

Gennovate: Enabling Gender Equality in Agricultural and Environmental Innovation

Case synthesis report

Thai communities, Son La Province, Northwest Vietnam



Photo:ISDS

Institute for Social Development Studies (ISDS) and Bioversity International

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1. INTRODUCTION

This report synthesizes results from two case studies carried out among the Thai in Northwest Vietnam as part of the global comparative study ‘Gennovate: Enabling gender equality in agricultural and environmental innovation’. Gennovate addresses the question of how gender norms and agency influence men and women of different generational and socio-economic groups to adopt and adapt innovations in agriculture and natural resource management. These two case studies were funded by the CGIAR through the Agriculture for Nutrition and Health (A4NH) and contribute to the gender work package of the Nutrition Cluster of Activities of the Humidtropics Research Programmes which attempts to better understand the role of biodiversity at different scales from individuals, households (and their farms), villages and the wider landscapes. The Gennovate global study is carried out collaboratively among various CGIAR Research Programs (<https://gender.cgiar.org/collaborative-research/gennovate/>).

The qualitative methodology (<https://gender.cgiar.org/collaborative-research/gennovate/methodology/>) adapted and used for the case studies comprises seven data collection instruments, including three different sets of focus group activities, two sets of in-depth individual interviews, key informant interviews and a literature review. Focus groups are organized along gender, socio-economic and age lines, with an equal number of women and men participating in the study. The conceptual framework guiding the study centers on the key concepts of gender norms, agency and innovation and the interaction between agency and opportunity structure, drawing on feminist and innovation theories (see Badstue et al. 2014, <https://gender.cgiar.org/collaborative-research/gennovate/methodology/>).

Fieldwork in Vietnam was conducted in December 2014, with the field team spending one week in each study site. The mixed gender field team, coordinated by the Institute for Social Development Studies (ISDS), consisted of two facilitators and two note takers, working with same sex participants. The following report briefly presents the analyses carried out throughout 2015 based on a template provided for all Gennovate case studies. More substantive treatment of the data will be presented in thematically-focused papers and communications products.

1.1 Reviewing the literature

This section reviews the literature on the interaction between gender norms and agency on agricultural innovations and natural resource management in Vietnam, with a specific interest in the North West region, Son La province, and the Thai ethnic group.

1.1.1 National and local context

The Doi Moi reforms in Vietnam during the late 1980s and early 1990s included land reform, price liberalization, agricultural deregulation and enterprise law. They were fundamental to the country’s impressive socio-economic development of recent decades. Vietnam has since experienced a dramatic growth in various domains, including impressive poverty reduction and, recently, advances towards gender equity. According to a United Nations in Vietnam (UNVN)

report (2003), the Doi Moi reforms expanded people's choices, further liberalized their creativity, and generated a substantial increase in domestic incomes. Within the last couple of decades, a number of new policies and laws have offered considerable scope for further progress towards gender equality.

However, provincial and social disparities and inequality remain. The depth of poverty is 6 times higher in rural areas, and 7 times higher for ethnic minorities than for the Kinh/Hoa majority (UNVN 2003). Ethnic minorities comprise 15% of the population but nearly half of the poor and two thirds of the extreme poor (Hoang et al. 2006, World Bank 2012). Malnutrition remains a problem in many of the poor, isolated, rural areas in Vietnam, particularly the mountainous areas (Baulch 2010, ILRI 2014). As this is also where ethnic minorities predominantly dwell, poverty is expected to persist particularly among these groups in the future (Hung et al. 2011).

The Northwest region holds the highest ethnic, environmental and economic diversity in the country and is presently experiencing the most dynamic development (Vien 2003, World Bank 2009, Minh 2011). Yet, Son La – a province in the Northwest region - is ranked among the poorest provinces in Vietnam. Its population as of 2009 was of 1,040,000 inhabitants, and population density was at 73 people/km² (Gret 2009). People living in Son La have a more than 40% chance of suffering from food poverty and hunger throughout part of the year, compared with a 1.6% chance for those living in the upper quintile of better provinces (UNVN 2003). Local livelihoods are mainly based on planting rice and maize, and raising cows and pigs (Gret 2009). Son La is where recent dynamic institutional changes from cooperative to market-oriented production have played a determining role in innovation processes (Minh et al. 2011).

The Thai people have lived in the Northwest of Vietnam since ancient times, mainly in the provinces of Son La, Lai Chau, Yen Bai, Hoa Binh, Thanh Hoa and Nghe An. The Thai population comprised 1,550,423 inhabitants in 2009, an increase of 16.7% over the previous 10 years. The Thai have their own Sanskrit-style writing system and mainly worship their ancestors. They live in small patriarchal families; except in some areas where big, multigenerational families still live together (Tung et al. 2014).

The Thai people settled within rather well-defined boundaries, occupied the most favourable areas, and established geographically stable and hierarchically structured communities characterized by closely knit social networks and patron-client relationships. They are experienced farmers with extensive indigenous knowledge and relatively good skills in using the Kinh language. They have a major presence in the region and are thus fairly well integrated into national political developments. They play a more prominent role in the local government as well as in achieving socio-economic development in the Northwest provinces (World Bank 2009, Minh 2011, ILRI 2014).

There have been significant improvements in the Thai's general living standards: a sharply decreased poverty rate, improved housing and higher net school enrolment rates. Agriculture remains the most important livelihood activity for Thai people, with 91% of Thai adults still working in agriculture in 2011. The Thai's average agricultural land area per capita was estimated at 1,733.5m² in 2011. Maize, rice and cassava were their main crops (Tung et al. 2014).

1.1.2 Gender norms and agency in agriculture and natural resource management

a. Division labor, tenure, markets and mobility

Land is arguably the most important physical asset of rural households, especially for those residing in the communes where livelihoods are difficult and mainly based on agriculture (Hung et al. 2011, World Bank 2011). Land ownership in Vietnam is male dominated with 91% of agricultural land holders being men (Quisumbing et al. 2014).

Prevailing customs and social norms have precluded women from having equal access to land and credit (UNVN 2003, iSEE 2010). According to traditional belief, sons generally inherit the parents' agricultural and residential land (Phuong et al. 2011). Besides, despite the new law stipulating that Land Use Right Certificates (LURCs) should have both the husband and wife's names, the majority of LURCs are still registered under the name of the designated head of household; usually the male in the family (UNVN 2003; Phuong 2011, World Bank 2011). The low number of women working in land administration poses a problem, as predominantly male land administrators are not gender sensitive when dealing with documents and cases relating to land issues (UNVN 2003).

Another factor impeding the gender-equitable allocation of land is that land allocation regulations are based on age-based employment status. While a standard area of land is allocated to people within the labor age, only half of that is provided to people who are not within the labor age. Women, whose mandatory retirement age in Vietnam is 55 compared to 60 for men, are thus disadvantaged. In addition, less land is allocated to female headed households, with total farmland for female-headed farms being, on average, only 54% that of male-headed farms (UNVN 2003, Hung et al. 2011).

An inequitable division of labour between men and women in agriculture still exists, and further limits women's rights and agency. Men are still responsible for work that is considered 'heavier' and more 'important', which requires more technical and social skills, and women's work is considered less important. Besides shouldering a higher workload in farming, women also are responsible for chores within the household (iSEE 2010, ISDS 2010, ILRI 2014).

In rural Vietnam, men still predominate in wage labor, except in the case of women mostly from female maintained, landless households (World Bank 2011, Quisumbing et al. 2014). Women and female-headed households rely more on natural resources. Men generally have greater mobility than women in these rural communities, greater opportunities to obtain employment off-farm and are more likely to be able to migrate to cities. Men also have greater access to and control over livelihood resources due to prevailing gender inequalities (World Bank 2011).

Women from ethnic minorities tend to be disadvantaged relative to women from majority communities. They are far less involved in market activity, have less access to productive

resources and extension services. They are also less well served by the Women's Union¹ and hence have less access to the credit and other facilities provided by the Union (Work Bank 2011).

In terms of profit from agricultural production, men have access to higher-valued products than women. For instance, it is mostly men who benefit from selling timber (a product with high value); while women benefit from selling bamboo shoots and other smaller valued agricultural products (Phuong et al. 2011). Female-headed households possess on average less annual crop land than male-headed households, and their income from agriculture is equal to only 46% of male-headed households.

Even though Vietnam has virtually achieved gender equity in net enrolment rates in primary and lower secondary education, this is not necessarily the common case in rural areas, especially among ethnic minorities. The Northwest region is the only region reporting marked gender inequalities in education (World Bank 2011). Nationwide, Son La is at the bottom fifth in net enrolment rates. There is a considerable gender disparity among the Thai ethnic group, where the net enrolment rate for girls is 6.7% lower than for boys. Lower participation of girls in lower secondary school is highest in ethnic minority areas. Girls and women are also least likely to participate in and benefit from non-formal education, such as extension training programs or technical trainings (UNVN 2003). Low education means poor human resources and lower labour productivity in agriculture and other sectors (Hung et al. 2011).

A mix of geographic and socio-cultural factors, such as norms suggesting that domestic responsibilities lie with girls and that girls therefore do not need an education, underlie some of the disparities (UNVN 2003). Consequently, when it comes to 'theoretical' trainings on agricultural skills organized by provincial extension services, women often 'leave' it to their husbands to participate as they have lower educational levels and are already busy with domestic works. This further constrains women's agency and rights (Phuong et al. 2011, World Bank 2011),

There have, however, been agricultural innovations that have had positive impacts on gender norms. In Vietnam, women's participation in farmer field schools (using an experiential, group-based learning process) has had positive effects on women's leadership, incomes, and livelihoods (Quisumbing et al. 2014). Among ethnic minorities, it is increasingly women who are entering into new trade opportunities that have become vital as cash sources, bringing money into the household through their involvement in the textile and alcohol trades as well as with trekking (Bonnin and Turner 2013).

Every day gendered politics in these uplands are extremely complex and contested. On the one hand, upland ethnic minority women appear to be increasingly pushed out of decision-making due to the state's interventions and associated extension services that are far more easily accessible to

¹ Vietnam's Women's Union (WU) is a socio-political organization that organizes Vietnamese women in a network and mobilizes them for women's development and gender equality. The WU has an administrative body at 4 levels: central, provincial, district and commune.

men. On the other hand, women's innovative market activities are creating new avenues for income generation vital to purchasing 'modern' agricultural inputs (Bonnin and Turner 2013).

b. Leadership and village governance

Female representation in public office remains an important issue in Vietnam. While women's participation in legislative bodies is high, executive decision-making bodies in Vietnam count among their members a much lower share of women (UNVN 2003, World Bank 2011). Similarly, women's representation on People's Councils are in the order of 20% on average at the provincial, district and commune levels.² However, female representation on the important People's Committees at the provincial, district and commune levels is substantially lower, in the order of only 5% (UNVN 2003). What is more, women often perform the 'weaker' positions, such as in the Women's Union, local government, etc. while men would take more important positions such as Chairman or Secretary of the Party Committee, People's Committee etc. This is partly due to the fact that women have lower educational levels and fewer members in the Party Committee than their male counterparts. In addition, there are no activities encouraging female participation in local governance (Phuong et al. 2011).

The low number of women working on land administration poses a problem for women as predominantly male land administrators are not gender sensitive when dealing with documents and cases relating to land issues (UNVN 2003).

Women had joined different associations (Women's Unions, Farmers' Association etc.) and played a key role in creating credit channels, expanding the activities for poverty reduction and engaging in other social work at the community level. However, girls and women belonging to the ethnic minorities were especially disadvantaged as they had lower social status, have less education and fewer contacts outside their community (ILRI 2014).

c. Family structure, decision making and gender-based violence

The majority of households are headed by men. Men are also the main representatives of their families in dealing with social relations. They often participate in important meetings in the locality, such as meetings to develop regulations and improve security for the village. Women go to meetings about family planning (ISDS 2010, Phuong et al. 2011).

There are still customary practices that negatively affect gender equality efforts in some ethnic groups. For example, women and men eat separately; in some families that strictly follow the tradition, women are prohibited from eating at the same table as her husband or older male members of her husband's family, which restricts her voice in the family's decision making process when important decisions are discussed during mealtime (Phuong et al. 2011). Another

² Vietnamese provinces are controlled by a People's Council (PC), which is elected by the inhabitants. The PC then appoints the People's Committee, which acts as the executive arm of the provincial government.

example is the ‘marriage challenge’³. A high marriage challenge could become a burden for the newly married wife as she has to ‘pay’ the ‘cost’ of the dowry back to her parents-in-law (ISDS 2010).

Domestic work is still considered to be women’s responsibility. Money is mostly kept by women for daily expenses (UNVN 2003). When it comes to buying big assets or to other farming matters (such as what varieties or fertilizers to buy and in which quantity, how to sell products, etc.) inter-spouse communication is frequent; however final decisions are made by the husband (UNVN 2003, Lan Any et al. 2006, ISDS 2010). The husband also is the one who controls almost all of the family’s resources (ISDS 2010).

Domestic violence remains significant (World Bank 2011). In many cases, it is the women who are deemed responsible for the violence as it is considered a sign that a woman has failed to fulfil her duties as a wife and failed to maintain family harmony (UNVN 2003, World Bank 2011).

Although domestic violence is traditionally rooted in unequal gender relations and gender stereotypes, studies indicate that economic hardship and alcohol abuse are contributing factors. Other major factors include issues of sexuality (e.g. adultery, jealousy, and sexual incompatibility) and differing opinions in child rearing and relations with friends and relatives. There is initial evidence showing a relationship between domestic violence and the changing role of women in the transition to a market economy. Domestic violence tends to increase in cases where women have a strong economic position within the family, and where husbands feel that their traditional role is being jeopardized (UNVN 2003).

1.1.3 Recent agricultural and/or natural resource management innovations

Since 1995, after the Doi Moi reforms, innovation processes have gained momentum. Government policies geared towards establishing a market-based rural economy have reduced many trade barriers between the uplands and lowlands. The agricultural innovation wave has progressed, reflecting the interdependent effect between the government’s policy framework and the market’s driving forces. Starting with ‘advanced technologies for food security’, capital-intensive and productivity-enhancing techniques such as improved varieties, pesticide application, large-scale mechanization of land preparation and harvesting, a second cropping season, and irrigation systems were introduced to the Northwest region for the first time. That was followed by ‘advanced technologies for commodity production’ (Minh 2011).

There are three major diffusion mechanisms by which innovations are spread in local communities in Northwest Vietnam: the trickle-down mechanism, the ripple mechanism, and the network mechanism. The trickle-down mechanism is a quantity-oriented approach employed mainly by the formal extension system which includes public organizations at central, provincial, district and

³ Customarily, a groom’s family has to pay quite a large bride wealth (for instance, 10 million VND or more on a limited income) to the bride’s family. The new wife is then expected to work very hard to help her parents-in-law regain that cost and the other expenses linked to the wedding ceremony.

communal levels. The second mechanism – ripple mechanism – is a more quality-oriented approach to promoting indigenous knowledge and its integration with other knowledge domains, and is mainly employed by international development projects and NGOs. The network mechanism – main mechanism for diffusing innovations developed by farmers – is based on individuals' self-motivation to develop and adopt innovations in order to serve particular needs or to solve certain problems at an individual level. Holding quite high political and social status among the ethnic minority groups in the region, the Thai people have been drawn more into mainstream extension approaches, and their stratified, hierarchical society has proven very conducive to the trickle-down mechanism of innovation diffusion (Minh 2011).

The negative impact, however, is that innovations introduced often display considerable ambiguity. On the one hand, they make a significant contribution towards increasing agricultural productivity. On the other hand, they have proven to be inappropriate in terms of technical, socio-economic, and agro-ecological factors as well as ecological adaptability, environmental conservation, and marketability. Farmers frequently bore economic losses and experienced high vulnerability when adopting innovations too quickly (Minh 2011).

Having experienced these failures, upland communities have strategically adapted their mode of adoption to cope with the linear policy-oriented approaches. New materials, practices and technologies are being integrated into upland farming practices rather than simply replacing them. The ripple and network mechanisms in the diffusion of adoption driven by the local communities increasingly serve to make up for the limitations of the trickle-down mechanism in terms of quality and effectiveness. The dynamic development of a local private trader network since the early 2000s is another institutional change in this adaption scheme that assists upland farmers in dealing with the neglect of the market chain. This is an appropriate local adjustment for the self-sustaining process of innovation in the region (Minh 2011).

The fate of newly introduced innovations depends on the ability to satisfy farmers' aims and socio-economic conditions. Successful diffusion is likely to occur when farmers' interests and the government's agenda match (Minh 2011).

Some natural and social changes related to agricultural and natural resource management in rural areas have also been mentioned. These have gendered impacts. Emerging challenges in Vietnam include climate change (World Bank 2011), the loss of farmland, and population growth, which lead to a relative abundance of labor (Pandey et al. 2006, ILRI 2014). On a more positive side, housing, local infrastructure and the provision of electricity have improved substantially, though difficulties in remote mountainous areas remain (General Statistics Office 2012, World Bank 2012, ILRI 2014). The rural market system has expanded from the central province to the districts and communes (ILRI 2014). Health services have expanded their reach, and health insurance coverage and free health cards for ethnic minority groups have increased (World Bank 2011, General Statistics Office 2012). Sanitation has also significantly improved, yet there remain concerns especially in remote areas (UN 2003, General Statistics Office 2012). Access to information and cultural services have developed rapidly (for example, phone, mobile phone, the internet, cultural houses etc.) (UN 2003, Lan Any et al. 2006, General Statistics Office 2012). And there are a

growing number of initiatives from the government and local mass organizations for improving women's health and economic development (ISDS 2010).

1.2 Study sites

1.2.1 Site selection

The study was carried out in two communes, Muong Chanh and Chieng Chan, which are located in Mai Son district, Son La province of Northwest Vietnam (Figure 1). The two communes and villages selected within these are sites of the Humidtropics CRP nutrition cluster of activities. The case studies are thus intended to deepen the contextual analysis done within the scope of that project.

Before the fieldwork, the ISDS research team worked with HealthBridge Foundation of Canada's Hanoi office, which is leading the data collection effort for the larger nutrition study, to select the study sites. The two communes and villages were selected using the principle of maximum diversity sampling; that is, they were expected to show the maximum amount of variation in their level of economic dynamism and of gender equality. However, it was not possible to obtain accurate information on gender in the communes prior to the study so selection rested on diversity in economic dynamism. A number of criteria were considered, including remoteness or proximity to the district town, and access to roads and services. Based on unpublished data collected by HealthBridge Foundation, Muong Chanh was expected to be more economically marginalized and isolated than Chieng Chan. Upon analyzing the data, however, Muong Chan was considered to be highly dynamic from an economic perspective, primarily due its recent integration in the coffee market.

1.2.2 The Communes

The two study sites have experienced major changes in the past few years. The national programme for poverty alleviation and the programme 'Development of a New Rurality' are working to improve infrastructure in rural communities, such as roads, schools, clean water supplies, medical facilities, electricity and telecommunications systems. With the development of transportation, television, Internet and telecommunications, people can more easily access different kinds of services and information: from different agricultural production and trading services to information services, commercial and social services. The private sector advertises its fertilizers, pesticides, varieties, or agricultural equipment. Besides private services, the extension program in the commune assists people with new agriculture production, pesticides, and cultivation techniques.⁴

Telephones, and especially cell phones/smart phones, which allow for quick update of information, have become a common means of communication both for family and commercial purposes. Even many old people have cell phones that help them communicate with their children when they are

⁴ The agricultural extension system is a top-down system led by the Ministry of Agricultural and Rural Development. It is run from the central level down to the provincial, district and commune levels. There is an extension worker in each commune.

working in distant fields. With cell phones, people can learn the daily prices for agriculture products, especially coffee and maize.

Credit services provided by the Agriculture Bank or Social Policy Bank allow people to obtain loans to invest in businesses or intensify their agricultural production.⁵ And through the Women's Union or the Farmers' Association, members (female or male farmers, respectively) can borrow money at low interest rates to invest in economic activities and improve their livelihoods.

Motorbikes have become the main mode of transport for local people. Many families can afford to buy a motorbike and some women can also drive motorbikes, thereby increasing their mobility. New technologies, such as a husking machine, are available at the village level, which saves a lot of working time for women as they do not need to husk paddy or maize manually. New job opportunities in the commune have emerged linked to more self-employment and to wage labour for men and women.

⁵ The Social Policy Bank is the State bank that provides low interest rates to the poor or/and engages in poverty reduction programs.

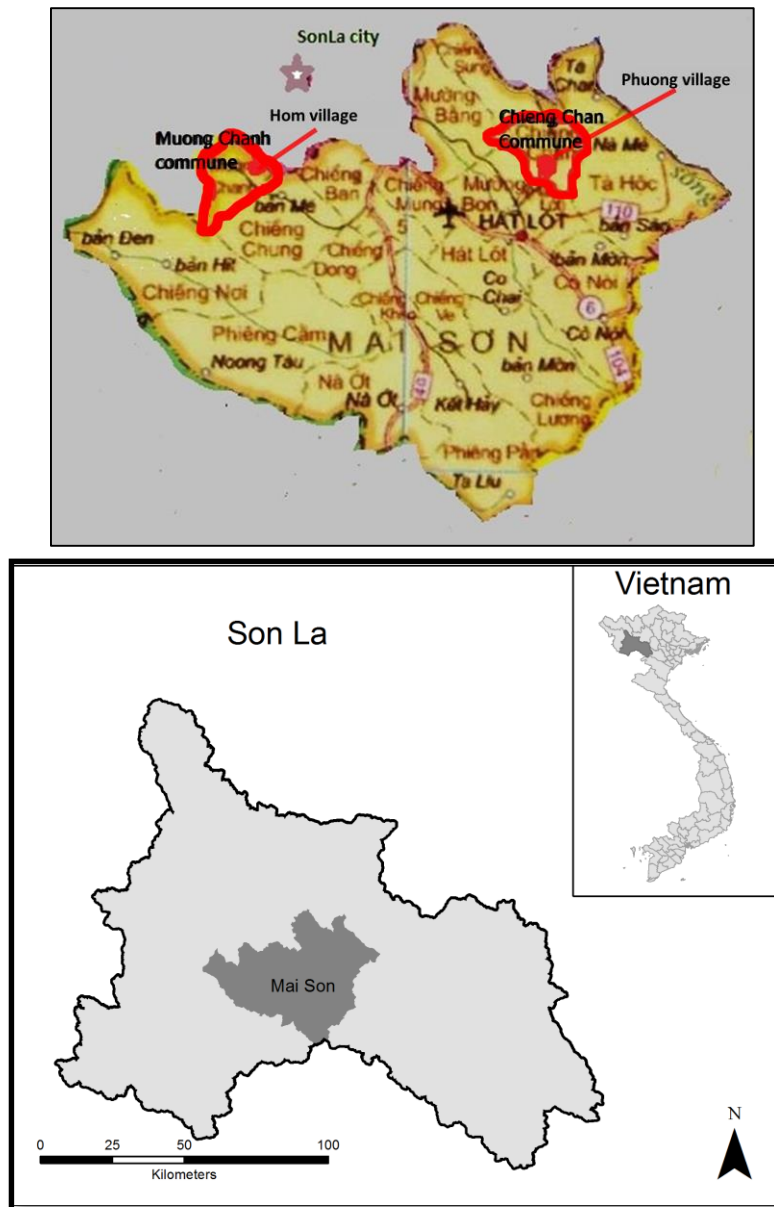


Figure 1: Study sites in Mai Son district of Son La province, Northwest Vietnam Source: (top) Adapted from administrative map of Son La province; Retrieved online December 2015, at: http://sonlatourist.do.am/publ/thong_tin_tu_van/ban_can_biet/b_n_d_hanh_chinh_t_nh_s_n_la/18-1-0-25; (bottom) Map developed using layers gadm2

Despite these changes, agriculture remains the main livelihood activity for commune residents. Wet rice remains a main crop, and villagers are encouraged by the local (provincial/district) government to plant new varieties with a higher productivity. In addition, livestock such as pigs, cows/buffalos, chickens, ducks, and goats, are raised mainly for family use. Only some households try raising pigs for commercial purposes. Most commercial products are sold in raw form. The

traditional variety of sticky rice named “Tan nhe” is a specialty of the area, but it has only begun being cultivated as a commercial product in a pilot program by the local (district/provincial) government.

Agricultural extension encourages people to apply new cultivation techniques such as growing rice in fish ponds, raising hybrid pigs, new breeds of chicken; new ways of raising chickens/pigs (in enclosures; using manufactured feeds for chicken, pigs); using animal dung for fertilizing coffee, farm/garden); training in new agriculture technologies and NRM, and introducing new equipment. The application of new technologies, new varieties, new ways of cultivating and working (equipment, fertilizer and pesticide, which help to increase crop productivity, training and assistance, etc.) have contributed to improved economic conditions.

The development of commercial crops has created new jobs opportunities arisen for villagers, and new trading services contribute to significant improvement in people’s livelihoods. Besides, a reforestation programme is now implemented to help prevent land erosion.

In the past, food shortages were prevalent for a few months a year. People had to eat rice mixed with cassava, maize, sweet potato or tapioca (includes types of tapioca collected from the forest). At present time, participants suggest that only a few households may lack food between two crops, but they can borrow rice from neighbours. Men and women can also be hired to work for some cash to cover family expenditures. In addition to on-farm wage labour, new jobs have such as motorbike taxis, selling pesticides, fertilizers, purchasing coffee from villagers for resale to buyers in the district town, selling agricultural equipment, and repairing motorbikes or equipment in shops have arisen.

Relating to NRM, communes follow regulations and laws on forest protection. At village level, there are regulations that households must agree on responsibilities to protect forests and other lands, with imposed fines for those who violate regulations. Through the government reforestation (payment for ecosystem services) programme, villages are given forestland for planting and caring for trees. Participants believe that people are better aware of the need of protecting forests and water, and that deforestation has become less frequent. Women play as important roles as men in implementing NRM, such as in planting trees and participating in information, education and communication (IEC) activities for forest protection and to keep the forest from deterioration. Men can be involved in planting trees and work in groups as forest guards, alerting the village head or the person responsible for the forest guard team and mobilizing villagers’ assistance if there is any sign of fire.

1.2.3 Muong Chanh Commune

Muong Chanh commune was established administratively during the French colonial period, at which time it was named Chieng Quang. Muong Chanh is known for its Communist Party revolutionary base in anti-colonial wartime. It is located in the hills, with the commune centre sitting 16 km away from Son La city and 40 km away (about one hour away by car) from Hat Lot district-level town, the administrative centre of the district.

Muong Chanh sits between five other communes of Mai Son district: Chieng Co and Hua La of Son La city in the north; Chieng Chung commune in the east, Chieng Noi commune in the south and Ban Lam commune of Thuan Chau district in the west. Due to easy access to the commune, Muong Chanh has been prioritized among communes by the local government for investments such as an inter-commune road, inter-commune health centre and secondary school. These provide services not only to people from Muong Chanh but also to residents of the other nearby communes. This has been favourable to Muong Chanh's development. Muong Chanh is also among the communes targeted by the Mai Son district government for the government programme "Building a New Countryside."⁶ This is the National Target Program for comprehensively developing rural areas, including through improvement of infrastructure and others socio-economic aspects.

The population of Muong Chanh is 4,029 people who live in 796 households in 19 villages. In 18 of the villages, residents are mainly from the Black Thai ethnic group. In the remaining village, the population is of Viet ethnicity, having migrated from the Red River Delta in 1963 as part of a government migration program. According to the Vice-chairman of Muong Chanh People's Committee, about ten years ago, Muong Chanh moved up from being considered among the 3rd rank of extremely poor communes to the 2nd rank ones.⁷

In the commune, most household heads are male. Men are mostly entitled to the 'Red Book', where women's name (the wives') is written only in the part of inheritance; meaning that she will take over the land and house as the family heir if her husband dies.⁸

All households now have access to electricity since the completion of the Son La hydroelectric dam, the biggest dam in the north of Vietnam, and clean water is provided directly to houses.⁹ The inter-commune asphalted road was built to reach the central area of the commune in 2010.

In recent years, Muong Chanh has achieved major socio-economic improvements. According to the Vice-chairman of the Commune People's Committee, about 17% of households in the commune were poor in 2014 compared to 50% in 2004 (fieldwork data). They explained that this reduction in poverty was due to greater economic diversification with the cultivation of new perennial commercial crops and especially coffee, which is now widely planted on nearly 447.5

⁶ Resolution number 24/2011/NQ-HĐND dated 16 December 2011 by the Mai Son District People's Council about the Program of Building a New Countryside for Mai Son District 2011-2015.

⁷ According to Government Decision number 30/2012/QĐ-TTg, communes are classified by the government into several categories in term of socio-economic development. The government identifies 3 levels of socio-economic difficulties for communes in mountainous/remote areas, where the 3rd rank consists of the poorest and most disadvantaged. This classification, established in 2012, is based on an assessment of infrastructure, social services, and living conditions, among other factors.

⁸ The Red Book is the Land Use Right Certificate (LURC), commonly referred to as the 'Red Book' because of its red cover.

⁹ In Son village, Muong Chanh commune, a large water reservoir has been built to contain water from the stream head and from it clean water is run to each house through water pipes. In each house, there is a water meter. The villagers have appointed one man who supervises water resources in the village and collects a small fee for water system maintenance and for his allowance on a monthly basis.

hectares in the commune.¹⁰ The economic condition of villagers has especially improved in the last three or four years, when coffee plantations, along with the operation of the Son La Hydro-electric dam.¹¹ The operation of the dam has had a positive impact in term of helping to improve the climate of the area – reducing the hoar frost. Before the coffee tree was brought into the village, agricultural products were used mainly for household consumption, not for commercial purposes, and agriculture cultivation was carried out using traditional methods, without using much technology or scientific knowledge. At present time, agricultural technologies such as new varieties, new breeds and equipment have become common for villagers along with changes in commercial crops (coffee trees). Given their success with coffee trees, a number of households have been inspired to try other new commercial crops such as fruit trees – longan, plum, macadamia – or to start raising a large number of pigs for selling. People, mainly men, visit friends or relatives who live in other villages and who are successful with new livelihood activities to learn from them and to apply those initiatives.

In the past few years, various services have become available to help ease peoples' lives in the commune, especially services and information related to agricultural production. Every day, dozens of small trucks of private buyers come to the villages to buy products (either fresh or dry beans) from households, so villagers do not need to transport their products for sale. Some families even can buy a truck to bring their own products and that of others to sell to dealers in the district town.

People can now easily drive to the district town or to Son La city to purchase or sell goods, or just to bring and pick up their children from school. In the recent past, women had to walk to the commune centre to buy things in the commune's market and shops. Now they can easily and quickly to get there by driving a motorbike or asking their husband to drive them.

Education and health care services are one remarkable aspect of Muong Chanh commune as the commune receives significant attention and investment from the provincial government. A complex of pre-school, primary, and secondary school was completed in April 2014, with modern studying facilities including a boarding apartment¹² which can have 800 students. The education program has received strong support from the local authorities. Muong Chanh is one commune which has a significantly high enrolment rate for both boys and girls.

The village where data collection was carried out – henceforth referred to as Son (pseudonym) – is located about 2 km away from the commune centre where primary schools, the health centre, market and various services are located. The total population of the village, which is ethnic Thai, is 335 people living in 72 households.

¹⁰ Muong Chanh People's Commune, *Six-month implementation of socio-economic development and security of Muong Chanh commune*, 27 June 2014.

¹¹ The Son La Hydro-electric dam was constructed from 2005-2012 and is one of the biggest dams in Southeast Asia. It is now one of the main sources of electricity for the country. It regulates the flow of water (preventing flooding) to the Red River Delta, and is meant to promote the socio-economic development of the Northwest region.

¹² The school complex was constructed with funds from the Agriculture Bank of Vietnam.

Ten years ago, Son village was among the poorest villages in the commune, but it has now become one of the better-off villages. Local people largely associate the village's move out of poverty to a shift from planting maize or cassava to growing coffee for sale. Coffee is the main cash crop, which provides about a third of households with an income of about 100 million Vietnamese Dong (VND) per year (based on a 2013 estimate by the head of the village).¹³ Coffee trees are planted by most households and an estimated 15 to 20 tons of coffee per hectare are harvested per year. As coffee in Son La has good prices in recent years and the harvest has been good since 2010, coffee can be considered a "tree for poverty alleviation" in the commune¹⁴. Households with large land areas for planting coffee trees and those which have been involved in planting coffee for a longer period of time have better income than other households. It is estimated that there are about ten families that have become rich due to coffee cultivation. Some have even been able to afford to buy a small truck.

Coffee also creates opportunities for new jobs for both men and women. Many women and men can work on their own coffee farm and also be hired to work for other families to collect coffee beans, weed, transport collected coffee from farm to purchasing agency, etc. For this, they can be paid about 100 thousand VND per day (approx. 4.45USD).

1.2.4 Chiang Chan Commune

Chiang Chan commune is located about 7 km away from the district town. Its population of over 6,500 people (1,376 households) consists mostly of Thai (85%) and Hmong (15%) ethnic inhabitants living in 17 villages.

Chiang Chan's main agricultural activity is the cultivation of a new hybrid maize which gives high yields and provides income to many families. Roads are asphalted and it is very convenient for cars and trucks to go to maize warehouses in the village to collect maize.

Worthy of note, Chiang Chan is a hotspot in the district for drug use and there is a high prevalence of HIV/AIDS. Some families in this study report falling into poverty due to drug addiction (fieldwork data).

Chiang Chan commune has overcome poverty in the past ten years thanks to improvements in transportation, roads, irrigation and to agricultural transformation based on hybrid maize as a commercial crop alongside wet rice cultivation of two harvests per year. Good income earned from selling maize helps to improve people's lives. Many families then can now afford to buy motorbikes, or to reconstruct their house, buy home appliances and furniture. Some even buy cars/trucks.

Road construction has been one important factor that has helped to speed up the change in people's economic life – car and trucks can now easily get to the villages to buy agricultural products, mainly maize. As maize becomes the primary commercial crop in the commune, new techniques

¹³ 1 VND = 0.0000445000 USD based on the exchange rate of 8 December 2015.

¹⁴ According to the commune extension worker, the price of coffee beans ranges from 32 million to 47 million VND per ton so if a household gains 3 tons of coffee beans per year, they can earn about 100 million VND per year (approx. 4300USD).

for maize cultivation on sloping land was introduced to villagers by the extension program. The development of commercial crops has created changes in maize cultivation techniques, and in preservation, processing and trade: new varieties, new techniques and equipment (machines for ploughing land, husking machines, etc.). For instance, nowadays, big warehouses are constructed for preserving corn; corn beans are detached from corncoobs before selling and corncoobs can be used as fuel. This work is done by machine instead of manually as in the past.

Chemical fertilizers of various brands are introduced to the commune along with advertisements for new utilities to attract famers. Besides, as a part of the extension program, the demonstration model for new cultivation techniques, new crops or fertilizers is implemented in the commune. In this context, some households are supported to grow new varieties or apply new techniques such as planting chili, or new types of hybrid maize. If the demonstration model is successful, it will be implemented widely.

The commune agriculture program also provides different extension trainings to households on topics relating to new cultivation techniques, pesticides, or the introduction of new varieties, etc. Compared to the past, more women are involved in the extension training.

Besides, people in the commune have started planting vegetables on a larger scale for selling. These new activities have created job opportunities for people in the commune – more self-employed jobs and hiring work for men and women.

The village where the study was conducted, henceforth referred to as Lan (pseudonym), has a population of 556 people living in 117 households. All residents are from the Black Thai ethnic group. The head of the village explained that 12 households in the village are classified as ‘poor’ by the local government. Hybrid maize represents the main source of income, with some households also now planting vegetables on a large scale for sale. Off-farm activities, such as selling boiled corn as snacks or sewing clothes and traditional Thai scarves, also provide income for women.

1.3 Focal innovation

This study did not originally focus on any particular innovation, yet both communes have experienced a significant change in the past ten years due to the transformation of their agricultural production from a subsistence-orientation to production for commercial purposes. In Muong Chanh, coffee plantations are replacing maize and cassava on uphill land. In Chieng Chan, hybrid maize is replacing the local breed of maize. With increased incomes from commercial coffee and maize sales, there have been improvements in local living standards and diets. These have been facilitated by improved infrastructure and consequent access to markets and social services, which have promoted access for both men and women to the outside world and to additional job opportunities.

Success with coffee and maize in Muong Chanh and Chieng Chan, respectively, has acted as a catalyst for farmers to experiment with other forms of agricultural production, such as raising animals like superlean pigs, turkeys, Muscovy ducks (*Cairina moschata*) and goats or growing different varieties of rice, maize and other commercial crops (e.g. mango, longan, plum). Rather

than waiting for implementation of the local government's agricultural programmes, farmers are turning to their neighbours and relatives within and outside their communities to ask them for advice regarding the different crops and other forms of agriculture they adopt in their farms.

In addition, some farmers can now afford machinery, which significantly helps to reduce the manual work involved in ploughing fields, weeding, husking, grinding and milling maize. Other changes have occurred in the way maize, the main commercial crop in Chieng Chan, is cultivated, preserved, processed and sold. A new technique for growing maize on sloping land was introduced to the villagers through the agricultural extension programme, and new varieties are now available. Big warehouses have been constructed to preserve corn. Corn kernels are detached from the cob to be sold as food and corncobs are used as fuel. Most of this work is now done by machines, whereas in the past it used to be done manually. In both communes, chemical fertilizers of various brands and types have also been introduced, promoted by advertisements to attract farmers to these new products.

Part of the agricultural extension programme aims to introduce demonstration plots for new crops, and new cultivation and fertilizer utilization techniques. Some of the households within the commune have additionally received support to grow new varieties of crops, such as chilli and hybrid maize, or to apply new growing techniques. If the demonstration model is a success, there are agricultural extension plans to widely implement these new techniques.

2. PREVAILING GENDER NORMS

2.1 Gender roles in the domestic sphere

2.1.1 Women's roles

According to Thai customs, a wife's main responsibility is to care for their husbands, children and in-laws. They do household chores, go to the forest to collect firewood, cook for the family, and take care of children and the elderly. They should keep the house and children neat and clean. What is more, they are required to work hard in their husband's fields. A woman has to optimize her time in a day to complete all these chores. She may also be busy with off farm, income-generating activities.

However, some changes are recognized. Villages are now connected to water reservoirs and water pipes reach every household (Figure 2). This takes a huge burden off women, who used to have to carry water to their homes. With improved income from coffee production in Muong Chanh and maize production in Chieng Chan, families can now afford to buy household and electric appliances that save time and labour. This is especially true for women in better-off families. A husking machine is now available in each village and helps to reduce women's manual work (Figure 3).



Figure 2: Clean water runs to the house, which saves women from water-carrying tasks.



Figure 3: Vegetable cutting machine (left) and husking machine (right) reduces women labour and time in preparing animal feed

In terms of behaviours and relationships, women are expected to have good manners, be gentle, faithful and devote their time fully to the family, not to themselves. They should be good daughters-in-law, showing good manners and caring for their parents-in-law and their relatives (the husband's siblings and the elderly of the family).

“A good wife should be gentle and tender to her husband.” (Poor women's focus group, Muong Chanh)

“Women serve meals: the mother-in-law sometimes scoops rice into the bowls, but the father-in-law never does that. A daughter-in-law must not sit next to the father-in-law, or take a noon nap or wear shorts in front of her parents-in-law.” (Poor women's focus group, Muong Chanh)

The poor women's groups in Muong Chanh and Chieng Chan expressed the following stereotypes that suggest that men or husbands are seen as masters or superior to women:

“A good wife should know how to cook to serve her husband.” (Poor women’s focus group, Muong Chanh)

“A good wife should not talk back to her husband at home.” (Poor women’s focus group, Chieng Chan)

“A good wife should not envy her husband when he does not do housework or does not go to work in the uphill fields.” (Poor women’s focus group, Chieng Chan)

2.1.2 Men’s roles

Both men and women from the study groups expressed the view that in a Thai family, men dominate as decision-makers, breadwinners and owners of their house. They are considered to be responsible for the well-being of their family and pillars of the family. The husband is the one who takes the final decisions in most family matters, although both the husband and the wife can discuss matters first. The husband also manages the household budget in many families. Women explained that this is because of the husband’s important responsibilities of supporting parents and all family members.

“Men’s main responsibility is to provide food for the household, because men are the family’s pillar, managing finances for the family. They trade and work for other people to get money to buy food.” (Chair of Chieng Chan Women’s Union)

Especially if a man is the eldest son, he is expected to take good care of his younger brothers and sisters. For instance, the eldest son should help build a house and organize a wedding party for his brothers.

“The main responsibility of the husband is to know how to work well, how to take care of the family and relatives.” (Poor women’s focus group, Muong Chanh)

“A husband is like an account holder. He is the son who takes care of his parents and his family so he should keep the money and give money for daily food.” (Poor women’s focus group, Muong Chanh)

Going to the market to buy food or other goods for the household is considered a man’s responsibility since the market is often located a few kilometres away from the village and men can use their motorbikes to get there. Increasingly, however, women are also riding motorbikes. During important occasions, for instance when the family is inviting guests, the husband buys and cooks the main dish, while women prepare the vegetables and rice to serve the husband and guests. The husband is the one who receives and talks with the guests.

“Meals with meat are prepared by men, meals with vegetables prepared by women” (Poor women’s focus group, Chieng Chan)

“Men will decide to buy new foods which are nutritious and healthy. For example, if men see people selling wild boar, they can buy it for the family, they buy when they like. Women often want to save money so they may regret buying it” (Poor men’s focus group, Chieng Chan)

Although doing household chores is mainly the women's responsibility, Thai men can share some of the housework with their wife, such as taking care of children, cooking, cleaning the house or feeding animals. Yet, the final responsibility for housework remains the woman's.

“Men only do housework when their wives are not home.” (Poor women's focus group, Chieng Chan)

“If there is not much work, the woman will do it on her own, if there is a lot of work, the husband will help.” (Poor men's focus group, Muong Chanh)

Socio-economic changes in the community may influence the division of labour between the spouses so that labour can be used in the most optimal way within the household. Some of the work women used to do is now done by men. For instance, men now collect firewood by motorbike from the forest. Husbands take care of small children when their wives attend meetings or are busy working in the fields. They also drop off their wives or pick up their children from school with their motorbikes.

Women mentioned two traits that a good husband should not have: he should not get drunk and he should not gamble. A good husband is also expected to be faithful to his wife (Annex 1).

2.2 Gender roles in agricultural production

Women and men work together and share agricultural work, doing slightly different tasks (Table 1). Both men and women plant and harvest coffee or rice, but the stereotype of men doing heavy work and women doing lighter work prevails. In Muong Chanh, men prepare the land, dig and transport coffee from the field to the homestead. Both women and men are involved in planting coffee trees, weeding, fertilizing, and applying pesticides.

“Women can do more tasks than men, but heavy tasks must be done by men, like transporting wood or coffee. Husbands go to sell coffee beans, they may take their wife with them or not.” (Poor women's focus group, Muong Chanh)

When it comes to rice cultivation, women are believed to “transplant rice more quickly and neatly than men” and transplanting is mainly a woman's responsibility. Women also harvest rice, cassava and fruits. Growing vegetables and raising livestock, poultry, and fish are a wife's task.

With respect to maize cultivation: women sow, and both men and women weed, and may apply fertilizers and chemicals. Although men are primarily responsible for land preparation, women are increasingly involved in ploughing, especially with mechanized ploughs. Uphill farms, which are located some distance from the homestead, are mainly associated with men's care.

Table 1. Division of labour in coffee cultivation in Muong Chanh

Male roles	Both male and female roles
• Land preparation	• Planting trees

<ul style="list-style-type: none"> • Digging holes • Transporting coffee from field to homestead • De-husking coffee beans 	<ul style="list-style-type: none"> • Weeding • Fertilizing • Spraying pesticides • Harvesting coffee • Drying coffee • Selling coffee
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Participants recognize that significant changes over the past 10 years have opened up new job opportunities for both men and women, on- and off-farm. Major changes related to agriculture include a diversification of the crops grown. Along with planting rice, mostly for self-sufficiency, and cultivation of a main cash crop such as coffee or maize, many households have begun planting other cash crops on a small scale. Selling crops is considered a new job opportunity for both men and women, as are raising livestock or poultry for sale and other off-farm activities, such as opening small grocery or service shops, grinding or milling crops in the village and becoming part-time motorbike taxi drivers. In contrast, collection of forest products still occurs but is no longer one of the primary sources of income for the family.

Revenues from crop sales are allowing many households to reconstruct or build new houses; therefore, poorer men and women can work as construction workers. In Chieng Chan, there are also more chances for men and some women to work in private enterprises located in the area. Better-off families can now afford to hire agricultural labourers for land preparation, planting, harvesting and crop processing.

Men and women may be paid for ploughing, rice transplanting or harvesting, weeding, collecting coffee, transporting goods, or tending to shops. Transplanting, weeding, and selling rice are considered women's works, whereas men transport goods from the field. Both men and women can be hired to collect coffee beans. Women in Chieng Chan sell boiled cassava, sweet potato or sweet corn as a snack in the village, or sell different vegetables and herbs, tomatoes, beans and animals. They can additionally tend buffalo for other families to earn cash on a monthly basis. Compared to ten years ago, there are more paid job opportunities, since in the past most agricultural work was subsistence-oriented.

Improvements in living conditions are increasing demand for consumption goods and services beyond basic needs, including for:

- home furniture and other equipment and appliances for household use
- new foods for children, such as milk, sweets and cakes or more food to give the children and families better meals
- children's schooling
- health care
- mobile phones
- motorbikes
- jewellery
- clothes for children

- children's and relatives' wedding ceremonies or other social and spiritual ceremonies

2.3 Gendered decision-making

Despite the many socio-economic changes in the study villages, decision-making authority remains men's privilege in most Thai families. Husband and wife may discuss important matters, such as what to plant, what inputs to purchase and how to sell goods. However, in most interviews and FGDs in both villages, the husband is viewed as the one who makes the ultimate decisions, and women take this for granted. The following quotes illustrate both that discussion among spouses inform the decision-making process, and that the final decision-making power rests in men's hands.

"He applies new things. Once he makes a decision I follow him and motivate him even if I don't like the idea. But it requires discussion." (Poor women's focus group, Muong Chanh)

Husband and wife should discuss together and it should have husband's agreement to do things. (Middle-income women's focus group, Chiang Chan)

"Men are the pillar of the family, so whatever they decide, the women have to follow." (Middle-income men's focus group, Muong Chanh)

This gendered decision-making pattern also applies to the agricultural arena.

"It is the husband who decides whether or not to use new varieties. And the husband is also the one who buys the varieties. The husband decides which brand of chemical fertilizer to buy for coffee, for rice or for plums. The husband and wife decide together to use fertilizer, but which one to buy is for the husband to decide." (Poor women's focus group, Muong Chanh)

"Both discuss what kind of fertilizer to use, but the final decision maker is the husband. The wife should follow her husband's decision" (Poor men's focus group, Muong Chanh)

Yet, some comments suggest that there may some exceptions to the rule. Moreover, women seem to exercise more decision-making autonomy in some areas, such as with regards to their own production in home gardens.

"Both make the decision. Men bring up the topic and discuss with women, they will not proceed without agreement." (Poor women's focus group, Chiang Chan)

"Both husband and wife have to discuss with each other to look for a way to escape poverty, and after that the whole household has to focus on working hard and escaping poverty" (Poor men's focus group, Muong Chanh)

"Women decide for vegetable crops, while men decide on fruit trees, corn and rice crops." (Poor women's focus group, Chiang Chan)

“Clean vegetables do not require chemical sprays, only cattle manure. I decide to grow vegetables and how to grow them. They are mostly for family consumption, only a little bit for sale, so I never use chemicals.” (Poor women’s focus group, Muong Chanh)

When it comes to coffee, dealers come to the house to purchase coffee beans and it is usually the husband who decides whether to sell coffee to a dealer or whether to take it for sale in the district town for a higher price. Although the husband has the final say, the wife can also have a voice in the discussion about the coffee selling price. Some women also are involved in selling coffee, if their husband requests them to do it when he is away.

Some women participants also make a distinction between major decisions, which are made by men, and more minor decisions over which they have some autonomy.

“Big things must be consulted on with my husband, such as going to a wedding party, travelling far from home. I can make decision for small stuff, e.g. farming. I don’t have to ask him if I want to go out with my friends.” (Middle-income women’s focus group, Muong Chanh)

In a fictional scenario asking participants to comment on the social acceptability of women’s participation in groups of female vegetable growers and on their autonomy in decisions to sell their own vegetables at the market and keep ensuing revenues, women considered that the more patriarchal husbands would not approve of such activities. Some women believe that men would not allow their wives to participate in vegetable grower groups because their role is to take care of children and do household chores.

“As the husband only wants his wife to stay at home and take care of the family and housework instead of going out, if I join the group, he might think that I don’t follow him, we may have conflict and no one would do the housework.” (Poor women’s focus group, Muong Chanh)

“The husband would be worried that the wife would be too busy with her work and nobody would do the housework. Even if she earns more money than the husband does, he would still dislike it as he cannot manage that money.” (Middle-income women’s focus group, Muong Chanh)

They suggest that men would be involved in decisions over women’s home garden production and that it may be awkward if women begin to earn more than their husband.

“If the husband is at home, both will discuss and he will make the decision. If he disagrees, she will try to persuade him. If he keeps saying no, she will have to follow his will.” (Middle-income women’s focus group, Muong Chanh)

“A wife earning more money than her husband is an odd thing.” (Middle-income women’s focus group, Chieng Chan)

Interestingly, men have mostly opposite perceptions when asked about the same scenario. As the following quotes from the middle-income men’s group in Muong Chanh demonstrates, they are more open to the idea of women pursuing their own activities, provided that they are for the sake of the family and as long as they discuss plans with their husband.

“The husband will agree to the wife expanding the area to grow vegetables because the wife just wants to do it to earn more money for the household... if they expand the vegetable garden, they will have more vegetables they can sell for more money, and earn more profit for the household.”

“The husband would help his wife to have more time to take care of the vegetables because they are much busier now... The ultimate purpose is to earn money for the family, so the husband will tell the wife to focus on vegetable farming, to focus less on the jobs on the uphill farm, only focus on planting vegetable at home.”

“If the wife is busy, the husband would stay at home and help the wife to cook, clean, look after the children... Because if they can sell a lot, their income increases, they can have more varied meals and buy more food, more meat.”

Yet, one respondent from the group adds that women would still be required to fulfil their other household duties.

“The wife still has to spend time cooking meals for the family, waking up earlier to cook the rice or coming back earlier to ensure that the meals for everyone are ready.”

2.4 Women’s physical mobility and inclusion in public spaces

Figure 4 indicates that young men and women believe that nearly all women can move around freely within their village, except young women in Muong Chanh who consider that only 7 women out of 10 have that privilege. Nonetheless, some participants express reservations about women’s mobility.

“Men prohibit their wives from visiting neighbours in the evening; men don’t like women going out at night. The women’s association always has its meetings in broad daylight” (Poor women’s focus group, Chieng Chan)

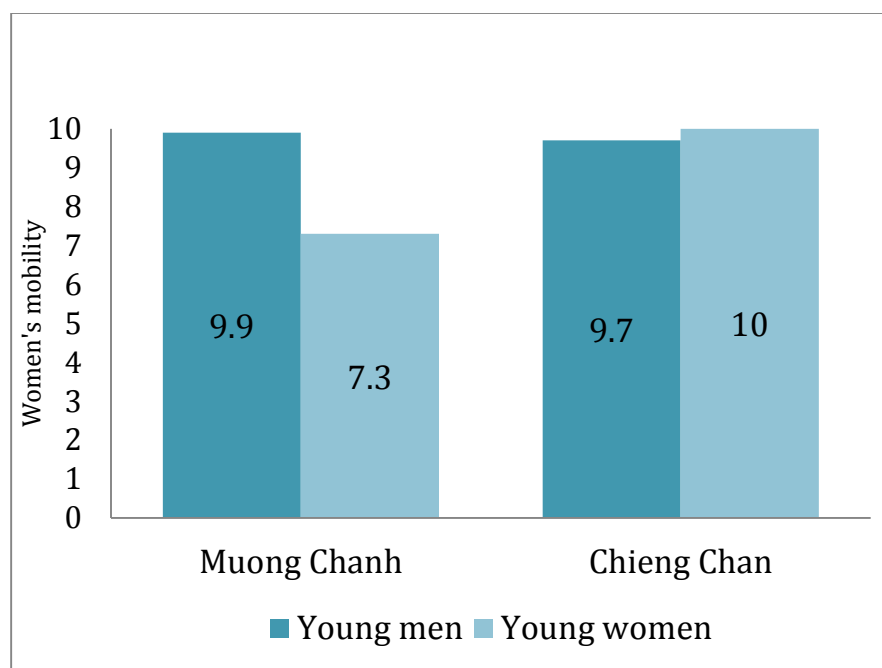


Figure 4: Perceptions of degree of mobility of women in the public spaces of their village, both villages

Moreover, when it comes to moving about beyond the village, women face more limitations. One reason for women not being able to travel far from home is the fear of being a target of rumour-mongering in the village.

“Married women do not dare to travel far, as they are afraid of people gossiping that they have affairs there. If an unmarried woman travels far people may put about a rumour that she goes there for sex work.” (Poor women’s focus group, Chieng Chan)

Hence, women in the poorer focus group in Muong Chanh state that: *“Women just work within the village or commune area.”* Others, however, indicate that women are also active in the marketplace.

“Women go to the market to sell home-grown vegetables and fruit: jicama (yam bean), and potatoes. They go to Hat Lot market to sell produce; men are too embarrassed to sell. Whatever I sell, people will buy it all.” (Poor women’s focus group, Chieng Chan)

“Men work at home only. If buyers come to his house to buy, he will sell. But it’s the women who sell at the market. Everyone here can ride a motorbike, they all have a driving licence already.” (Poor women’s focus group, Chieng Chan)

As mentioned earlier, there are more opportunities today for men and women to work for cash income than one decade ago. Table 2 indicates perceptions around whether certain types of women in the village are more likely to work for pay than others, and whether this has changed over the past 10 years. The table shows a clear trend towards more women working for pay in both villages.

In Muong Chanh, however, women believe that it is still rare for young married women and widows to work for pay whereas men believe it is now common. In particular, young married women may have to take care of young children, which can limit their ability to pursue paid work opportunities.

Table 2. Extent to which different groups of women work for pay in their village today and ten years ago, based on poor women's and men's perceptions (poor women's/men's focus groups). Rare (0-2/10 women) =1; Common (3 or more women /10) =2

	<i>Women's perceptions</i>		<i>Men's perceptions</i>	
	Now	10 years ago	Now	10 years ago
	<i>Muong Chanh</i>			
A young single woman	2	1	2	1
A young married woman	1	1	2	1
An older married woman	2	1	2	1
A widow	1	1	2	1
	<i>Chieng Chan</i>			
A young single woman	2	1	2	1
A young married woman	2	1	2	1
An older married woman	2	1	2	1
A widow	2	1	2	1

Nonetheless, the trend towards women's increased participation in paid activities is tempered by the following statements indicating that women continue to face difficulties finding remunerated work.

"Married women have difficulty in working or finding the right job." (Poor women's focus group, Muong Chanh)

"It's OK for women to work for the government, or work in the provincial/district centre to learn and to earn money. I myself have my husband and children already so I can't." (Poor women's focus group, Muong Chanh)

Men's views on women's opportunities for paid work are slightly different from those of women. While women express concern about their role as caretaker for family members, especially

children, men seem to express readiness to take over those housework tasks for the sake of family income.

“Women with small children who go to work for others are normal. The situation is difficult if the husband stays at home and the wife stays at home too. If the wife goes out to work and earns money, the husband has to help the wife with the housework and looking after the kids. That is normal. Going out to work is good because if we have free time then we should work to earn money to buy milk for the kids. Going out to work and earning money is difficult so everyone is supportive, if you just stay at home, then there would be no money; life would be even more difficult.” (Poor men’s focus group, Muong Chanh).

Women’s ability to participate in productive activities and related capacity strengthening initiatives is also shaped by gendered stereotypes concerning women’s and men’s capacities and by gender norms (Box 1).

Box 1. Gender stereotype in agriculture among poor and middle-income men and women, both villages

Women attend extension trainings less than men because their communication ability is less than men’s.

Women are less concentrated than men during trainings.

Women are good only at raising pigs and chicken. Raising poultry and livestock are women’s tasks.

Women should stay at home to take care of the children, so they cannot free up time like men to attend trainings.

Women cannot make decisions themselves so women attend trainings less than men.

Men are more confident and fearless than women.

Men are the pillar of the family and can make decisions therefore men attend training more than women do.

Because the wife is hard working, she stays home to work. Men have more time so they attend trainings.

The man is the owner of the house, so he is the one who decides about the division of labour among family members.

Men often go out so they learn more things than women do.

Gender stereotypes change among young men and women

Women can also have opportunities to study and to implement new techniques, as men do.

Women can do things. No one should forbid them to.

Women are quick and nimble so they can do those tasks that men often do.

Women can also take initiatives to participate in agricultural production.

Women can take initiatives to implement innovative techniques in agricultural production.

Women can attend extension training for new agricultural techniques and new varieties of crop and animals.

Women participate in natural resource management.

As suggested in Box 1, women face gender-specific challenges attending agricultural trainings.

“Women can only learn from women. ... Some husbands do not let their wives learn from a man because they are afraid that their wives would get involved in an affair. But if a husband wants to go, the wife cannot forbid him even if she wants to, so it’s better not to forbid him. The husband or son would reproach her if the woman went by herself to learn from some male.” (Poor women’s focus group, Muong Chanh)

At the same time, poor women realize that they have to develop their knowledge to overcome poverty.

“Women must know how to apply technologies like their husbands, and learn from their siblings and relatives.” (Poor women’s focus group, Muong Chanh)

“Women should be able to manage time to go to work.” (Poor women’s focus group, Muong Chanh)

2.5 Access to credit

Both women and men can access credit through their respective collective action organizations: men, from the Farmers’ Association, and women from the Women’s Union. These organizations can stand as guarantors for their members to obtain loans with low interest rates from the Social Policy Bank or the Agricultural Bank. Some households also borrow money from relatives at higher interest rates. Access to credit seems to have improved over time. Borrowing money may be a joint undertaking in the household.

“It’s easier to borrow from banks and others now. In the past, no one had money to lend you” (Poor women’s focus group, Chieng Chan)

“The husband and wife must borrow money together or [the bank] won’t provide the loan even in the case of private lending. If there are four people in my family, all four have to sign the IOU” (Poor women’s focus group, Chieng Chan)

2.6 Inheritance of assets

Strong gender norms favour men’s inheritance of the land and house.

“If they don’t have many children, they may leave a small plot to their daughter, but if they don’t have much land, they will only give it to the sons, the daughters don’t have that right. ... Only if that family doesn’t have a son could the daughter inherit her parents’ assets and land. But if the daughter gets married, that’s the end, she has no rights in her parents’ family anymore.” (Chair of Chieng Chan Women’s Union)

This quote highlights the norm that married women are considered to belong to their husband’s family, and retain little voice to weigh in on family affairs related to their natal family.

When commenting on a fictional scenario, women agreed that it would be difficult for a woman to make decisions about her inheritance without their husband's agreement; for example, by deciding to invest her inheritance in a plot to grow vegetables. In the opposite case, however, they believe it would be easy for men to do so without their wife's agreement.

"Once husband and wife, although the inherited money is left to the wife only, it is still common money; whatever to do or to spend it on should be discussed between the couple. If not, it would be difficult to do. It is the Thai custom. The woman should be dependent on her husband and follow her husband's decision." (Middle-income women's focus group, Muong Chanh)

"It is difficult if the husband does not support [the wife's intention]. The husband and wife can find consensus in some way. ... But things may just be difficult for a while." (Middle-income women's focus group, Muong Chanh)

"Whoever's money it is, the husband has the final say. That is the Thai ethnic traditional custom." (Middle-income women's focus group, Chieng Chan)

Other women have a different opinion, however, which suggests that there may not be a uniform custom regarding this issue.

"The wife can make the decision because it's her money." (Middle-income women's focus group, Chieng Chan)

"It would not be difficult if I know how to persuade him." (Middle-income women's focus group, Muong Chanh)

2.7 Family formation

One reason that young girls stop going to school is to get married. Although 18 is the formal age for marriage according to the Vietnam Law of Marriage and Family, early marriage seems a common practice for girls in both Chieng Chan and Muong Chanh. It is agreed that Thai women nowadays often get married when they are 16 or 17 years old, while men get married when they are about 20. Early marriage is easier for families with better economic conditions, as they can afford to prepare for the marriage ceremony and also to pay an unofficial amount to "buy age" for their children.¹⁵

When asked: "What should a young woman do when she finishes studying?", young women participants stated that:

"They should get married. If not they will become an old maid and will not find a shelter." (Young women's focus group, Chieng Chan)

¹⁵ It was explained by some participants that the families of couples who get married before reaching the official marriage age (18 years old for women and 20 years old for men) should pay (bribe) the commune's administrative staff to obtain approval to prepare the customary marriage ceremony. The couple then waits until they reach the full legal age to apply for the official marriage certificate registration.

“An 18-year-old girl should worry about getting married; they are told that 18-year-old girls are late for marriage already.” (Young women’s focus group, Chieng Chan)

“It would be best to get married to stabilize one’s life because our parents cannot take good care of us for our whole life, so a girl should get married so that her husband can care for her.” (Young women’s focus group, Muong Chanh)

Young men, in turn, believe that before getting married, they need to think about their livelihoods.

“I have to do business, trade, raise pigs... in order to earn money and get married. If not who would give me a wife if I cannot offer anything?” (Young men’s focus group, Muong Chanh)

“Staying at home means I have to invest in developing my business first. In the future if my business life is stable enough, I will go and seek a wife. If my business is good, I will have enough money to marry a wife and to build a house. I [need to] save enough money to marry a wife (a marriage arrangement costs about 50-60 million VND).” (Young men’s focus group, Muong Chanh)

Marriages should have the agreement of parents from both sides, but arranged marriages are not the norm; young people get married mainly for love.

“Young (men and women) are dating to understand each other, to see if their personal traits are suitable or not. Then the young man will tell his parents to visit the girl’s parents. The parents of both sides will discuss how to arrange the marriage: what to prepare for a dowry, gifts, a good day for the marriage ceremony. The marriage arrangement used to be conducted in three steps, now it needs only two.” (Young men’s focus group, Muong Chanh)

Despite the young marriage age, young women consider that it is not appropriate for girls to give birth when they are too young because they would not have enough knowledge and sufficient health to give birth and take care of the baby. They believe that the appropriate age to become a mother is above 20. There is a strong preference for having sons, which seems to be a must for a married couple:

“One should give birth to a son. If not they should keep giving birth until they have one.” (Young women’s focus group, Chieng Chan)

“If the couple has both a son and a daughter then they can give birth to two children only. If the two children are both girls, they must keep giving birth until they get a son. Having no son is like a house without a roof.” (Young men’s focus group, Muong Chanh)

2.8 Domestic violence

Men and women participants view violence in the family as less frequent today than ten years ago (see Table 3). In both villages, most participants in the poor women’s groups believe that domestic violence exists, but occurs only occasionally (to 1-2 women/10 per year). Poor men from Muong Chanh share that perception, whereas most participants from the poor men’s group in Chieng Chan believe it happens frequently (to 4 or more women per year). The perceived decrease in violence

is explained by economic improvements in the family, and greater satisfaction with living conditions.

“It gets better with more corn and cassava. When we were very poor and food insecure, we had more fights. The situation gets better and we fight less. At Tet, without money to buy things for the children, I complained a lot and we fought again.” (Poor women’s focus group, Chieng Chan)

TV programmes on prevention of violence have additionally made villagers aware about issues of domestic violence. Men in Chieng Chan mentioned the government law on domestic violence prevention¹⁶ and the role of the media in preventing domestic violence.

“The government law constrains domestic violence, women can watch TV and read the newspaper so they are more knowledgeable. Both men and women watch TV, so domestic violence is limited.” (Poor men’s focus group, Chieng Chan)

One man also recognized a pragmatic reason for avoiding domestic violence:

“Beating my wife only brings harm to my wife and I. My wife has to go to the hospital, we have to spend money to help her recover, she has to stay at home and skip work.” (Poor men’s focus group, Muong Chanh)

Other factors influencing the incidence of domestic violence include:

- Women’s greater sensitization against domestic violence through the Women’s Union
- The establishment of a reconciliation group in each village over the past three years, which consists of representatives of collective action organizations and the head of the village. These groups come to the house where violence occurs and the husband is fined if he does not stop his violent behaviour. The case will also be brought to the village meeting.
- Now that women have telephones, if they experience violence they can call the commune police right away.

However, indication of less violence may also reflect another phenomenon: the calm stand of women over their husband’s behaviour because of traditional gender norms. The Thai custom does not tolerate a woman’s actions to go against her husband’s will. As the below quote suggests, a woman cannot retaliate if her husband is aggressive towards her, and abiding by her husband’s wishes can avoid potential conflictual situations.

“As per custom, a Thai woman must not hit her husband or she cannot go to work. A man can, and if he does, his wife can only talk back or cry but not hit him back.” (Poor women’s focus group, Muong Chanh)

¹⁶ The Law on prevention and control of domestic violence was ratified by the National Assembly in 2007.

Table 3. Views of men and women about violence in the family among poor women and men in Muong Chanh and Chieng Chan (no violence = violence against 0 women/10 per year; occasionally = 1-2 women/10 per year; regularly = 3 women/10 per year; frequently = 4 or more women/10 year)

	<i>Muong Chanh men</i>		<i>Muong Chanh women</i>	
Violence	Over the past year	During 2004	Over the past year	During 2004
<i>No violence (0)</i>				
<i>Occasionally happens here (1-2)</i>	9/9		8/9	4/9
<i>Regularly happens here (3)</i>				3/9
<i>Frequently happens (>4)</i>		9/9	1/9	2/9
	<i>Chieng Chan men</i>		<i>Chieng Chan women</i>	
Violence	Over the past year	During 2014	Over the past year	During 2004
<i>No violence (0)</i>				
<i>Occasionally happens here (1-2)</i>			6/8	
<i>Regularly happens here (3)</i>	2/8		2/8	
<i>Frequently happens (>4)</i>	6/8	8/8		8/8

3. AGENCY AND INNOVATION IN AGRICULTURE

3.1 Trends in empowerment

3.1.1 Women's views

Participants were asked to imagine a 5-step fictional ladder of power and freedom where on the top step stand women or men (depending on the sex of the focus group) with the most power to make important decisions in their life and on the bottom step those with the least. When asked where they felt most women participants in their village would stand, 6/8 middle-income women in Muong Chanh considered that the level of women's empowerment in their village is moderate (level 3) and two believed that most women would stand on level 4. This is an improvement

compared to ten years ago, when their level of empowerment was perceived to be at levels 1 or 2 (Figure 5).

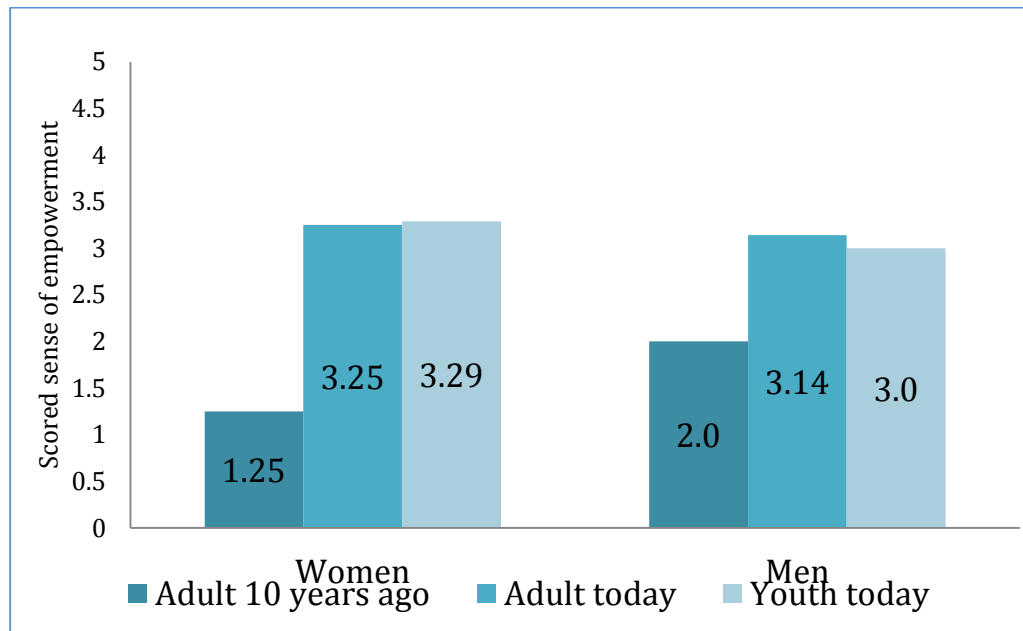


Figure 5: Five-Step Ladder of Power and Freedom for men and women in Muong Chanh in 2014 and 2004 (n=30)

In Chieng Chan, middle-income women perceived women in their village at a higher level of empowerment: six of nine women chose level 4, two chose level 3 and one chose level 2 (Figure 6). They believed that ten years ago, most of the women (8/9) were at level 2 and one was at level 1, completely subordinate and dependent within the family.

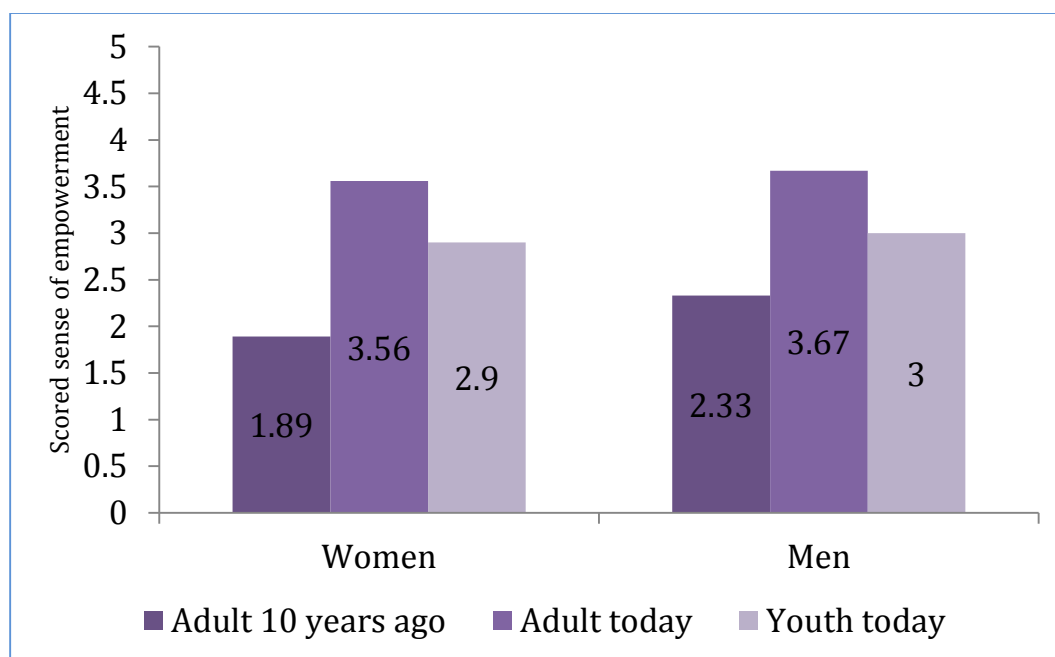


Figure 6: Five-Step Ladder of Power and Freedom for men and women in Chieng Chan in 2014 and 2004

On average, young women in Muong Chang felt that young women in their community are quite empowered; more so than older women and men—young and old—believed themselves to be. In Chieng Chan, they believed they were more empowered than the older women felt they had been 10 years ago. In both villages, middle-income women recognize a big increase in their level of empowerment over the past decade. Ten years ago, when they were young daughters-in-law, they had little freedom and had to conform to their parents-in-law's decisions about what varieties to plant and what types of animal to raise. Many women put themselves at level 1 ten years ago, explaining that they were in a subordinate position in the family at the time. Whatever they wanted to do, even in terms of cooking, had to receive the approval of their husband or mother-in-law.

“Ten years ago, we were very poor. We had no motorbike, and we had to find cassava and yam for food. We couldn't make any decision, everything was decided by our husbands. We had to ask our parents-in-law about what to cook.” (Middle-income women's focus group, Muong Chanh)

The improved roads and means of transport along with the information education communication (IEC) programmes on gender equality seem to have been a catalyst for change.

“Now I can decide what to eat today. We [men and women] are equal so we can go to the district centre and interact more with people, knowing more and more.” (Middle-income women's focus group, Chieng Chan)

“The road was under construction then, so there was no convenient means of transport. Women could not go out regularly and they relied heavily on men... Women could not ride a motorbike, they did not know where to sell products, they depended on their husbands for everything. All they

could do was stay at home to do farm work and bring up children.” (Middle-income women’s focus group, Chieng Chan)

Another female participant associates an increase in her own power and freedom with having acquired a formal education.

“I went to school so I know better. I can decide by myself what to cook. I have a bit more rights.” (Poor women’s focus group, Muong Chanh)

Women attribute their slight sense of empowerment to the space, however small, they have to make decisions about their productive, domestic and social activities.

“If I want to go to work, my husband would not say anything. I can also decide if I want to ride a motorbike, or raise some animals.” (Middle-income women’s focus group, Muong Chanh)

“I feel confident and comfortable. I can do whatever and go wherever I like. It’s alright. I’m always confident when going somewhere. But key matters, like travelling far away or to a funeral, or house building, must be decided by my husband.” (Middle-income women’s focus group, Muong Chanh)

“As women we can make minor decisions at home while following our husbands’ major decisions. Minor things are like cooking, children rearing, cattle raising and food purchases. Major things include farm work and corn planting; my husband decides the varieties to be used.” (Middle-income women’s focus group, Chieng Chan)

3.1.2 Men’s views

Whereas younger and older women in both communities see a high level of change in their empowerment, middle-income men perceive only a moderate increment in men’s levels of empowerment over time (Figures 5 and 6). In Muong Chanh, these men recognize a shift in their level of empowerment from level 2 ten years ago to level 3 today (Figure 5), whereas several men in Chieng Chan rate the current level power and freedom of most men in their village at levels 4 (6/9 men) and 3 (3/9 men) today, while placing them at level 2 ten years ago (Figure 6).

Men consider that changes in the economic environment make them more active and determined. They are gaining more knowledge of cultivation techniques, which makes them gain confidence in business communications and in working with more people and services providers. Some state that the level of empowerment of men should be higher than that of women because men are decision-makers.

“Regarding level of empowerment, men’s empowerment in the village should be higher than that of women in the village because men make decisions.” (Middle-income men’s focus group, Muong Chanh)

3.2 Important agricultural and NRM innovations

For people in Muong Chanh of both income and generational groups, the two innovations considered most important are coffee cultivation (Box 2, Figure 7) and the cultivation of new rice

varieties (Table 4). This is explained by the fact that coffee brings high cash income, while rice provides basic subsistence and food security.

“Rice is the most important. You can have money but sometimes you cannot buy rice in the village because people do not want to sell it; they keep rice for their own needs.” (Middle-income men’s focus group, Muong Chanh)

“Coffee is sold at a good price so that people become rich. People would not become rich if we couldn’t sell coffee.” (Middle-income men’s focus group, Muong Chanh)

In Chiang Chan, men and women have somewhat different views about the most important innovations (Table 4). Poor men mention the management of water resources as an important practice besides high-yielding maize varieties. Poor women emphasize techniques for breeding lean pigs (Box 3) and the cultivation of hybrid rice. Women in the middle-income group also mention water resources as one of the most important new practices of the past decade, while middle-income men value ploughing techniques and pesticides. Overall, however, people in Chiang Chan agree that the most important innovation is maize, and specifically the use of new hybrid varieties and cultivation techniques.

Interestingly, some groups mentioned new varieties of rice or maize as being the important innovation, whereas others cited the techniques used for growing these new varieties as the innovation (Table 4).

“Maize helps people to change their lives.” (Middle-income men’s focus group, Muong Chanh)

Table 4. Most important new agricultural practices over the past decade in Muong Chanh and Chiang Chan

Focus group	Most important innovations for women		Most important innovations for men	
	Chiang Chan	Muong Chanh	Chiang Chan	Muong Chanh
Poor men	<ul style="list-style-type: none"> • Techniques for breeding super lean pigs • Techniques for growing new rice varieties 	<ul style="list-style-type: none"> • Techniques for growing new rice varieties • New coffee tree cultivation techniques 	<ul style="list-style-type: none"> • New water management system (delivery via pipes) • Techniques for growing new maize varieties 	<ul style="list-style-type: none"> • Techniques for growing new rice varieties • New coffee tree cultivation techniques
Middle income men	<ul style="list-style-type: none"> • Techniques for growing new maize varieties • New water management 	<ul style="list-style-type: none"> • New coffee tree cultivation techniques 	<ul style="list-style-type: none"> • New techniques for raising pigs and chickens • Growing deep-water rice 	<ul style="list-style-type: none"> • New coffee tree cultivation techniques

	system (delivery via pipes)	<ul style="list-style-type: none"> Techniques for growing new rice variety 		<ul style="list-style-type: none"> Techniques for growing new rice variety
Young men	<ul style="list-style-type: none"> Techniques for growing new rice varieties New techniques for raising livestock 	<ul style="list-style-type: none"> New techniques for raising livestock and poultry New rice varieties 	<ul style="list-style-type: none"> Techniques for growing new maize varieties Techniques for growing new rice varieties 	<ul style="list-style-type: none"> Cultivation of new rice varieties New coffee tree cultivation techniques
Poor women	<ul style="list-style-type: none"> Techniques for growing new maize varieties Techniques for growing new rice varieties 	<ul style="list-style-type: none"> New rice variety Coffee cultivation 	<ul style="list-style-type: none"> Techniques for growing new maize varieties Techniques for growing new rice varieties 	<ul style="list-style-type: none"> New rice variety Coffee cultivation
Middle income women	<ul style="list-style-type: none"> Techniques for growing maize (fertilizing and planting) Techniques for growing rice (transplanting) 	<ul style="list-style-type: none"> New rice variety New water management system (delivery via pipes) 	<ul style="list-style-type: none"> Animal (buffalo) ploughing techniques Techniques for growing maize 	<ul style="list-style-type: none"> New rice variety Coffee cultivation
Young women	<ul style="list-style-type: none"> Techniques for growing maize (fertilizing) Techniques for growing rice (adjusting density) 	<ul style="list-style-type: none"> Techniques for growing new rice variety New coffee tree cultivation techniques 	<ul style="list-style-type: none"> Techniques for growing maize (ploughing and raking) Techniques for growing rice 	<ul style="list-style-type: none"> Techniques for growing new rice variety New coffee tree cultivation techniques

Box 2. Coffee changes lives in Muong Chanh

Coffee trees were introduced to the village for the first time about ten years ago but failed due to frost. In the past few years, coffee trees again have been brought to villages by some villagers who visited neighbouring communes and saw that coffee plantations there were successfully commercialized and helped many families to significantly improve their livelihood. They bought the seeds and learned how to cultivate coffee trees. Started by few families who sold their first coffee harvest and earned about 100 million VND (4450 USD), gradually many families in the villages have started planting coffee trees for commercialization and successfully improved their livelihood. Nowadays, in the village, many new houses have been constructed, new motorbikes are available in almost every house, also, agriculture machinery and equipment have been bought as well as other home electric appliances which help a great deal with women's household chores. Village life has changed dramatically due to the coffee trees. Coffee trade has also developed. There are new jobs for villagers such as carriers, or hired workers for coffee gathering. Trucks come directly to the village to carry coffee beans or raw products to the district town and villagers do not need to carry coffee beans to the district town for selling any more. Some families can even afford to buy a small van to carry coffee goods. Mobile phones are widely used by village people as a common means of family and commercial communication.



Figure 7: Coffee tree (left) and woman harvesting coffee (right)

Box 3. Raising super-lean pigs in Chieng Chan

Ms Binh, a 26-year-old married woman in Phuong village has successfully raised pigs for sale and this activity has not only significantly contributed to improving her family's income but has also helped to improve her status in the family.

Ms Binh with her husband received a little land from family which they used for maize cultivation. Although this crop has brought good cash, they needed more income-generating activity to supplement the family income. So Ms Binh started her initiative a few years ago, when she saw her mother-in-law and neighbours successfully raising super-lean pigs instead of traditional village pigs. She also learnt from a TV programme about how to raise super-lean pigs.

In 2007, with her husband's support and a loan from her parents-in-law to build a pigsty, she tried to raise nine piglets the first time. She learnt a lot from her parents-in-law about how to feed them, what to feed; how to clean the pigsty; how and when to immunize them. Now she has been able to buy a vegetable-chopping machine which can help her to prepare food quickly. She also learnt other techniques for caring for the pigs, such as delivery of piglets and how to keep them warm in the wintertime.

Her pig raising has gradually improved. In 2010, she earned about 60 million VND (2700 USD), and she used that money to give loans to others. Now she has 30 pigs and she can sell them directly from her house. She has used the money earned to buy a TV and other goods, and a hose machine to wash the pigsty. Also, the family can use biogas to cook, which is clean, time-saving and costs less.

Raising pigs has changed her life as she feels less dependent on her husband and his family. She also feels more confident. She gains more respect from her husband and he is willing to help her feed the pigs while she is busy working in the fields. Her relationships with other people have also changed – she feels more confident as she has extra money to give others loans.

“It has helped to change my life. Before, life was hard; I had to be careful and was dependent. Now I am not dependent anymore, I feel more confident, less dependent on my husband. When my husband drinks or does something wrong, I can argue with him. And now I have my own money to lend to others.”

For the change at village level, families like her who raise pigs can afford for their children to get higher education, such as to be teachers. Some people can buy trucks and transport maize for the village people.

3.3 Qualities of innovators

Female and male participants from the middle-income group cited many qualities of innovators (Table 5). A strong will and eagerness to learn new things to overcome poverty were mentioned by most participants. Good communication with other community members, access to training and capital were also mentioned. Family factors, such as getting consensus among family members and having decision-making power within the family, were named by women but not by men.

Table 5. Important qualities of innovators in the village according to middle-income participants

Men's views	Women's views
<ul style="list-style-type: none"> - Good health - Strong will and hardworking - Eager to learn new things and to apply new technology - Determined to turn ideas into practice - Pioneer in application of new technologies - Friendly, good manners, good relationships with neighbours and relatives - Having opportunities and liking to travel to other places to learn from friends and new models - Better living conditions: owning a lot of equipment and tools; able to afford children's higher education - More land 	<ul style="list-style-type: none"> - Hardworking, knowing how to do business - Good relationships and communications network - Loving to try new things - Eager to learn from other people - Speaking the national language well - Knowledgeable about how to diversify their agriculture production - Constantly changing, trying new good varieties and different techniques - Applying many types of fertilizers and knowledgeable about how to apply fertilizers - Capable of holding discussions and getting consensus among family members on production - Attendance at training classes - Having a voice in the family

According to middle-income women and men, an important quality among innovators is the readiness to accept and try new things.

"Innovators are... people who are eager to learn. Whatever others are doing new, they will learn and experiment first with a few kilos, then, if they are successful they continue the following year. They are very determined and hardworking." (Middle-income men's focus group, Muong Chanh)

"They change varieties annually, they change as soon as they see a good variety, they often learn from others." (Middle-income women's focus group, Chieng Chan)

"One should be determined to do better, should do things on their own. Then life will be better." (Middle-income women's focus group, Muong Chanh)

Better-off farmers have more favourable circumstances for applying new innovations than poorer farmers, and they tend to act as role models and initiators for other farmers in the village.

"They have many new machines: rice milling machines, coffee milling machines, tractors, cars. They have a very stable financial lives, they are creative, they apply new scientific techniques. They often do new things first so others can follow." (Middle-income men's focus group, Muong Chanh)

According to women participants, female innovators have less decision-making power than male innovators due to traditional gender norms that allow men to decide and require women to get their husband's approval before engaging in most new activities. These norms also result in women having fewer opportunities to attend extension trainings or to visit demonstration sites than men.

However, some men recognize positive traits of women innovators.

“Women are hardworking while men just focus on drinking.” (Middle-income men's focus group, Chiang Chan)

3.4 Factors fostering capacities for innovation

Political and institutional factors that support the application of focal innovations include:

- access to information;
- ease access to credit for capital;
- access to extension trainings to learn about new production techniques and varieties;
- supportive government policies; an intensive national programme of poverty alleviation, which provides opportunities for farmers to learn about new crops, varieties and techniques
- availability of different agro-chemical companies

Important physical factors were also mentioned:

- improved infrastructure (better roads—intercommunal and inter-village—and availability of transport such as various long-distance coaches results in high mobility and connection to other communes, villages and the district town
- schools
- telecommunications system
- running water
- grid electricity thanks to Son La hydroelectric dam, which also helps to balance the harsh climate in the region
- new cash crops (coffee tree) or new hybrid varieties, breeds or seeds
- more fertilizers and seeds
- labour-saving equipment for agricultural production, especially among better income families

Farmers learn from formal extension training provided by the local agricultural division. In addition they learn from informal networks among neighbours, friends or relatives who successfully implement the innovation. Some innovators in Muong Chanh shared their experiences of learning to plant coffee trees from their relatives and friends from a neighbouring commune instead of learning from an extension programme. This way of learning from each other's success seems to be a common way to disseminate innovation in the commune.

Other aspects supporting the innovation are the growing network of companies selling fertilizers, new varieties, and chemical pesticides. Often these companies' marketing strategies entail guidance and demonstrations directly in the villages to sell products and keep farmers as long-term clients. Networks of dealers buy products directly from farmers' houses, which also encourages

farmers to innovate given that they can easily liquidate their products. Farmers have more choices of varieties and fertilizers, which encourages them to try innovations with more likelihood of success.

Men's and women's views on supportive factors for innovation are slightly different. In contrast to men's groups, women mentioned that knowing how to ride a motorbike increases their mobility, which helps them expand their communication skills and learn the national language, learn from others and brings them confidence and empowerment. Men mentioned that the most important factors for innovation are capital, education and extension training, and a strong will to effect change (Table 6). Besides loans or capital, women mentioned new varieties and harmony within the family.

“Men are the ones who decide to use new varieties of crops. Men often go out a lot more so they are more knowledgeable; women go out less so they are less knowledgeable. That is why men are the ones who make the decision. Women do not understand, so they are scared of doing anything. They are scared that they might not be able to do it, that the harvest may fail” (Middle-income men's focus group, Muong Chanh)

Table 6. Factors that support innovation according to middle-income participants

Men's views	Women's views
<ul style="list-style-type: none"> • Eagerness to learn and to apply new ideas and technologies • Education • Support by local government • Capital to buy different equipment and to visit different models • Different learning channels such as TV, newspapers, internet • Active discussion and sharing with family members • Government policy to provide loans to farmers to invest in agriculture • Government support for new varieties, and extension trainings on new cultivation techniques and animal epidemic prevention • Neighbours who help each other (buy first pay later) • Improved roads to facilitate transport of goods • Electricity, so people can use machines, enhance productivity and earn more money 	<ul style="list-style-type: none"> • Good roads so people can ride a motorbike to visit and learn from other villages/communes • Different companies that come to introduce fertilizers, seeds and provide training on their use; bring seeds for pilot planting and provide guidance on planting techniques to farmers; bring farmers to visit demonstration model • Many dealers who go to village to buy products from farmers at a good price so farmers do not need to take their products elsewhere to sell them • Farmers attend trainings and learn from each other • Information accessible through TV, loudspeaker in the village • Easy travel for women on motorbike so they can learn from others and speak the national language more fluently • Women go to school more than before • Loans from social policy bank

	<ul style="list-style-type: none"> • Irrigation system so trees can be watered • Different production machines/equipment: ploughing machines, weeding machines, watering machines, etc. • More choice for chemical fertilizers • Son La hydroelectric dam creates favourable climate— less frost than before • Easy to buy production equipment
<p>Most important factors for men:</p> <ul style="list-style-type: none"> • Capital • Education • Extension training (on cultivation techniques, disease prevention, varieties) • Strong will and determination to learn and overcome poverty 	<p>Most important factors for women:</p> <ul style="list-style-type: none"> • Access to loans • New varieties • Harmony in the family

3.5 Factors that hinder innovation

Both middle-income men and women believe that diseases and epidemics and unfavourable weather conditions (frost, cold), lack of labourers in the family, lack of access to loans, lack of knowledge about production or cultivation due to lack of access to information or extension training and lack of water for cultivation hinder innovation (Table 7).

Women add that their husband's disagreement is one of the biggest factors hindering innovation and contributing to their lack of knowledge about high yield cultivation techniques.

“The most hindering factor is if the husband disagrees, because the husband is the owner of the house, so all decisions rely on him.” (Middle-income women's focus group, Chieng Chan)

For middle-income women in Muong Chanh, factors that most hinder innovation are animal and crop epidemics and unforeseen climate change, as natural disasters may cause crop failure. Threats to family harmony and frost, which can spoil their cash crop, were the top cited factors.

Table 7. Factors hindering innovation according to middle-income participants

Men's views	Women's views
<ul style="list-style-type: none"> • Animal epidemic 	<ul style="list-style-type: none"> • Unfavourable weather condition (frost) • No consensus in the family

<ul style="list-style-type: none"> • Wrongly applied techniques of grafting trees • Unfavourable weather conditions (frost and cold weather make animals and trees die) • Diseases of new rice varieties, coffee trees or fish and do not know how to cure diseases • Low education, so do not dare try new techniques or varieties • Lack of water for wet rice ploughing • Poor health (sickness) • Low access to information (TV, newspapers) • Lack of opportunities to attend trainings, poor communication and social skills (does not communicate with many people; does not often go outside the village) • Lack of production tools or equipment • Lack of means of transport 	<ul style="list-style-type: none"> • Lack of irrigation in fields • Does not attend trainings so lack of cultivation knowledge (of new varieties and crops) • Lack of labour in the family (husband sick or deceased)
<p>Most hindering factors</p> <ul style="list-style-type: none"> • Animal and crop diseases • Natural disasters and unpredictable weather • Lack of capital (to buy equipment, tools, etc.) • Poor health 	<p>Most hindering factors</p> <ul style="list-style-type: none"> • No consensus among family members: if husband does not agree, things cannot be implemented • Frost • Lack of knowledge about cultivation techniques (how to care for crops to get high productivity)

3.6 Gendered experiences with the focal innovation

Various new practices have been introduced to the villagers through local government programmes or by villagers themselves who sought to learn new practices from other villages.

Hardware changes:

Different varieties of rice or perennial crops diversify agricultural production in the two villages. High-yield hybrid varieties of maize, rice, cassava and beans, new breeds of chickens, ducks and goats are introduced to farmers by agricultural extension programmes, by the villagers themselves or by private companies. Chemical fertilizers and pesticides of different brands are increasingly available; people can easily buy them in the market shops or from seed companies.

New labour-saving mechanical equipment and means of transport are also more available. Mechanical equipment is becoming commonplace and in most agricultural activities farmers are assisted with mechanized machines, from ploughing and weeding to cutting trees. Grid electricity opens opportunities for equipment to reduce the workload required for household chores, which are still largely considered a woman's responsibility (e.g. husking, grinding and milling). Electric rice cookers are increasingly used and cutting machines are used for chopping banana trunks and other vegetables to feed pigs. Rice husking machines are available in the village so women and men can bring their paddy there for husking, instead of manually pounding the rice as in the past. Water pipes lead clean water from the village reservoir to each house and save time from fetching water. Heavy loads, including wood, are carried by motorbikes owned primarily by men and by some women in the family (Figure 8). Taking children to the commune school and picking them up is also much easier and more convenient with a motorbike, and men are more willing to pick up small children from the kindergarten. Cell phones ease communication, especially for business information and price updates, for both men and women.

Women in Muong Chanh suggest that men are more used to using this new machinery than women.

“A husband knows how to use machines more than a wife does. The wife can use it only when the husband is absent or sick.” (Middle-income women's focus group, Muong Chanh)



Figure 8: Motorbikes have become a main means of transport, especially for men but also for some women

Software changes:

With the success of cash crops and the development of infrastructure in the commune, farmers have access to a wider range of services, from buying seeds, pesticides and fertilizers to labour-saving mechanical equipment to credit services provided by the banks or through development programmes run by collective action organizations. Seed and agro-chemical companies also buy

products from farmers and assist them with new cultivation techniques and seeds. Different agricultural extension programmes run by the national and local government are widely implemented in the northern mountainous region. Active support from collective action organizations and kin relations help farmers acquire and exchange updated price information.

Villagers have new knowledge of cultivation and breeding techniques, caring for crops and animals, processing of crop products and new techniques for raising hybrid pigs or poultry. Training in new techniques is conducted for male farmers through the Farmer Association and to some extent for women through the Women's Union, the two most significant collective action organizations.

“Being members of the Women's Union, women learn techniques for tree planting, to get loans and learn to work effectively.” (Middle-income women's focus group, Muong Chanh)

Participation in these trainings and self-learning opportunities are motivated by a desire to improve the family economically. However, as mentioned earlier, men and women differ in training opportunities:

“Women do not attend extension training because the training is conducted through the Farmer's Association, whose members mostly are men, so only men attend the training.” (Middle-income women's focus group, Muong Chanh)

“Men also have the chance to attend technical extension training classes because they are the head of the family, and they decide every matter in the family... Women also participate in training classes, but only in cases where the husband is absent” (Middle-income men's focus group, Muong Chanh)

“There are fewer women in those trainings because they are less interactive than men; women often have private talks or distract the class.” (Middle-income men's focus group, Chiang Chan)

3.7 Changes in gender norms

Gender stereotypes still exist, although some changes can be observed towards recalibration of each family member's contribution to the household division of labour, especially among young families. For instance, men may share some of the housework after working in the fields, or a man can help his wife to feed animals. Nevertheless, common stereotypes, such as that *“men do heavy work, women do light work”*, or *“men learn, women do”* persist.

Some Thai women can attend extension trainings if their husband is absent or if female participation is specifically required by the training programme. Unfortunately, extension training classes are often conducted through the Farmers' Association, where most members are men. Thai women would participate in training courses more if there were a quota or if participation of women was specifically written in the training requirement.

Some men also seem willing to do 'female' tasks such as cooking or picking up children from school. There are more chances for women to participate in economic and social life than before. For example, young girls have more chances to attend higher education and women have more

prospects to engage in paid work. Hence, more women contribute to the family's income. These changes have gradually resulted in women feeling more confident in negotiating with their husband, selling products, riding motorbikes, making decisions; and hence being more empowered than ten years ago. Whereas men are the ones who mainly deal with trading the family's agricultural products and initiating innovations, women are now taking initiatives to do with men the work they like, or to perform some tasks considered men's prerogative. These include washing motorbikes or negotiating prices when selling agricultural products like coffee beans or pigs.

Some Thai women of all ages can now also drive a motorbike comfortably in the village roads. Affordable prices, together with help from the local government,¹⁷ have helped to change opportunities for Thai women to manage and increase their mobility significantly, and this creates opportunities for women to work and learn from outside channels.

However, as demonstrated earlier, gendered power relations seem to have changed very slowly over the last ten years. Most women emphasize their husbands or parents in-law as the decision makers for most important decision in the family.

3.8 Trust/social cohesion in the community

In both villages, men and women agree on the high level of trust and cohesion in the community. Nowadays with improvements in the economic situation of many families, villagers seem willingly help each other more with providing loans, lending agricultural equipment or providing rice if some families need it. Thai people still maintain the tradition of exchange labour. It is traditional that families, especially those in the same kinship group, exchange/jointly work for each other on many occasions: land preparation, weeding, rice harvesting, building a house or on wedding or mourning occasions (Figure 9).

¹⁷ In Muong Chanh, a few years ago, to meet women's demand for driving licenses, the Commune People's Committee asked the District Transport Office to conduct a training and exam for a motorbike driving license for women in the commune. This way, women did not need to go to the district office to acquire a driving license.



Figure 9: In Muong Chanh, people voluntarily give a hand to help build a new house.

“People often help each other. Whoever has any business, people come and help them. For example, if they build a small house, people will come and help for three days. If they build a big house, people will come and help for five days.” (Middle-income men’s focus group, Muong Chanh)

“People are very caring and supportive of each other. If anyone falls sick, people will help to take the person to hospital and help with money and with rice to help them to pay for their treatment.” (Middle-income men’s focus group, Muong Chanh)

“The village’s code of conduct regulates that people have to help each other. In the village, they establish groups and teams to help each other, carry sick people to the hospital or help with their funerals and weddings. Whichever household has a funeral, people have to contribute 50,000 VND, 2kg of rice, or chicken or fabric. Whoever is more generous can contribute money. The village establishes teams and groups that help when they need people to care or dig or prepare for funerals.” (Middle-income men’s focus group, Muong Chanh)

4 SOCIAL AND ECONOMIC MOBILITY

4.1 The ‘Ladder of Life’

Although people in the two communities have improved their livelihoods in different ways—mainly via coffee in Muong Chanh and hybrid maize in Chieng Chan—they all recognize significant changes in the lives of village residents over the last ten years. Most families in the communes have improved their economic situation; many families have become rich or better-off. People report that ten years ago a large proportion of the villagers lived in poverty, facing food

shortages a few months a year, lacking means of transport, means of production, and experiencing poor living conditions. Yet, the situation has apparently changed; there is only a small number of families that still experience poor living conditions, and even these families do not experience long-term food shortages as before. However, the gap between the rich and poor seems bigger today than in the past (Annex 2).

Poor women and men participants share similar views about what characterizes people who have the highest well-being (top step in a fictional ‘Ladder of Life’) in the village, and those with the lowest well-being (bottom step of the Ladder). In all FGDs, women and men view people at the top step as those who have become rich in the past few years. There were no such people in their village ten years ago. There were many people at the bottom step ten years ago, and many have since improved their livelihoods and moved up onto higher steps (Annex 2).

The richest families in the commune today can own a truck or car and have valuable assets (fridge, TV, electronic appliances, wooden sofa, wooden wardrobes and cupboards, expensive motorbikes, cell phones) in newly constructed houses. They have more land for farming and they invest in their children’s education. Rich families are considered those who have resources to invest in diversified production, buy more production equipment and try new varieties and breeds. They are pioneers in the application of innovations in the commune.

Differences described by men and women for rich and poor families include different types of houses and assets, land, production tools, means of transport, clothes and access to healthcare and other social or credit services. Rich and better off families have more choices while the poor face limitations in most aspects, including limited opportunities for innovation. Regarding types of foods that rich and poor families eat: rich families can afford to buy different nutritious foods – meats, vegetables, dairy products – and eat three meals a day while poor families have very limited choices for meals and face food shortages.

4.2 Poverty trends

Although living in distant communes, men in Muong Chanh and Chieng Chan share similar perceptions of local poverty trends, as do women in both communes. Men consider the community poverty line (CPL) to be at a higher step than do the women in their community. Consequently, in both communes, men put a higher proportion of the village population today below the poverty line than do village women. Women in both Son and Lan villages consider that only 2/20 households live below the community poverty line today. In contrast, men considered that 13/20 households in Son village and 9/20 households in Lan village live below the CPL (Table 8).

Table 8. Distribution of households across steps of the Ladder of Life in relation to the community poverty line (CPL) in Muong Chanh and Chieng Chan according to poor women and men

Women _ Muong Chanh

	Distribution today	Distribution 10 years ago	
Steps			
5	2		
4	11	2	
3	5	3	cpl
2	2	5	
1	0	10	
Total	20	20	

Men _ Muong Chanh

	Distribution today	Distribution 10 years ago	
Steps			
6	2	0	
5	5	0	cpl
4	6	2	
3	4	3	
2	3	6	
1	0	9	
total	20	20	

Women - Chieng Chan

	Distribution today	Distribution 10 years ago	
Steps			
6	4	0	
5	5	1	
4	6	2	
3	3	3	cpl
2	2	4	
1	0	10	
Total	20	20	

Men - Chieng Chan

	Distribution today	Distribution 10 years ago	
Steps			
7	2	0	
6	4	1	
5	5	5	cpl
4	5	5	
3	2	4	
2	2	4	
1	0	1	
Total	20	20	

Women in both communes believe that a high proportion of village residents have moved out of poverty over the previous decade (86% in Muong Chanh and 87% in Chieng Chan), while men believed that only about one-third of residents have moved out of poverty during that time (Figure 9).

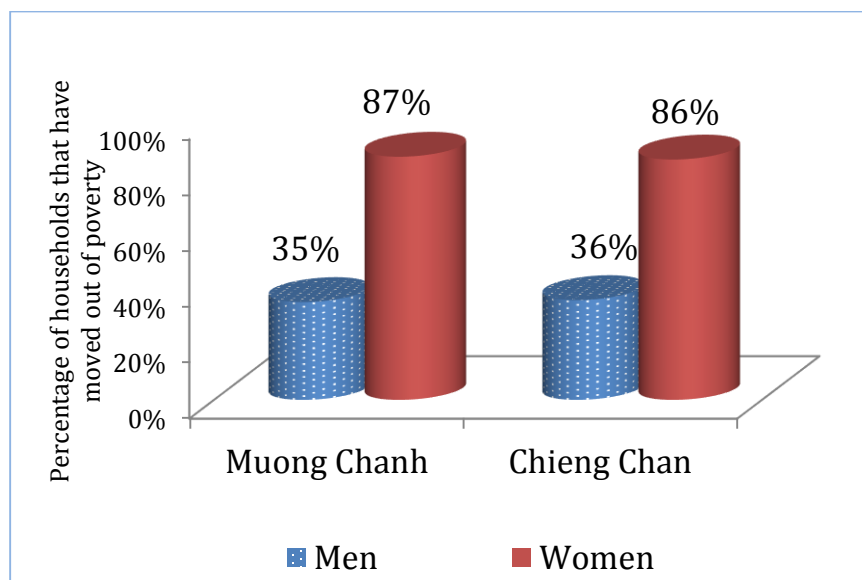


Figure 9: Perceived movement out of poverty of households in Muong Chanh and Chieng Chan according to poor men and women

4.3 Roles of agricultural and NRM livelihoods in poverty trends of the community

According to men and women in both communes, innovators who successfully adopt new livelihood strategies become like role models for other families in the villages. As discussed above, successful livelihoods are closely related to changes in both ‘software’ and ‘hardware’ and to social networks over the last ten years.

The placement of families along the Ladder of Life is based not only on personal characteristics (strong will, determination, management or planning skills, know how) but also on access to resources, including information and training, and to experiences and capacity in communication and socialization. Besides wealth and better living conditions, people on the higher steps and at the top are described as having greater chances for investment in production, as they have good financial resources and other resources such as large, good quality land, production machines, access to services and information channels for learning and applying new varieties and new cultivation techniques. They also have more resources for investment in production (buying good varieties, fertilizers, machines or more land; hiring people to work for them), in education and in transportation; and they can visit other areas to learn from others and about market opportunities.

On the contrary, people at the lower steps are described as having limited access to resources (lack of land, access to training, education, capital for investment, experiences, etc.) and limited knowledge and mobility.

4.4 Moving up the Ladder

Male and female participants had different views of how men and women can help their families move up the ladder over time. For men to move up, participants emphasized factors such as *“learning from others what to do and how to do it”* (poor women’s focus group, Chieng Chan) and *“hard work: do more jobs, work harder; more diversified activities”* (poor men’s focus group, Chieng Chan). However, for women to move up, beside factors such as hard work, raising more livestock, working more on land and garden, selling products for cash income (poor women’s and men’s focus groups, Muong Chanh and Chieng Chan), factors related to the husband–wife relationship were emphasized. These include supporting and encouraging the husband to implement innovations, and helping the husband to work or to get a loan from the bank (Annex 3).

“The wife should agree with and follow her husband’s doing.” (Poor men’s focus group, Muong Chanh)

“The wife encourages and supports her husband to do business and learn more experiences from families using good practices.” (Poor women’s focus group, Muong Chanh)

4.5 Remaining stuck or falling down the Ladder

As shown in Annex 4, women remaining in poverty were perceived as those who:

- have little land, bad quality land or are landless. For instance, widowed or divorced women who are not given their husband's land to work and whose parents do not have any more land to give; those who have to do work for others to earn income
- have no or limited access to irrigation
- have many children
- lack labour due to illness or accident that affects the health of the main labourer in the family. For treatment of the ill person, the family has to sell assets or borrow money.
- have low education, are illiterate and do not have opportunities to attend extension trainings
- have a husband who is drunk, addicted to drugs or involved in gambling
- are discouraged to work hard
- suffer from the low status of women in the family—she has to follow her husband's decisions although she has ideas and willingness to innovate
- are victims of domestic violence

“It is said that women have to follow their husband. If he does not work while she does, he can use up all their money. She is discouraged to work hard and they cannot get better.” (Middle-income men's focus group, Chieng Chan)

One reason women remain in poverty is landlessness associated with widowhood. Women are not entitled to land use right certificates so it is very hard for them to get a loan as they have no paper to put their land up for mortgage as collateral.

“I married my husband in another village. When he passed away, his parents gave nothing to me and my children. I came back to here to live with my parents, so I have no land. I don't have capital and it's hard to borrow money because I have no land, I have no name on the Red book (Land Use Rights Certificate) so I cannot get a loan.” (Poor women's focus group, Chieng Chan)

Factors causing men to remain in poverty are described as:

- lack of will or determination to learn new things or not striving hard enough
- too lazy to work
- involved in alcohol, gambling or drugs
- low level of education not able to arrange work or time effectively
- Husband is discouraged from implementing innovative ideas
- In some families, the eldest brother has to take responsibility for building a house and arranging the marriage ceremony for their brothers. It may take many years to recover from these family expenditures.

Men and women also identified several factors which cause some families to fall down the ladder (Annex 4):

- natural disasters, animal or crop diseases, or bad varieties, which may cause the crop or livestock to fail and the family to lose all the money it invested, and even fall into debt
- serious sickness of family members, which may cost a lot of money for treatment and represents a loss of labourers to take care of the sick person in hospital instead of working.

4.6 Roles that gender norms, agricultural innovation, and household cooperation/conflict play in poor people's mobility

Men still play the key decision-making role in the family's agricultural activities. Participants mentioned the role of women in discussing and supporting their husband to adopt innovations, and in following their husband's decisions.

"Men are the ones who decide which livestock to raise, what crop to plant, how to fertilize. They also discuss with their wife but they are the ones who make the final decision. Men are the pillar of a family, so whatever they decide, the women had to follow." (Middle-income men's focus group, Muong Chanh)

Yet, if the wife is the one who initiates the innovation, she or the family cannot apply it without her husband's agreement.

"[The] wife is dependent on her husband. If her husband does not agree to do it [the innovation], the wife cannot initiate it by herself." (Poor men's focus group, Muong Chanh)

As discussed above, gender norms can limit women's ability to innovate and in some cases to engage in opportunities for remunerated work. In such cases, this can hinder women's ability to move or help move their family out of poverty.

"The strongest barrier [to women innovating] is the husband's disagreement because the husband is the master of the house, all decisions made depend on him" (Middle income women's focus group, Chieng Chan)

"The husband only wants his wife stayed at home to take care of the children and do house work. He does not want her to go out. If she want to join an [interest] group he would think that the wife does not listen to him. If the couple have a conflict, no one does the work in the family" (Middle-income women's focus group, Muong Chanh)

5 SUMMARY OF MAIN FINDINGS

5.1 Gender norms and agricultural innovation

Social and economic changes, together with new cash crops (such as coffee trees or hybrid maize), have brought about changes in men and women's division of labour in the house and in production fields. Although taking care of household chores is still seen as women's task, men nowadays also help women with tasks such as cooking, feeding animals, or taking children to school. Young couples seem to share more housework for the sake of optimizing their labour across household members. Moreover, women's high mobility within the village and to some extent beyond it thanks to motorbikes, their opportunities for engaging in paid work, and their access to TV and other information channels play a role in improving women's self-confidence and empowering them.

Although gendered divisions of labour are starting to change, the power relations between men and women are lagging behind. Men are still considered the main decision makers for all important family matters, and women are expected to play a subordinate role as supporters and doers following the husband's decision, even though discussion between husband and wife may be a regular part of the decision-making process. Therefore, if the man in the family is not in favour of applying an innovation, the woman of the house has to follow, even if she herself would have been capable of adopting the innovation. The tradition of land inheritance to male heirs as well as a strong son preference put women at risk of lacking land, which is an essential resource for agricultural-based livelihoods.

5.2 Local innovations and women's and men's individual and collective agency

Local innovations (coffee planting in Muong Chanh or new hybrid maize and super-lean pigs for sale in Chiang Chan) together with improved infrastructure, have created more opportunities for both women and men as individuals and as families to improve their lives, both economically and socially. In general, women's status has improved as women can be involved in income generating activities and have more opportunities to travel outside the village to learn new things.

5.3 Key factors supporting poor women's and men's capacities to learn about, access, adapt, and benefit from agricultural innovations

In the last ten years, there have been dramatic changes in socio-economic conditions as well as technologies in the study communes and the region as a whole:

- Government policies and national programmes for poverty alleviation in the northern mountainous areas have put substantial efforts into building infrastructure in communities (transportation, roads, electricity, schools, health centres, telecommunication systems)
- Different agricultural development programmes and projects provide information to farmers about agricultural production, disease prevention, introduction of new varieties and crops, and new cultivation techniques
- Development of social and credit service programmes, introduced to local areas by the government and by private companies, due to the opening up of the market economy, help farmers to access loans with low interest by the Social Policy Bank under the 'Programme for Poverty Reduction' and through two important collective organizations for men and women: the Farmers' Association and the Women's Union
- Introduction of new varieties, seeds and breeds by the agricultural extension programme as well as by private companies with strategic marketing activities and extension training classes and demonstration models
- Motorbikes and cell phones have become important transportation and communication tools for most farmers and families
- Networks of relatives and friends and traditions of helping each other create favourable conditions for farmers to learn about successful innovations and experiences from each other and to implement innovations (borrowing machines, taking loans, exchange works)
- Growing availability of equipment and tools help farmers to save labour and time

These factors have contributed to creating opportunities for men and women in the studied areas to learn about and try out new local innovations brought in mostly by the farmers themselves, such as the coffee trees in Muong Chanh or super-lean pigs in Chieng Chan.

However, women face limitations in attending extension trainings to learn new techniques of cultivation and production and are limited by not speaking the national language, which raises a barrier for their innovation. They are also hindered by their limited decision-making abilities within the household, which can prevent them from adopting new innovations that their husband may not agree with.

5.4 Key factors hindering poor women's and men's capacities to learn about, access, adapt, and benefit from agricultural innovations

The fact that extension training classes are still conducted mainly in favour of men sidelines women. The lack of education and limited access to extension training limit women, especially poor women, in applying innovations.

Risks of facing harvest losses due to diseases or natural disasters discourage poor men and women from pioneering new innovations, as they have limited resources to buffer failure compared to better off families. Other factors, such as men involved in gambling or drug use, put families at risk of economic burden and falling back into poverty.

5.5 Differences with innovations across socio-economic groups

Better-off farmers have better opportunities for innovation as they can access more loans from banks for investment; can afford labour-saving machines to help with their production; can hire people to work in their fields; invest to diversify their production, and to secure, store or preserve their products (in better warehouses, and can sell their products for a better price, etc.).

Unlike poor groups, better-off families can afford to invest in their children's education in travelling further afield to learn new things.

5.6 Interactions between the normative environment, men's and women's capacities for agricultural innovations, and poverty trends in the community

In short, there have been dramatic changes in the lives of people in the two studied communities due to new modes of production, from self-sufficiency to commercial production, which have improved the economic conditions of farmers. Access to information, to new knowledge and to different services have improved incomes and the conditions for development in the region, acting as a catalyst for people to gradually change their lifestyles and some gender norms, especially gender roles in the domestic and production spheres. However, gendered power relations seem slow to change as men are still the main decision makers in the family and women still largely play subordinate roles. Although more gender equality can be observed among the younger

generation, strong son preference and the return of a tradition of early marriage may reinforce the subordinate role of women in Thai society.¹⁸

¹⁸ For many decades, the government has made strong efforts to reduce the incidence of early marriages. With economic improvements, it seems that early marriage happens more often, as the family can afford to pay the fine to “buy age” as mentioned earlier. No official statistic on early marriage could be found.

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ANNEXES

Annex 1. A good wife, a good husband

A Good Wife	
Women's views (Muong Chanh)	Men's views (Muong Chanh)
<ul style="list-style-type: none"> • Must work with the husband, being able to do housework, feeding livestock and poultry • Must be able to take care of her husband, being gentle and soft to the husband • paying attention to relatives and siblings • Neat and clean, • Able to do housework and take care of children including their education • Able to cook and serve the husband • Not drunk • Not having affairs • Able to do farm work and housework after farm work • Not going out • Wife responsibilities are to take care of the husband, able to do housework, take care of children. Able to do go with husband to work in the field, in the up-hill land and. 	<ul style="list-style-type: none"> • Knows how to take care of the family • Knows how to take care of the children, knows how to educate them. Dress children well with enough clothes • Knows how to listen to her husband, does not talk back to him. A good cook, and good at washing clothes. • Who cares and helps brothers and sisters in the family. Who knows how to take care of others, and take good care of the household work • Who knows how to make her husband happy. When she is at home, she knows how to take care of the housework. She knows how to feed her children well, educate them well • Knows how to take care of the husband. When the husband comes back home tired from a long working day, she knows how to take care of him, talk to him and share with him things. Who is loyal to her husband and children in the family • Participates in social activities, treats her friends and house guests well • Implements birth control methods to avoid having many children.
Women's views (Chieng Chan)	Men's views (Chieng Chan)
<ul style="list-style-type: none"> • Taking care of husband and children 	<ul style="list-style-type: none"> • Taking care of husband and children

<ul style="list-style-type: none"> • Cooking and washing. Taking care of husband's family • Taking care of husband when he's ill • Doing a lot of housework • Good at farming to have abundant food • Able to do farm work, take care of farm and plants • Not talking back to the husband at home. • Not envying husband when he does not do housework or does not go to work in the up-hill field. • Wife does most housework, husband only does that when they have small children. • Nice to families of both sides. When visiting parents, bringing them some cash or good food • The wife of the eldest son must prepare housing for her husband's younger brothers, distributing land and assets for them. 	<ul style="list-style-type: none"> • When the husband gets drunk, she must carry him to bed, taking care of him, keeping him warm so he doesn't die • Waiting for the husband at home when he's out for work or a drink, not yelling at him if he gets drunk • Can do housework and farm work • A good cook • Able to make and mend clothes for the family, able to grow vegetables • Knowing how to take care of the family and teach children, taking care of old parents • Holding no discrimination when treating parents, siblings and relatives • Being good at housework, such as washing clothes, raising pigs and chicken • Able to attend to husband, children or ill members in the family • Taking children to school and teaching them every day • Sharing work with husband, able to receive guests, e.g. preparing drinks and meals, being attentive and friendly • When husband's absent, she must be able to complete all work on his behalf • Able to make legal money, not involved in any illegal acts or social evils.
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A Good Husband	
Women's views (Muong Chanh)	Men's views (Muong Chanh)
<ul style="list-style-type: none"> • The husband cares about siblings and takes care of wife and children • Takes good care of his family • Not drunk. Being drunk is bad. Get drunk and go to bed • If drunk, he would not beat his wife • Takes care of family members when they are sick • A good husband speaks softly with his family, doing farm work together with his family • Good communication with neighbours • Good at raising livestock and poultry • Taking children to school • He may drink, but he still cares about his family • The husband does not have affairs outside 	<ul style="list-style-type: none"> • Someone who cares about the family, builds the family's happiness • Someone who does not gamble or drink • Hardworking and manages things well. Knows how to do lots of things in the family • A role model for his wife, children and others • Who knows how to protect himself and his family • Whatever he is going to do he discusses with his wife and family • Knows how to take care of the family • Does not drink intemperately, not addicted to alcohol or drugs •
Women's views (Chieng Chan)	Men's views (Chieng Chan)
<ul style="list-style-type: none"> • Able to take care of parents of both sides • Just sleeping at home when getting drunk instead of annoying or hitting wife or children • Taking care of wife when she's ill • Hardworking farmer • When his wife is ill, he can take care of all housework, including feeding chicken and pigs • Able to take care of children and cook for them • Taking children to school. Able to make money to pay their tuition fees • Able to hunt more food: trapping bird or frog 	<ul style="list-style-type: none"> • In my opinion, a good husband must be loyal to his wife, one husband and one wife. • Not getting involved in social evils, e.g. gambling, prostitution, drug • Good husband must not be a drunkard or hit his wife and children after drinking. If he's drunk, he should just go home and sleep. • Teaching children with his wife • Honest, often talking and sharing with his wife • Hardworking and sharing housework with wife. • Applying scientific advances in life

<ul style="list-style-type: none"> • Able to take care of plants/trees • Waking up almost right after his wife, sharing work with her • Taking wife out , to Hat lot market (district centre) sometimes, Son La hydropower plant or to visit relatives on both sides • Letting his wife go out with friends, a bad husband would not do that. The couple should go everywhere together. 	<ul style="list-style-type: none"> • Sharing workload with wife, taking care of wife and children, buying meat for family sometimes • Not getting involved in social evils, such as gambling or drug • Not hitting wife and children • Helping wife with housework • Both go to work together, after which, the husband has meal with his family • He can drink, but not too much or smoke too much • A good husband must share all work with his wife. • He must comply with traffic rules and ride safely • Learning business with his wife. • A good husband has to do farm work with his wife, teaching and taking care of children, sharing housework with his wife every day. He wakes up at 5am for personal hygiene, then feeds the children and domestic animals. After that, he would go the field, ploughing or clearing weeds depending on the cycle, and having lunch at 11:30 am. And then, he will watch the buffalos grazing before ploughing again. He should come home at 5:30 – 6 pm. • Husband's responsibilities: He's the breadwinner, the pillar of the family and making key business decisions in the household.
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Annex 2. Ladder of Life

Poor men's focus group, Muong Chanh

STEP		#HH 2004	#H 2014
6 - RICH	<ul style="list-style-type: none"> • Have a lot of experience in doing businesses/production • Own many machines: Tractor, harrows • Wealthy -have lots of money • Wear cleaner clothes, they pay more, eat better food • They have a lot of land to work on • They are smarter • Better manage their finance; they don't spend money freely • They own a lot of properties • Have more buffalos and cows • Have better social relationships/communication • Wear beautiful clothes • Beautiful /luxurious houses • Eat more nutritious food, have more meals than others. <p>How they eat:</p> <ul style="list-style-type: none"> • Eat 3 meals per day, among which only 2 meals with meat, and 2 types of different meats. For ex. if they have chicken for lunch, then they will have fish for dinner, and the meals have more dishes. They change their dishes every day • There is more meat in a meal. Whatever they want to eat, they can buy • Sometimes they drink beer and eat snacks for fun • They change their dishes every day, whatever new dish that they know about, they can buy and try out right away • "I heard that the village next door is selling wild pig/ swine, they can run there and buy right away, if they are poor then they don't dare to" 	Did not exist	2

STEP		#HH 2004	#H H 2014
	<ul style="list-style-type: none"> • They don't repeat the dishes between meals; they would throw away the leftover food, others have to collect it and eat it at the following meal. <p>Production tools:</p> <ul style="list-style-type: none"> • They have many production machines and tool. If there is any new type of machines, they can buy it right away. Some households can even buy cars • They can go and learn from other places, from people's experience, and then they can explain back to other households 		
5 - Average: enough food	<ul style="list-style-type: none"> • Their houses are prettier, cleaner. Inside the house they have beds, wardrobes, TV, water filtering system • They eat more and their meals have enough things • Their social relationships are better. Their voice is much respected in the village • Their spending does not have many difficulties • They could buy nice, good brand motorbikes (Honda, Yamaha), they could even buy automatic motorbikes. • They do not have to care about how much they spend on food for their family • They can buy agriculture machines: harrows, threshing machines, forest clearing machines • They have their savings to buy many machines to help them with their farming • They have money to invest in agriculture production; inside their house there are many types of new and modern machines • They have many valuable belongings in their house, they have good economic conditions, they can help their relatives in developing their businesses as well. <p>How to eat:</p> <ul style="list-style-type: none"> • They eat 3 times per day, they have meat once in every 3 meals 	Did not exist	5

STEP		#HH 2004	#H H 2014
	<ul style="list-style-type: none"> • They do not have to worry about money they spend on food • They buy more food, more meat. In one meal they eat more things: vegetable, meat, fermented cabbage • Their meals have more dishes, the food is better. They have enough food every year. In the house there are always many types of spices and sauces ready <p>Production tools:</p> <ul style="list-style-type: none"> • They have many types of agricultural machines (threshers, ploughing machines, clearing machines, coffee milling machines...) • They attend training classes at the commune; they have more opportunities to visit other production models in other communes or districts. 		
COMMUNITY POVERTY LINE			
4 - Just enough food for consumption	<ul style="list-style-type: none"> • They have enough rice to eat • Their meals sometimes have meat • Their voice is respected much more • Their kids all go to school, they have enough money to pay for their kids' tuition • They have more properties: TV, motorbikes to move around • They have more food in their daily meals. Their daily meals have more meat .Their voices are respected more • They were granted loans to do business because they can pay their debts, their economic lives are improved • In the house here are more valuable assets: Buffalos, cows. They could buy some small machines like banana trunk cutting machine. • Their lives are more comfortable, no more shortage of food; they can buy valuable assets like TV, fridge, tables and chairs, beds 	2	6

STEP		#HH 2004	#H H 2014
	<ul style="list-style-type: none"> • They have quite enough land <p>How to eat meals:</p> <ul style="list-style-type: none"> • Eat 3 meals per day • There is more food in a meal, the number of days that they have meat is more than normal • They have enough money to pay for food; they don't have to worry about spending money. They have enough rice to eat; they do not lack rice anymore • If they raise their livestock successfully, they will eat their own chicken <p>Production tools:</p> <ul style="list-style-type: none"> • They have some essential machines: Vegetable cutting machine, coffee shell grinding machine • They can attend agriculture extension training • They can visit production models in other villages. They have better social relationships • They can buy better motorbikes, for example in the past they could only afford Chinese motorbikes, but now they can buy Honda and Yamaha motorbikes 		
3 - Poor	<ul style="list-style-type: none"> • They have no means of transportation, no motorbike. They have to borrow their relatives' motorbikes to travel when needed • Have no television, no chair and table. They have a house, but small. Their children go to school but they do not have much stationery or books • They do not have enough food to eat for around 1-2 months in a year • Still lack utilities, furniture in the house. They only have goods that do not cost much • They may have motorbikes but old and cheap • In the house they lack wardrobes, bed, and their houses are not beautiful 	3	4

STEP		#HH 2004	#H H 2014
	<ul style="list-style-type: none"> • Saying "Rich households ride expensive motorbikes, poor households ride Chinese vehicles" (which are cheap) • Their social relationships are very limited. Their children go to school but they do not have enough stationery or books. They can afford their children's tuition fee but it takes a longer time for them to earn and pay that money than for others • They wear cleaner clothes, but they still lack money for household's expenditure <p>How are their meals:</p> <ul style="list-style-type: none"> • They eat 3 meals per day • They eat rice with vegetable, with <i>cham cheo</i> (a sauce made of mixed salt, vinegar, chili and pepper). They eat meat once every 2-3 days • They have enough rice <p>Season of food scarcity:</p> <ul style="list-style-type: none"> • They go work for others to earn money • They sell chickens and pigs in the house to sell and buy food • They borrow money to buy food. <p>Production tools</p> <ul style="list-style-type: none"> • They have more production tools, better production tools. • They start to have some small, old, less valuable machines • They can only follow people who did it before them or follow the instructions from training classes or trained people 		

2	<ul style="list-style-type: none"> • Poor people are poor in all aspects • Dress untidily. Their clothes are even a little dirty • Poor people do not have much property • They do not have enough food to eat or clothes to wear. They don't have much food. • Their meals do not have much, only vegetables. They don't have enough rice to eat. They lack food for 5-6 months a year • They have very little land to work on • They do not have much property; lack of food, clothes • Have very little livestock, few buffalos, cows or chicken. • In their meals, they only eat rice with <i>cham cheo</i> • They speak slowly, think slowly, they are not confident • They are shy, usually do not speak out what they were thinking • They don't dare to do big things • They lack everything, their houses are small and temporary. They have no valuable property in the house. <p>How are their meals:</p> <ul style="list-style-type: none"> • They eat twice per day: lunch and dinner; they do not have enough rice so they have to mix rice with other things like corn and cassava to eat. Eat vegetables • The money they earn is not enough to spend, they eat meat only 2-3 times per week • In rich families they eat all chicken raised. In poor families there is only one chicken and they will sell it to earn money to buy rice, fish sauce, salt and other things, they do not dare to eat its meat. • Eat rice with vegetable, with <i>cham cheo</i> • During the season of food scarcity, they go digging for cassava, or other things to eat • Go and work for others to buy rice each day • Borrow money from others to buy food <p>Production tools:</p>	6	3
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STEP		#HH 2004	#H H 2014
	<ul style="list-style-type: none"> • There are only simple types of tools: hoes, shovels, knives, baskets... but they only have one for each type • They don't own any agricultural machines • They can only participate in agriculture extension training classes in the village but not at commune level • They are not qualified enough to be sent for extension training at commune level • They lack experience in doing businesses/production. 		
1 Very poor	<ul style="list-style-type: none"> • They do not have warm clothes to wear and suffer the cold; wear torn clothes • Their houses are small and torn • They do not have enough rice to eat; they eat rice mixed with other things; they are hungry for many months • They do not have enough clothes to change daily, wear the same clothes for a few days • They do not have shoes to wear, no mattress or blanket, they have to suffer the cold day and night • They cultivate traditional rice (low- yield variety) • They lacks a lot of things, there is no property in the house • They lack salt, lack soap to wash their clothes, their clothes are old, torn, they do not have shoes/sandals and go barefoot • They grow only cassava, corn with low productivity and then sell only at a low price; household economy is poorly developed. 	9	Does not exist

Poor women's focus group, Muong Chanh

STEP		#HH 2004	#HH 2014
5 - Rich	<ul style="list-style-type: none"> • Have cows and buffalos, abundant paddy rice, many pigs, much coffee farming, cash for spending, and equipment such as ploughing machine or rice plucking machine (removes grains from stems) • Have many plots of land • Have TV, fridge, electric rice cooker, motorbike, car • Often transport coffee commodity for people • Have few children, big house on stilts • Confident, speaking official language (Vietnamese language) well • Able to grow new varieties, having second establishment (for farming such as fish pond, fruit garden, livestock) • Having many machines. Hiring employees. Knowledgeable and often sharing knowledge with people • Their children receive good education, after graduating they can find a stable job, maybe as a teacher. Wife has a lot of jewellery, nice clothes, and they can buy for each child a motorbike. 	Did not exist	2
4- Average: Enough food	<ul style="list-style-type: none"> • Ability to manage things is modest • Able to learn experiences from neighbours • Able to apply technologies in production • Have few children • Have cows and buffalos, motorbike, rice plucking machine and ploughing machine • Have grinding/slide machine to grind vegetables for pig feed, and cutting machine to cut grass/small trees to clear uphill fields/milpa • Have pesticide pump • Have second establishments (farm, fish pond, fruit garden, livestock farm) • Wooden-made house on stilts • Travel outside to other areas to do business • Have sharpening machine, motorbike to transport fire wood, and agriculture machine 	2	11

STEP		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> • Have agricultural knowledge for farming and livestock raising • Able to apply new varieties 		
3- Just have enough food for consumption	<ul style="list-style-type: none"> • Just enough food for consumption. • The house is a little better than lower step (a little better than temporary house) • Little land, few children • Able to make plan and manage things • Working hard • Have motorbike, TV • Have common labour tools, e.g. hoe, shovel, knife • Go to district centre sometimes • Children go to school • Still shy in communication • Wife cannot ride a motorbike herself and needs husband to transport her on motorbike. 	3	5
COMMUNITY POVERTY LINE			
2 - Poor	<ul style="list-style-type: none"> • Regularly lacks food for ~3 months • Have small land and very few pigs or chickens • Unstable/temporary house, have many children • Lazy and drunk often • Children have to stop education at grade 1 or 2, have few clothes to wear • Lack household utensils • No motorbike or production machine • Rarely travel far away from the village • Speak little official language • Not good at doing business or at arranging work productively/managing things • Do not know when it is right time to use fertilizer 	5	2

STEP		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> • People are hesitant to talk about those families as they may shout back <p>Food consumption:</p> <ul style="list-style-type: none"> • Eat 3 meals a day. If lack of food, she may go find some vegetables, she may go to forest and get wild vegetables and bamboo shoot and sell for money to buy rice. • Borrowing at low interest rate, partly spent on rice, partly on some cattle/poultry for raising 		
1- Very poor	<ul style="list-style-type: none"> • Food shortage for 6 months • Lack of clothes • Must work very hard, all kinds of manual labour: carry water home, getting firewood, grinding rice, growing cassava and corn • Many children • Not raising pig or chicken yet • No electricity (we started to have electricity in 2004, but those families did not have) • Children cannot go to school but stay at home to work with parents • They don't have agricultural knowledge 	10	Does not exist

Poor men's focus group, Chieng Chan

Steps		#HH 2004	#HH 2014
7 - Rich	<ul style="list-style-type: none"> Nice, proper and tidy outfit Good social understanding Spacious and nice house. Abundant, valuable and luxurious assets. "It's a stilt house but all is tiled". Lots of money, regularly visiting advanced and developed business models Abundant land Few children who can have full education Large social network, many friends Drinking less, having much money and often helping and lending to others Many domestic animals, having second or third facility, having multiple houses, the main one for living, the others for farming and cattle raising Many kinds of agricultural machines <p>Food:</p> <ul style="list-style-type: none"> 3 meals a day, have breakfast out, it can be <i>pho</i> (meat and noodle soup), vermicelli or cakes Lunch includes rice, vegetables, fish and meat, eating less in each meal as they don't have to work so hard "Such families eat mainly fruits, cakes, bread..." In each meal, there are more dishes "fish, pork, chicken" "They eat like an urban household, maybe only one meal with rice, the other two are full of fruits, cakes and milk. They have more snacks". The main meal is lunch. <p>Labour tools:</p> <ul style="list-style-type: none"> All kinds of tools and machines. Can buy many kinds of new and modern machines. Also put them for rent. Can even buy car and truck 	Did not exist	2

Steps		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> • Such people have enough money to buy a car, but they may invest in other areas instead, such as they can buy real estate or some construction. They can build large-scale storage to store up to hundreds of tonnes of corn • These people invest a lot, so they borrow much from bank to make investments • They have all conditions to participate in trainings and workshops or visit business models in many places 		
6 - Affluent	<ul style="list-style-type: none"> • Spacious, proper and nice house • Many kinds of modern machine and valuable assets: TV, radio, fridge, water filtering machine, water heater, truck, rice plucking machine cow, buffalo, cattle and poultry • Good social relations • Drinking little • Few children, who can have high education, “finishing all levels” • Abundant production land <p>Food:</p> <ul style="list-style-type: none"> • 3 meals a day • Have more vegetable and less meat because of fear of being fat. More options for meals, many kinds of vegetable and meat. “They can go to Hat Lot town sometimes, buying beef to make a hot pot” • Eat mainly vegetables, have desserts after meals, such as yogurt, fruits, cakes. These household have meat more regularly but smaller quantity, the lower-step households can have meat sometimes and more quantity in such meals. <p>Labour tools:</p> <ul style="list-style-type: none"> • Various kinds of modern tools and machines • Can put machine for rent 	1	4

Steps		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> • Borrow heavily from banks for agricultural production, or other investment areas • May travel to visit production models in other places 		
5 - Above average	<ul style="list-style-type: none"> • Clean and nice house • Proper look • Buying many kinds of machine: grinder and grater, rice picker, puller, motorbike, buffalo and cow, fridge, goat • Large network, good relationships • Few children who can have full education • Drinking little <p>Food:</p> <ul style="list-style-type: none"> • Food secure • 3 meals a day, breakfast including rice with egg, dried fish and vegetable. Other meals also have meat, fish, egg • Such household do not need to buy much food as they can self-supply. • Several households can slaughter and share a pig together, saving some meat for gradual use • More varied menu, having chicken today and fish tomorrow. <p>Labour tools:</p>	5	5

Steps		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> • Various kinds of new tools • Can buy some agricultural machine, having more machines: corn grater, mechanized plough, plucking machine, and buffalo • Borrow from bank to invest in production development • Participate in local agricultural training courses • Can borrow greatly from relatives because of higher ability to repay 		
COMMUNITY POVERTY LINE			
4 - Average	<ul style="list-style-type: none"> • Tidy outfit • Brighter appearance • More assets: bed, wardrobe, TV, motorbike, buffalo • Few children, about 2 who can go to school • Drinking less regularly • Large network of friends <p>Food:</p> <ul style="list-style-type: none"> • Food insecure for about 1 month a year • 3 meals a day • Breakfast including rice, vegetable and egg. Lunch and dinner include rice and vegetables, with tofu, pork and tomato sometimes. • During scarcity time: sell domestic pig, chicken or goat. No need to borrow, “Selling a 30-kg goat may cover food for a whole month” <p>Labour tools:</p> <ul style="list-style-type: none"> • More tools, may buy buffalo to plough soil 	5	5

Steps		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> • Can buy some simple agricultural machines. May need to borrow some more machines during cropping season. • Participate in agricultural trainings and workshops • Have bank loan at higher price than step 3, borrow to invest in animal raising activities 		
3 - Poor	<ul style="list-style-type: none"> • Tidy outfit • Some assets: wardrobe, bed • A little more land • Many children, about 4 • Drinking regularly • Better network <p>Food:</p> <ul style="list-style-type: none"> • Food insecure for 2-3 months a year • 3 meals a day • Typical meal includes rice and vegetables. If they have a pond, they can fish sometimes. • Catch wild frogs for food • During scarcity time: Work for others, sell domestic animals to have money for food • Some have to borrow more or less <p>Labour tools:</p> <ul style="list-style-type: none"> • Only simple tools, but more than previous step • Cannot buy own machine, still have to borrow from relatives • May borrow money from relatives to invest in production • Participate in agricultural trainings 	4	2

Steps		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> May have favourable loan from Social Policy Bank to do business (monthly interest rate of 0.6 – 0.8%) 		
2 - Extre mely poor	<ul style="list-style-type: none"> Small and sparsely furnished house Untidy outfit. Their appearance is OK or nice but their clothes are not as good as richer people Small and sparsely furnished house Untidy outfit. Their appearance is OK or nice but their dressing is not as good as richer people. Few assets, lack of household appliances. No bed or wardrobe or TV Little production land Many children, who do not finish school Insufficient rice for food Skinny and pale, weak Poor social relations, few friends Drinking regularly and not working, not listening to others including relatives and siblings. <p>Food:</p> <ul style="list-style-type: none"> Food insecure whole year, lack of rice for 3 to 5 months 3 meals a day, only have vegetables, or merely with <i>cham cheo</i>, typically used with sticky rice or meat and vegetables. May have meat once every 3 days Have to borrow food and money, even at high interest rates, during scarcity time Work for others (corn grating) to earn money for rice, have to sell goat and poultry to have money for rice <p>Labour tools:</p>	4	2

Steps		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> Only common and primitive tools: hoe, sickle, rake... Upon harvesting time, they need to borrow some machine, such as rice and corn pickers, from others “When they need to buy fertilizer, they have to borrow from households in step 5 or above and they have to pay interest, even for relatives. Money does not count relations” They can also learn agricultural knowledge and participate in trainings. “Poor households are encouraged to learn more”. There are agriculture extension agents to instruct 		
1-		1	Does not exist

Poor women’s focus group, Chieng Chan

Steps		#HH 2004	#HH 2014
6-Rich	<ul style="list-style-type: none"> Many motorbikes, milling machine for paddy and corn, ploughing machine, and automobile Big and nice house, multiple houses, brick house, corn storage, grinding machine Cow and buffalo, three-part pigsty, many pigs Gas cook No internal quarrel, be kind to neighbours, having large network, regularly helping others. Lending money at 2.5% (or typically 3%) interest rate Providing paddy milling service Doing farming Children can have high education, this is a remote area and people often end education after finishing junior high or high school 	Did not exist	4

Steps		#HH 2004	#HH 2014
	<ul style="list-style-type: none"> Hiring others. <p>Eating:</p> <ul style="list-style-type: none"> Also eating beef, pork, buffalo meat, egg and milk. <p>Tools:</p> <ul style="list-style-type: none"> Using machine for ploughing, milling and farm preparation. 		

Steps		#HH 2004	#HH 2014
5 -	<ul style="list-style-type: none"> having corn storage, ploughing and rake machine, paddy mill, vegetable processor for pig feed, brick stilt house, motorbike, TV, working for others sometimes, may hire others <p>Eating</p> <ul style="list-style-type: none"> Having meat and fish every day, having beef on special occasions only, beef is luxury 	1	5
4 -	<ul style="list-style-type: none"> Situation is better, sufficient food and clothes, still working for others but less Having wood or brick stilt house, cows, buffalos, pigs, lots of corn, cassava, rice, fruit trees, coffee plantation, motorbike, TV, ploughing machine, paddy mill <p>Eating:</p> <ul style="list-style-type: none"> Having meat and fish two or three times a week, eating pork, raising chicken and duck for home use sometimes. <p>Tools:</p> <ul style="list-style-type: none"> Partially automated plough, using buffalo, some having milling machine which others can ask to use. 	2	6

Steps		#HH 2004	#HH 2014
3 -	<ul style="list-style-type: none"> Food insecure for 3 months, striving to let children finish secondary school, still working for others Borrow from neighbours with interest to buy seeds and rice Cannot borrow from bank due to poverty status. Borrowing from corn dealers to buy seed and fertilizer, and pay them an interest rate of 2.5% if selling corn to them, or 3% Lack of labour, not applying machine and technology Having electricity <p>Eating:</p> <ul style="list-style-type: none"> Having 3 meals per day, eating more vegetable than meat, growing or picking own vegetables instead of buying, having meat sometimes Having meat once a week Working for others in times of scarcity, everyone here works for others to get paid 	3	3
COMMUNITY POVERTY LINE			
2 - Poor	<ul style="list-style-type: none"> Temporary, unrobust house Going to village clinic when ill; the better-off go to hospital Too poor to afford electricity. Children have tuition fee discounted, and only finish junior high school Working for others, in food insecure situation for 3 to 6 months, may have no land Get ill regularly and also poor so they have to borrow with interest to pay for treatment. Others may even not lend to them because they're too poor Working in corn mill, having no asset but a cow provided by State Lack of labour; unable to grow new varieties because it requires corn variety changes to have high productivity Using manual plough because they have no machine 	4	2

Steps		#HH 2004	#HH 2014
	<p>Eating:</p> <ul style="list-style-type: none"> • Still having 3 meals a day, otherwise, I cannot work. We eat vegetables. Without money, we have to borrow or work for payment; we must have meat once in a while. • In times of scarcity, we also dig for cassava and pick bamboo shoots, work for others or borrow money for food. <p>Tool:</p> <ul style="list-style-type: none"> • mainly knife, spade and hoe 		
<i>1- Very poor</i>		10	Does not exist

Annex 3. Moving up the Ladder

How men move their household up the ladder	How women move their household up the ladder
Poor women's group, Chieng Chan	
<ul style="list-style-type: none"> • Learning "how to do" from others: during visits to neighbours, during working for others – see how people do and learn the same for using fertilizer brand, how much. 	<ul style="list-style-type: none"> • Hiring more fields than others to cultivate • Learning from others – see if their field is good asking them how to do it • Going to the market to sell products: sweet potatoes, vegetables, get silkworm to sell in rainy season • Raising livestock: pigs, goats

	<ul style="list-style-type: none"> • Get loan (procedure requests that both husband and wife have to sign in the paper)
Poor men's group, Chieng Chan	
<ul style="list-style-type: none"> • Hard-working, bid for more land to expand cultivation; • Do extra jobs to increase income for needs • Work for others for cash income • Willing to learn and apply experiences and scientific advances • Visit successful households to learn their methods • Raise livestock: cow, goat, chicken, pig 	<ul style="list-style-type: none"> • Grow or pick vegetables, hunt animals and sell at the market • Work for others to earn extra money • Work hard and diligently • Work for others • Grow vegetables or raise fish, raise more animals at home • Actively seek ways to make money for the family; Eager to learn from other households – follow their good practice • Grow more high-yield crops or raise animals which can sell for good price.
Poor men's group, Muong Chanh	
<ul style="list-style-type: none"> • Men seek hiring work (cutting wood, carrying heavy things, farming, cultivating or raising livestock) to earn more money • Invest in raising pigs, chickens • If they can afford it they buy more machines/equipment for production • Some get lucky; they do not face much difficulty or risk; • Learn and follow experiences from rich families • Should be hard working and determined. 	<ul style="list-style-type: none"> • The wife should agree with and follow husband's doing • The family follows husband's initiatives to overcome poverty • Husband and wife should discuss together to find ways to escape poverty.
Poor women's group, Muong Chanh	

<ul style="list-style-type: none"> • Men do farming • Less involve in hiring work, but trading • Men better to manage and are more rational than women • Work hard and drink little • Take initiative in learning good livelihood experiences from others. 	<ul style="list-style-type: none"> • Women learn experiences from better off families and neighbours; and from siblings and relatives • Grow vegetable s • Know how to apply technologies like their husband • Must work hard • Raise a lot of animals/ cattle • Able to manage her time in a day to work effectively • Encourage/support her husband to do business and learn more experiences from good practice family; to learn new varieties of rice and coffee • Women should get education in order to learn more knowledge • Women go to extension training –they can go if their husband cannot go • Women can do more tasks than men, but heavy tasks must be done by men, e.g. transporting wood or coffee • Discuss with husband about cultivation of new varieties, new ways of planting • Women should follow husband’s plan
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Annex 4. Remaining in poverty or falling into poverty

Why women remain trapped in or fall into poverty	Why men remain trapped in or fall into poverty
CHIENG CHAN	
Poor women's focus group	
Remaining in poverty <ul style="list-style-type: none"> Widowed women are landless if they are not given husband's land and parents have no more land to give Having many children Poor health conditions, accident at work Low education and no opportunities for training; difficult to learn new things 	Remaining in poverty <ul style="list-style-type: none"> Having no land or little land (wife from outside) Not willing to work for others
Falling into poverty <ul style="list-style-type: none"> Lack of/ far from water resources to irrigate maize fields Cannot get firewood from forest: prohibited to damage upstream forest Give up working as discouraged by lazy husband Discouraged by husband who is drug addicted/or gambling and spends most family money Does not work hard on her garden to grow vegetables Having many children or having only girls 	Falling into poverty <ul style="list-style-type: none"> Drunkard or drug addicted, selling farm land to buy wine, not willing to work at all Gambling Lazy, always hanging out and not working Low education level or illiterate so do not know how to work properly No will to strive and develop Not willing to learn from relatives and friends Not willing to learn new techniques /knowledge; or to learn about society Drunk husband beats his wife, scolds wife Husband has affair so wife feels down

Why women remain trapped in or fall into poverty	Why men remain trapped in or fall into poverty
<ul style="list-style-type: none"> • Husband drinks and discouraged to work • Women who are beaten by her husband claiming money for a drink • Widowed and have no labourers • Having ill member so the family has to sell all assets for treatment • Wife is lazy, does not work with her husband • Illiterate or low education, does not know how to work/produce properly 	
Poor men's focus group	
Remaining in poverty <ul style="list-style-type: none"> • Husband is too lazy and the wife cannot work on her own so she gives up. • Addicted and gambling husband loses all income that the wife makes so she gets hopeless and does not want to try anymore • Husband and wife do not get consensus, not working together, not keeping savings. • Due to gambling and drinking issues • She is not willing to grow vegetables • Women devote to their husbands and children; some have too many children or have all boys or all girls. • Husband does not work at all but spends all money made by his wife 	Remaining in poverty <ul style="list-style-type: none"> • Dependent people who are not willing to learn new techniques or learn from relatives and friends • Lazy, drunkard, selling farm land instead of cultivating it to have money for indulgence. • No will to strive up and develop • Lazy, idle and too playful • Gambler, or too weak to work • Not willing to work at all • Not willing to learn about society or new knowledge • Drunkard or addicted. Caught in drug, gambling, prostitution and get poorer and poorer • Low education level, cannot go to school; illiterate so do not know how to work properly.

Why women remain trapped in or fall into poverty	Why men remain trapped in or fall into poverty
<ul style="list-style-type: none"> • She can make money but her husband only drinks, he makes her give all money she earned or hits her if she does not • Her husband died and no one works • Too ill and sell all assets <p>“They say that women have to follow their husband. If he does not work while she does, he can use up all. If she’s similarly idle, they cannot get better.”</p>	<p>“This is big problem, some have land but then sell all, some are alcohol or drug addicted, some involved in prostitution”</p>
<p>Falling into poverty</p> <ul style="list-style-type: none"> • A widow cannot make a living on her own • She or a family member is sick or addicted, so all money is spent on medicine or drugs • She works but her husband is so lazy and plays out all day, spending all money • She is lazy and not working with her husband • Illiterate, low education, not knowing how to make money 	<p>Falling into poverty</p> <ul style="list-style-type: none"> • Too many children, cannot earn enough to feed the family • Some rich people become lazy and dependent, or become addicted and caught by police so they immediately fall into poverty • Due to natural disaster or crop loss • Sickness makes them sell all assets to pay for treatment • Naughty children who are gambling addicted and ruining family’s fortune • Children’s education costs a lot and they cannot make money • Some already reach average level and become lazy since they think they have some money, and they don’t work anymore • Satisfied with what they earn and want to enjoy life rather than work and fall down

Why women remain trapped in or fall into poverty	Why men remain trapped in or fall into poverty
	<ul style="list-style-type: none"> Husband and wife do not have consensus and often quarrel, conflict, fight each other. Family violence – husband hits wife. Wife has an affair and neglects doing housework.
MUONG CHANH	
Poor women's focus group	
Remaining in poverty <ul style="list-style-type: none"> Victim of gender-based violence – beaten by husband Chronic disease Lack of land for production or low quality land – rocky land, difficult for cultivation. Family has many members but lazy to work 	Remaining in poverty <ul style="list-style-type: none"> As they are shy and not good at learning from others Husband and wife do not discuss with each other or listen to each other The couple is lazy, not taking care of crops/trees Shy to learn, shy to express, they feel inferior to the rich Frequently sick/ill Have too many weddings to cover (each wedding costs 1 cow – approx. 12-15 million VND). Big families with little land but lazy.
Falling into poverty As above	Falling into poverty As above
Poor men's focus group	
Remaining in poverty <ul style="list-style-type: none"> Women are dependent on their husbands. Husband disagrees with the initiative and the wife is 	Remaining in poverty <ul style="list-style-type: none"> Lazy, undetermined, having no patience.

Why women remain trapped in or fall into poverty	Why men remain trapped in or fall into poverty
<p>subordinate to her husband although she wants to do it.</p> <ul style="list-style-type: none"> • Lack of health. • Husband lacks willpower, wife is dependent on husband. If husband does not agree to do it, the wife cannot initiate by herself. 	<ul style="list-style-type: none"> • Do not want to learn experiences from rich, successful people • They do not learn much, do not travel around to learn much • Drinker, lazy working • Have little land • Have many children, or have sick children • Not able to work due to sickness • Have no capital for investment in family economy
<p>Falling into poverty</p> <ul style="list-style-type: none"> • Women are dependent on their husband; if the husband does not have enough willpower then the women themselves cannot do it so they fall back below the poverty line 	<p>Falling into poverty</p> <ul style="list-style-type: none"> • Risk of animal diseases – they all die. • Family member has been hospitalized - high cost for treatment and the family has to sell things to get money • The family invested a lot of capital for livestock and crops, but it failed; natural disaster or animal diseases so the family goes broke and loses all money

Annex 6. How spouses help other from falling down the Ladder

How women help men from falling down the ladder	How men help women from falling down the ladder
CHIENG CHAN	
Poor women's focus group	

<ul style="list-style-type: none"> • Work with husband: go to work in the fields, in uphill land or in the forest • Support husband • Take good care of husband (asking what he wants to eat, talk and share with husband; care when he is ill) • Getting consensus with husband on what to grow, what animals to raise 	<ul style="list-style-type: none"> • Husband and wife get in consensus over what to grow or what animals to raise • Husband can ask his wife to attend trainings with him • Husband does housework when his wife is not home • Husband shares housework with his wife: he can wash clothes while the wife is cooking
Poor men's focus group	
<ul style="list-style-type: none"> • Be hardworking and taking care of children well • Be willing to learn more • Work with husband, sharing work load with him • Work in the garden to sell garden products in order to add to the family income • The couple must get consensus on production: how to plant and take care of crops and animals 	<ul style="list-style-type: none"> • Focus on agriculture as the main livelihood • Raise more cattle and poultry to develop family economy • Be hardworking, doing extra jobs to earn money for his family • Actively learn from others how to improve livelihood • Do more hiring work for cash • Determined to work hard • Not involved in drugs, drinking or gambling; sex work • Saves money for production or children's education • Does not waste money • Invests money to buy machine/equipment (such as wood cutter to work as contractor)
MUONG CHANH	
Poor women's focus group	

<ul style="list-style-type: none"> • Supports husband, works with husband on what he has learned • Goes to other villages to learn what they grow/raise there • Applies new techniques • Borrows money from credit fund • When husband decides on things the wife follows and supports him although she may not like the idea. But husband and wife should discuss about it. 	<ul style="list-style-type: none"> • Husband supports his wife • Husband shares farm works with his wife • Husband is willing to help his wife with housework: picks up children to/from school. • Knows how to apply new techniques/technology • Hard working with wife and children • Borrows money to invest for production and livestock • Borrows money from the Social Policy Bank
Poor men's focus group	
<ul style="list-style-type: none"> • Work hard/share work load with husband • Takes care of things in the house when husband is absent (crop care, animal husbandry, childcare) 	<ul style="list-style-type: none"> • Determined to escape poverty • Consistently learn experiences from others • Hard working • Take care of their health • Do not drink or gamble, use drugs • Get loan to invest in their production to improve the family's economy