research Centre (IDRC)                          | 24   |
| International Union for the Conservation of Nature (IUCN)                 | 2-3, 13, 24-25, 30   |
| J   |  |
| Japan International Cooperation Agency<br>Joint Forestry Management (JFM) | 32<br>21-22  |
| K   |  |
| Kinh people   | 2, 5, 7, 49, 72, 86  |

| L<br>Locke, C   | 2, 21-23  |
|---|---|
| M Marginalized Groups McElwee Mikkelsen, C Ministry of Agriculture and Rural Development (MARD) | 13, 28<br>1-3, 13, 27-28, 30-31, 33<br>13<br>18, 27                             |
| N<br>Nam Dong District<br>Natural Resource Management (NRM)                                     | 12, 46-47, 49, 51<br>13, 17, 19-20, 23, 29, 33, 55<br>89, 95                    |
| P<br>Planning and Implementation<br>Protected Areas (PAs)                                       | 13<br>2-3, 5-6, 12-16, 19, 22, 23<br>27-30, 32, 34, 37, 73, 97                  |
| Q<br>Quang Nam Province   | 5, 9, 45  |
| <b>R</b> Rights, Roles, Responsibilities and Revenues (4Rs)                                     | 29  |
| Shah, M.K. and P<br>Special Use Forests (SUFs)  | 5<br>2-4, 6-7, 12, 14, 16, 19, 23-<br>24, 29, 32-34, 49, 55, 73-74<br>91-92, 98 |
| Swedish International Development Agency (SIDA)<br>Swidden Farming                              |   |
| T<br>Thua Thien Hue Province  | 5, 9, 45-47   |

| Thuong Nhat Commune   | 6-8, 12, 15-16, 38-40, 45-49, 51-55, 76, 81, 84 |
|---|---|
| U United Nation Development Program (UNDP) United Nations Environment Program (UNEP) United States Dollar (USD) | 30<br>6, 13, 17, 27<br>6, 26, 46, 62            |
| V Vietnam Conservation Fund (VCF) Vietnamese Dong (VND) Village's Monitoring and Forest Protection Team (VMFP)  | 18<br>62-63, 83<br>48, 52, 55-56, 63            |
| W World Bank (WB) World Conservation Union (WCU) World Wildlife Fund (WWF)                                      | 18, 19, 24, 30, 62<br>27<br>13, 27, 30, 32, 51  |

# Gender Participation in Forest Resource Management

Benefit Sharing Mechanisms in Thuong Nhat Commune, Bach Ma National Park Buffer-zone, Thua Thien Hue, Vietnam

#### Nguyen Thi Hong Van

This book aims to assess how the Co Tu peoples, an ethnic minority living in the central region of Vietnam, benefit from participation in a Benefit Sharing Mechanism which allows legal collection of non-timber forest products inside Special Use Forests. The research also examines social and cultural influences which impact on cultural harvesting and gender relations in the commune and households, particularly in regards to local rights and roles in harvesting the products.

The results indicate that benefits from collecting non-timber forest products after introduction of the Benefit Sharing Mechanism were insignificant when compared with before it's introduction. Furthermore, development activities under the Benefit Sharing Mechanism did not have any impact on local people, in terms of diversification of livelihood strategies, nor did it increase household income. Women, in particular, faced limitations in participating in the Benefit Sharing Mechanism's program, as a result of strong customary laws within their ethnic group. However, the Benefit Sharing Mechanism did increase women's knowledge on equal rights and roles in access to and control over forest resources, and their sense of responsibility in forest management and conservation.







