

## Gender and Ethnicity in Vietnam Agroforestry Landscapes: Lessons for Project Implementation

In

**Information Brief** 

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#### Citation

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Photo: ©Nguyen Mai Phuong

Image (right): Teaching H'mong farmers how to use a camera to take photos for the gender study at Toa Tinh commune, Dien Bien province.

#### Acknowledgements

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## About this brief

The brief summarizes learnings and outcomes from the Agroforestry for Livelihoods (AFLi) project, implemented by World Agroforestry (ICRAF) in Northwestern Vietnam. The project took place in two phases over the period of 2011 to 2021 and sought to encourage farmers to adopt agroforestry systems to combat environmental degradation and to diversify their agricultural products. The second phase of the project (AFLi-II) focused on the development of market-based agroforestry and forest rehabilitation.

The brief explores the benefits to women from participating in six AFLi exemplar landscapes and the gender-based constraints and opportunities women faced in participating in and benefiting from the project focusing on two ethnic minority groups including a Thai community in Hat Lot, Son La province and a H'mong community in Toa Tinh, Dien Bien province. The brief highlights the implications of barriers to women's empowerment in agriculture to the success of agricultural interventions. Lastly, it provides recommendations for agricultural projects and extension staff to become more gender responsive.

#### Agroforestry for Livelihoods of **Smallholder Farmers in Northwest** Vietnam (AFLi) Project

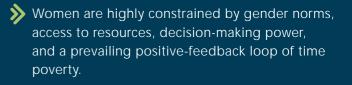
Recognizing the potential of agroforestry, ICRAF Vietnam, with support from the Australian Centre for International Agricultural Research (ACIAR) and the Research program on Forests, Trees and Agroforestry of Consultative Group on International Agricultural Research (CGIAR), implemented a comprehensive agroforestry and forest rehabilitation research program with local partners in Northwest Vietnam.

Please use this link to access further information on AFLi: www.worldagroforestry.org.

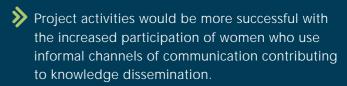


## Gender and **Ethnicity in Vietnam** Agroforestry Landscapes: **Lessons for Project** Implementation

## Key findings



>> A holistic, time-saving approach to addressing women's daily activities could reduce the effects of time poverty and increase project participation.



>> Involving women in project activities increases their confidence and empowers their decisionmaking abilities.



>> Cultural nuance affects women's access to agricultural training in ethnic minority communities.

Image left: Harvesting longan fruit Photo: ©Nguyen Mai Phuong

## Introduction

Agricultural extension services offer support to enhancing agricultural productivity within the context of local communities, yet women are repeatedly left behind due to sociocultural norms, limited access to information and gendered resource allocation (FAO, 2019). Agricultural innovation for smallholder farmers is highly gendered within patriarchal

family structures (Kawarazuka and Prain, 2019), where women are often positioned in relation to their husbands and perceived as 'farmer's wives' instead of professional farmers themselves (Brandth, 2002; Meinzen-Dick et al., 2010). This perception has led to women's exclusion from agricultural trainings limiting their access to tools and information.

#### VIETNAMESE CONTEXT

Agricultural development projects are faced with a unique challenge in Vietnam due to the presence of 53 recognized ethnic minority groups who made up only 14% of the population but 73% of the country's poor in 2016 (World Bank, 2019), and who differ in cultural norms and nuanced contexts within the country. Additionally, more than 81% of the ethnic minority population was employed in agriculture in 2017 (UN Women, 2017). In comparison with their male counterparts, ethnic minority women have lower levels of education, younger working ages, less likelihood of owning agricultural machinery, poorer proficiency in Vietnamese, and less likelihood of owning a motorcycle; a distinct obstacle for the 15 ethnic minority groups who live 20-70 km from their respective 'local' markets (UN Women, 2017).

Women are additionally disadvantaged with respect to decision-making power at the household level, although this is notably shifting as seasonal migration is leaving more femaleheaded households in the wake of absent men (Green Climate Fund, 2020; Kawarazuka and Prain, 2018). However, female-headed households experience different barriers to maleheaded households such as being more likely than male-headed households to experience labour shortages and difficulties in accessing loans and information; as a result, female-headed households are less likely to adopt agroforestry practices, despite expressing more interest in this practice than men in some cases (Catacutan and Naz, 2015).

# "I spend most of my time taking care of the children"

Photo: ©World Agrof



## Conducting the research

An assessment was carried out to determine the benefits to women from participating in the six AFLi exemplar landscapes in Na Nhan, Toa Tinh, Hat Lot, Chieng Yen, Xa Ho and Thuong Bang La communes in the Dien Bien, Son La and Yen Bai provinces. The main ethnic minority farmers in the region are Thai, H'mong, Kinh, Muong, and Tay. The assessment was initially carried out through a survey focusing on individual social benefits such as improved awareness, knowledge and skills on agroforestry implementation, farmer networks, and farmers' use and dissemination of project materials.



## What is an exemplar landscape?

A landscape is a geographic area with sufficient size, diversity, and complexity to capture the various dimensions of social resilience, climate resilience and ecosystem service linkages. An exemplar landscape is a smaller geographic area within the broader landscape that is selected for focused work. Exemplar landscapes typically comprise:

- Differing socio-economic and cultural aspects, health and nutrition statuses;
- >> Ecosystem services; and
- Varying value chains and collectives.

Two case studies conducted in Hat Lot and Toa Tinh communes complemented the initial quantitative survey, focusing on the Thai and H'mong ethnic minorities, two of the six minority groups which have populations over one million people in Vietnam (UN Women, 2017). The case studies sought to understand in more depth the gender-based constraints and opportunities women faced to participate and benefit from the project.

## The objectives of the study were to:

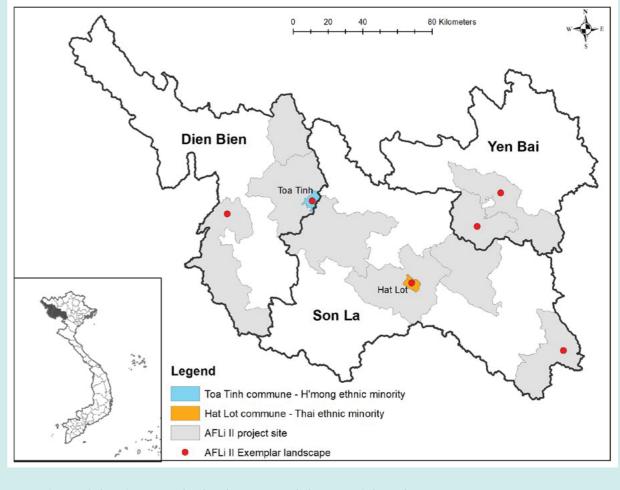
- Assess the benefits and constraints of women participating in six AFLi exemplar landscapes.
- Observe and compare key constraints to women's livelihoods and access to agricultural extension services in two case studies.
- Determine the implications of barriers to women's empowerment in agriculture to the success of agricultural intervention.
- Give recommendations to allow agricultural projects and extension staff to be more gender responsive.
- Assess the effects of cultural nuance on women's uptake of agricultural innovations.



#### Hat Lot and Toa Tinh Communes

The Thai community of Na Ban village in Hat Lot commune of Son La province was established in 1960, and all households have land certificates. The average land holding in Na Ban is 2-3 ha/household with an additional 200-300 sqm for the home and garden.

In Dien Bien province, Toa Tinh commune is home to seven villages: Hua Xa B being the most developed. The Toa Tinh Commune was established in 1952 and is now home to more than 2000 people, all of whom belong to the H'mong ethnic group.



Locations of the six exemplar landscapes and the Toa Tinh and Hat Lot communes

Thai groups in the Northwest generally live in the middle altitudinal zone (600-800 masl) while H'mong live at higher altitudes (above 800 masl). This has major implications for the communities' respective mobility in terms of distance to markets and access to resources; especially given the seasonal effect of rain on the conditions of the soil-topped roads characteristic of the highland regions in the Northwest. Qualitative data for the case studies was collected using gender-responsive surveys discussing project impacts and community barriers to uptake. The study employed the Social Analysis and Action approach developed by CARE International (CARE, 2017) (see Social Analysis and Action Global Implementation Manual) and focus group discussions based on GENNOVATE methods (Petesch et al., 2018) (see The GENNOVATE Methodology) including the ladder of power and freedom framework, 24-hour time allocation, gendered division of labour and decision-making structures.



## TO DETERMINE THE BENEFITS TO WOMEN FROM PARTICIPATING IN AFLI EXEMPLAR LANDSCAPES.



#### WHERE?

Six exemplar landscapes



#### Survey

HOW?

WHO?

182 project farmers (95 women)43 control farmers (22 women)

TO UNDERSTAND IN MORE DEPTH THE GENDER-BASED CONSTRAINTS AND OPPORTUNITIES WOMEN FACED TO PARTICIPATE IN AND BENEFIT FROM THE PROJECT.



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#### WHERE?

Hat Lot and Toa Tinh communes



#### HOW?

Two case studies

Gender-responsive surveys and focus group discussions



Photo-taking activity and community exhibition



WHO? Focus group discussions

41 Thai farmers (19 women) 41 H'mong farmers (20 women)



Photo-taking activity and community exhibition



16 Thai farmers (8 women)16 H'mong farmers (8 women)

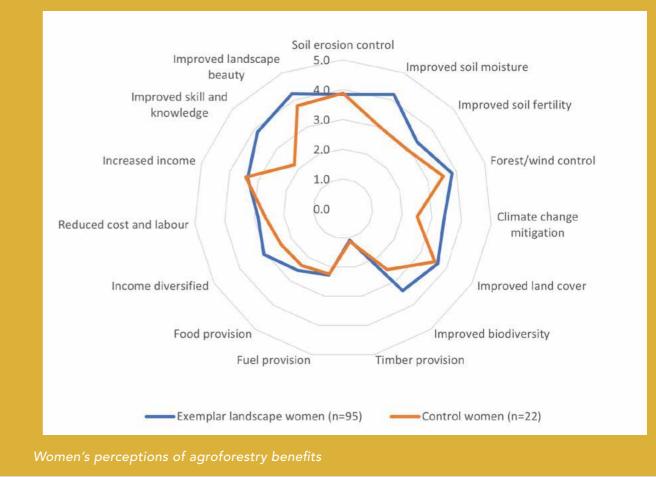


## Results of the research

## WOMEN'S BENEFITS FROM PARTICIPATING IN AFLI EXEMPLAR LANDSCAPES

#### Women's perceptions of agroforestry benefits

Compared to female farmers not involved in the project, women participating in the AFLi-II exemplar landscapes gave higher scores to the agroforestry benefits of improving soil moisture, mitigating climate change impacts, improving



biodiversity, providing food, and improving knowledge and skills. Their scoring was based on observations of project agroforestry systems of their own or of others in the village.





### Increased knowledge and skills

Technical support was provided to farmers through trainings on agroforestry system establishment, management as well as grafting technique and nursery management. Over 70% of female farmers participated in training activities, yet only 15% of them participated in nursery activities as nursery management was considered difficult for women, especially the grafting technique.

Over 80% of women were willing to share their knowledge with family members, neighbours, and friends in their villages. Their newly acquired knowledge included tree management techniques, fertilizer application, watering and grafting techniques, and pest management. The women wished to have more trainings specifically on fruit tree management and pest and disease control.



# Adoption of agroforestry options and soil/water conservation techniques

#### Expansion of agroforestry options

- Sixty-four percent of women participating in exemplar landscapes confirmed that they would like to expand their agroforestry systems (n=95).
- Forty-five percent of women not involved in the project wanted to adopt/expand agroforestry systems (n=22).
- > The most preferred agroforestry systems were fruit tree-based systems.

## Adoption of soil and water conservation techniques

All the interviewed women were aware of decreasing water availability, 66% of them observed soil erosion on their farms and the negative impacts of soil erosion on soil quality or crop yield.

- None of the women confirmed that they knew how to implement soil conservation techniques including tree planting, grass planting on contour lines, or terraced farming in agroforestry fields.
- The most common response was "don't know how to do" followed by
  - 1) Lack of management techniques;
  - 2 Lack of finance;



- Cattle damage; and
- 4 Lack of labour to manage forage grass and fruit trees.



#### **Social benefits**

- Social benefits included improved teamwork, connection with other farmers, ability to talk in public, improved decision making and the confidence to implement agroforestry techniques as well as enhanced community forest management.
- A high percentage of women from farmer groups that had been participating in the project for a long time (such as Hat Lot exemplar landscape) were receiving social benefits.



The main recognizable benefits were site visitations, network expansion, the broadening of knowledge and receipt of information. Farmers learned that they could broaden their network and benefit from teamwork when everyone becomes more active in sharing information, exchanging knowledge, and solving problems together.

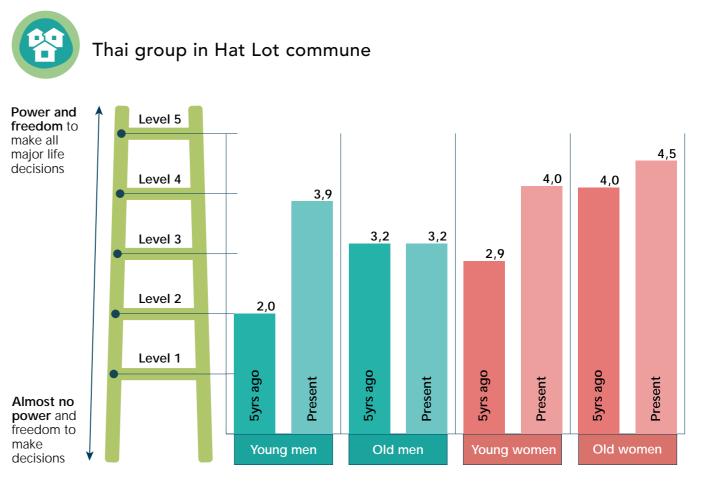


#### FINDINGS FROM THE CASE STUDIES ON THE GENDER DIVIDE IN THAI AND H'MONG ETHNIC GROUPS



### Degree of power and freedom

Both the young Thai men and women perceived an improvement in their degree of power and freedom over the 5-year period. The men perceived a slightly greater improvement than the



Thai men and women's perceived degree of power and freedom Note: Power and freedom is rated on a scale of 0- 5, where 5 indicates the power and freedom to make all major life decisions and 1 signifies almost no power and freedom to make decisions.

women (1.9 and 1.1, respectively). Old Thai men perceived no change to their power and freedom over the period, whereas the old Thai women showed a slight increase (0.5).



Young H'mong men perceived a decline (-1) in their power and freedom whereas the young H'mong women perceived a substantial improvement (1.6) in theirs over the 5-year period.

Old H'mong men perceived a slight decline (-0.8) in their power and freedom over the five-year period, whereas the old H'mong women showed a slight increase (0.9).

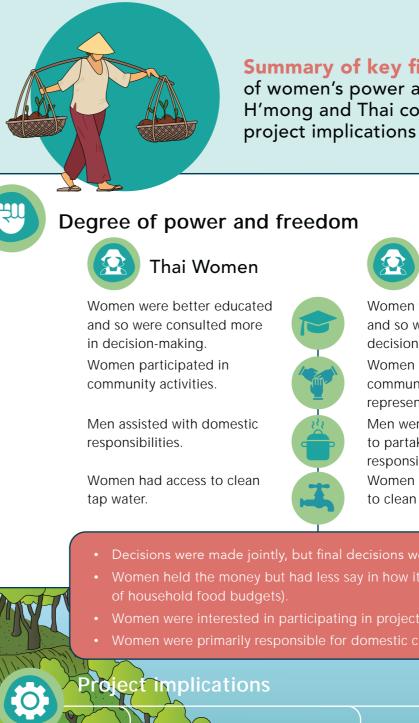


### H'mong group in Toa Tinh commune

Power and freedom to make all major life decisions



Men and women's perceived degree of power and freedom in the H'mong ethnic minority group of Toa Tinh commune.



Decision-making power and prevailing patriarchal social structures formed barriers to the accessibility of agricultural training for women from both ethnic communities.

Project activities enhanced women's social capital and confidence, contributing to their overall empowerment. Thai women had more perceived power, in line with their male counterparts, than H'mong women. Going forward, it will be important to address the needs of each community and encourage project participation whilst being respectful of household dynamics and not exacerbating tension between family members.

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### Summary of key findings: a comparison of women's power and freedom in the H'mong and Thai communities and the

Women were less educated and so were consulted less in decision-making. Women were less participatory in community activities as culturally men represent families in social settings.

H'mong Women

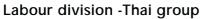
Men were less inclined to partake in domestic responsibilities. Women did not have access to clean tap water.

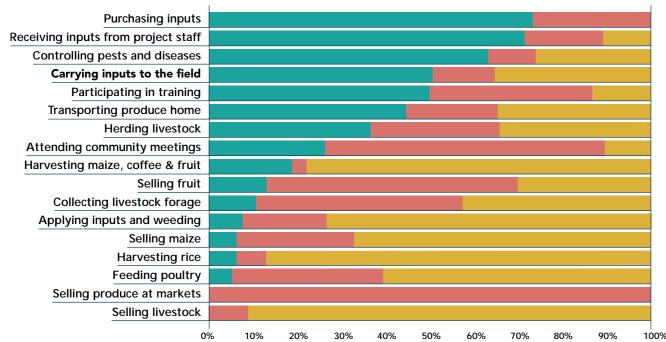
The communities had different levels of access to education, food and water which impacted the accessibility of extension training.

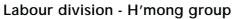


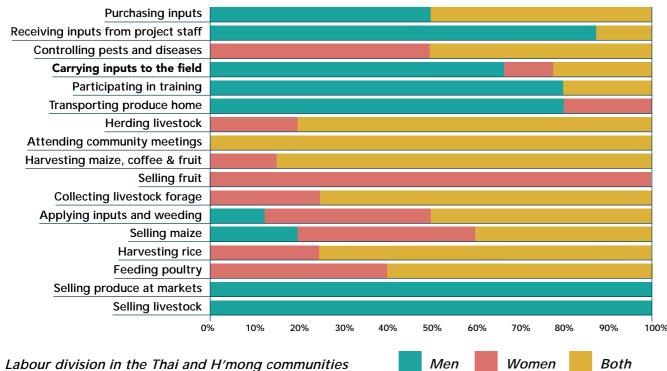
### Labour divisions

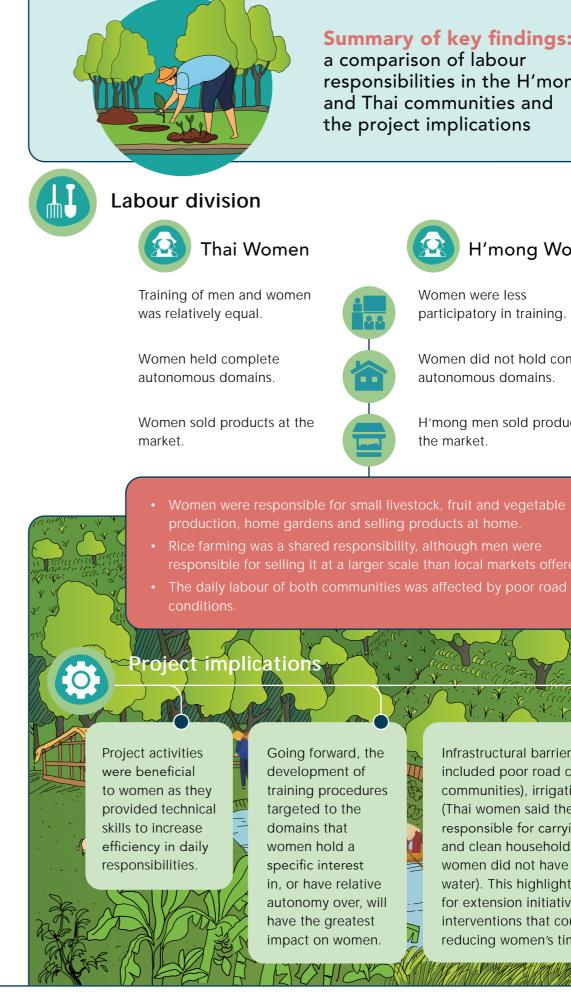
The results indicated a divide in labour responsibilities according to gender for both the Thai and H'mong communities. Women were typically responsible for small livestock, fruit and vegetable production and home gardens. Men purchased and applied inputs such as pesticides, seedlings, and fertilizers. The main differences identified between the communities were that H'mong women did not sell produce at markets and Thai women were slightly more empowered in that they were almost equitably trained and held autonomous domains.











#### Summary of key findings:

a comparison of labour responsibilities in the H'mong and Thai communities and the project implications



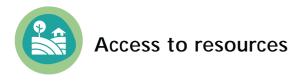
Women were less participatory in training.

Women did not hold complete autonomous domains.

H'mong men sold products at the market.

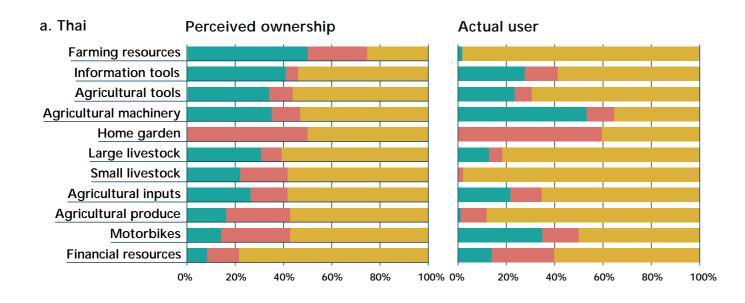
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Infrastructural barriers mentioned included poor road conditions (both communities), irrigation equipment (Thai women said they are often responsible for carrying water to fields) and clean household water (H'mong women did not have access to clean tap water). This highlighted the potential for extension initiatives to provide interventions that could contribute to reducing women's time poverty.



The distribution of assets and resources was highly gendered, where patriarchal norms influenced women's access. Since men and women in Thai communities were more equal in many spheres than in H'mong communities, it was no surprise that this was the same in their resource

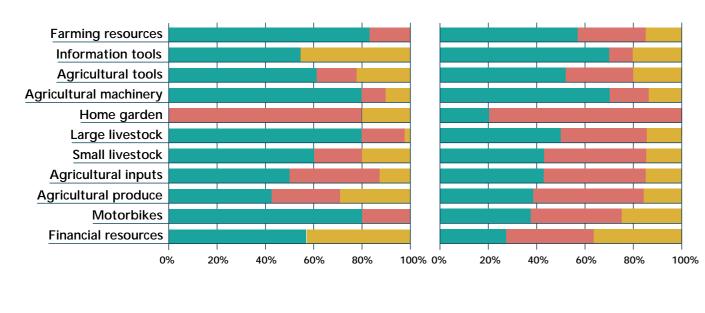
distribution. In both communities, women held more perceived ownership of resources in the domains in which they were responsible, such as in the home garden or with small livestock, however, male dominance in ownership was more pronounced in H'mong family assets.



b. H'mong

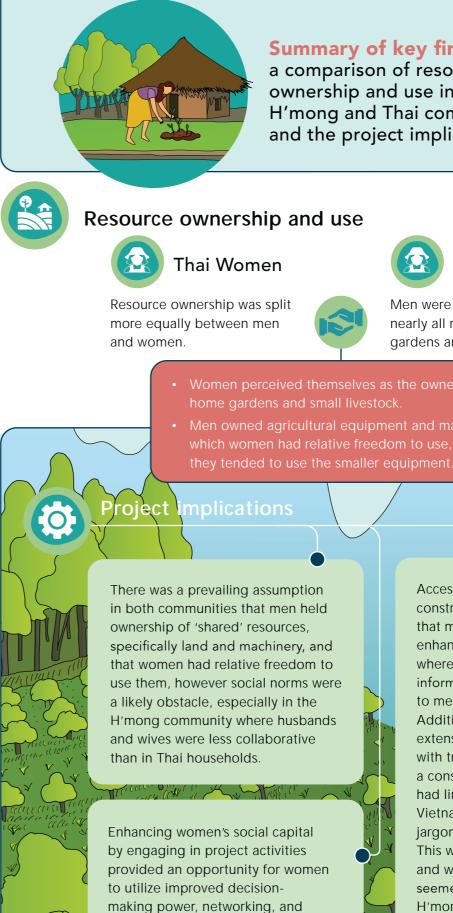
Perceived ownership

#### Actual user



Gendered allocation of resource ownership and use in the Thai (a) and H'mong (b) communities





public communication to take more

ownership of their time and resources.

#### Summary of key findings:

a comparison of resource ownership and use in the H'mong and Thai communities and the project implications



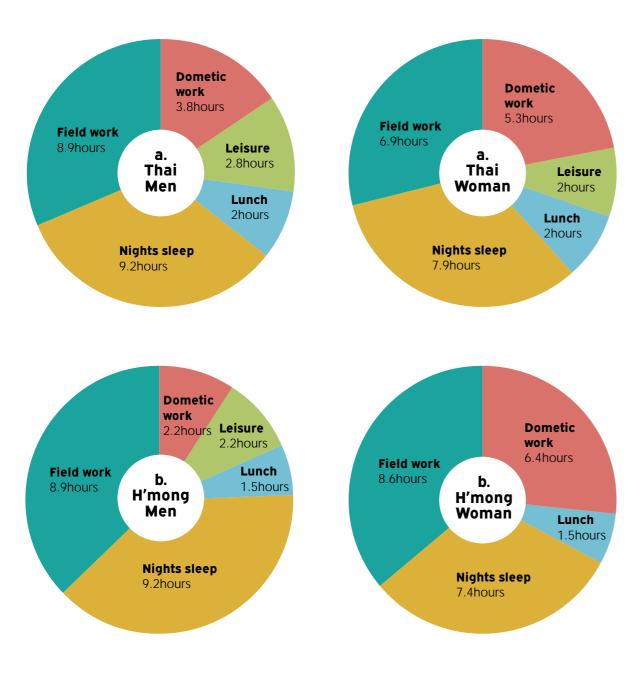
Men were the sole owners of nearly all resources except home gardens and small livestock.

Access to information was a vital constraint that perpetuated the norm that men were decision-makers thereby enhancing their perceived ownership, where women had limited access to information and so left final decisions to men, especially in H'mong families. Additionally, language barriers in extension materials and in working with traders in the local market were a constraint for women who often had limited working knowledge of Vietnamese and struggled with the jargon in technical training materials. This was a barrier expressed by men and women in both ethnic groups but seemed to be a specific barrier for H'mong women who had the added cultural norm that men are responsible for communications outside the family.

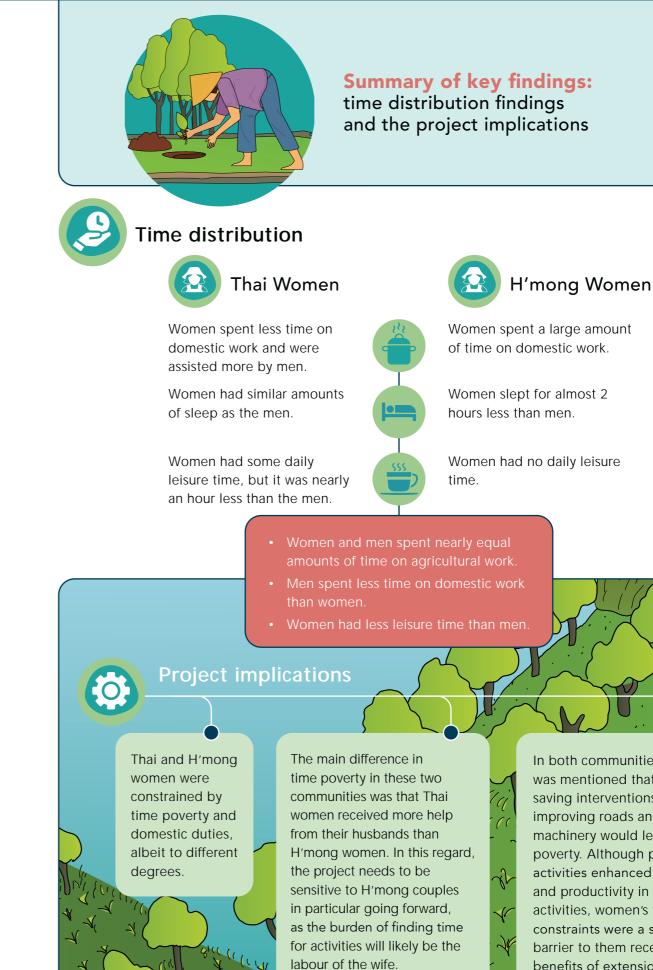


### Gendered time distribution

It was found that women and men spent nearly equal amounts of time on agricultural work across both communities (a 36-minute difference in the Thai community and only an 18-minute difference in the H'mong community). Men spent less time on domestic work than women (1.5 hours less in the Thai community and 4.2 hours less in the H'mong community). The H'mong women had no time allocated to leisure activities and slept for nearly two hours less than the men.



Gendered 24hr time-wheels for the Thai (a) and H'mong (b) communities



In both communities, it was mentioned that timesaving interventions such as improving roads and access to machinery would lessen time poverty. Although project activities enhanced efficiency and productivity in agricultural activities, women's time constraints were a significant barrier to them receiving the benefits of extension services.

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Summary of the key agricultural interests of the Thai and H'mong women and the project implications



#### Agricultural interests

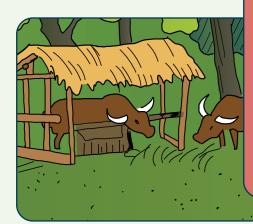


Women were better educated and had more freedom to use machinery, so they were interested in larger machinery training.

Women had access to clean tap water and were interested in irrigation systems.

Women were interested in complex agricultural techniques such as grafting.

Men and women were interested in planting grass following the AFLi project to reduce soil erosion.



## H'mong Women

Women were less educated and had less freedom to use machinery and so were interested in small equipment training.

Women wanted to obtain clean tap water before they considered irrigation systems.

Women were interested in basic agricultural techniques such as maintaining livestock health.

- and selling and pest and
- in accessible extension
- Women were interested in improving infrastructure

Both Thai and H'mong women expressed their interest in building upon their agricultural knowledge and practices in domains that would impact their daily lives, but which had barriers to accessibility.

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**Project implication** 

Thai women had access to clean tap water and were not concerned with household water sources, whereas H'mong women experienced the inverse. Thai women instead mentioned their desire for field irrigation systems since their household water needs were being met.



Thai women expressed their interest in large machinery such as trucks and tractors, whereas H'mong women mentioned their interest in smaller, more accessible machinery such as sprayers. It is important to note going forward that while project activities increase women's technical skills, the widespread adoption of innovative methods is dependent on how accessible and relevant the methods proposed are.

Both the Thai and H'mong ethnic groups mentioned the role of market traders in influencing the prices that products were sold for and that they often felt manipulated by the conditions set by traders. In response to this, young H'mong men suggested that formal support would be beneficial in maintaining more stable trading conditions, H'mong women did not comment on solutions to this problem, even though they were concerned.

Women were interested in accessible extension materials with limited jargon, in ethnic dialects, shorter and more concise information, video training, and infield demonstrations.

In future, project activities which increase women's communication skills and confidence may influence collaboration in these communities.

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### What do these research findings mean for future project interventions?

## WOMEN'S INVOLVEMENT IN PROJECT ACTIVITIES

- >> In the Thai ethnic community, husbands and wives collaborated on decision-making, although the husband generally had the final say. Though this varies between households, women in the Hat Lot commune, especially the younger generation, were more educated and their opinions were increasingly respected and heard. This contrasted with the H'mong group as even though men and women perceived their decision-making to be collaborative to some degree, the women were disproportionately less educated and therefore decision-making power was left to the husband; a power dynamic which, in addition to the effects of pervasive alcoholism and domestic violence in the community, affected women's confidence and participation in decision-making.
- Decision-making power is a key determinant in women's capacity to participate and benefit from project activities as it influences women's ability to implement the things they have learned and to re-distribute their time and labour.
- In both the Thai and H'mong communities, women were heavily constrained by domestic activities, however, they invested an equal amount of time in agricultural activities as men in their daily lives. There was some expectation for Thai men to offer help in household domestic duties which indicated a level of support for Thai women. H'mong men were less inclined to contribute to household



chores.

Project activities need to consider the time constraints of local women, not just in scheduling agricultural trainings, but also in the approaches and materials used. Both men and women identified difficulties in engaging with extension materials that were not in their native tongue (even those who had a high degree of competency in Vietnamese struggled with the jargon).

H'mong women disproportionately lacked fluency in the language and struggled more in understanding materials in Vietnamese. This not only perpetuated unequal access to knowledge and power dynamics but also intensified women's time-poverty as they needed to invest much more time and energy in engaging with the extension materials.

Participants identified several timesaving, accessible project materials e.g., poster boards, video presentations and in-field training activities.

Thai and H'mong women had different levels of access to education and resources and different positions in power dynamics both at household and community levels. These differences highlighted the importance of locally nuanced and community-driven interventions.

## WOMEN'S INFLUENCE ON PROJECT SUCCESS

Despite the difficulties faced in engaging with extension materials, nearly 80% of female participants in both communities expressed willingness to share project information and knowledge obtained from village heads, extension workers and neighbours with family and peers.

Women were found to use informal channels of communication to obtain agricultural knowledge more than men in both communities. Therefore, transferring relevant information to women will likely reach those who do not necessarily have time to participate in trainings, and facilitating the establishment of community groups, or posting information in an accessible way (including the use of appropriate language, length, and visual presentation of information) in places where women congregate could help to effectively spread information.

H'mong women identified a dynamic where men were the holders of information and had their position strengthened through their participation in trainings while women's knowledge was increasingly less valued. Ensuring that women take on leadership roles within their communities and increasing their agency over knowledge dissemination by targeting them for training will elevate their positions in their communities.

Dedicating efforts to facilitate women's attendance in trainings and spreading information among community members through informal channels could significantly support the success of outreach projects.

Technology such as mobile phones, radio and television are increasingly being used by extension services to disseminate information, especially in response to the COVID-19 pandemic. Women's access to information is critical to the success of project activities and appropriate channels of information should be prioritized to increase their participation.



Female group discussion on labour division Photo: ©Nguyen Mai Phuong

## Summary of key recommendations

#### THE RECOMMENDATIONS ARE SPLIT ACCORDING TO THE FOLLOWING FOUR CATEGORIES:







Ensure that project materials are accessible to all community members

>> Ensuring women's use of extension materials and participation in training should be sensitive to their proficiency with the language used, their skills and needs, and the presentation of materials.

>> Short materials which are presented in places where women frequent and are translated into their ethnic languages will be much more effective than extension packages with heavy wording that are time consuming to read.

>>> Language used needs to consider local dialects with different jargon and colloquialisms.



#### Holistic adaptation

Recommendation

Reasoning

>> A holistic approach to community intervention which offers training not just in agriculture but in language acquisition, finance and mechanization and offers women the chance to develop their sense of empowerment and confidence which contributes to a positive feedback loop of increased decision-making and participation in

Implement agricultural training that

targets women from a wider community

time-poverty and empowerment needs

project base and addresses women's

Additional initiatives that would benefit communities and reduce timepoverty are loan-support schemes and investment in local infrastructure.

project activities.

Identify indicators of time-poverty and constraints on women and incorporate them into the project framework

>> Though project activities themselves are constrained by access to resources, extension services which do not provide on-going support during community transformation are likely to miss critical factors to women's access as they arise.

#### Recommendation

Reasoning

Encourage women to lead in community development

>>> Creating spaces where local women can identify their needs and collaborate with other families and encouraging women to take on community leadership and responsibility towards disseminating information in their own spheres and around their schedules, can empower them to have confidence in their knowledge and spread

information effectively between them and to those who do not have time to attend regular training.

- Extension support can similarly be supplied in tandem with the work of existing women's associations.
- >> Ensure that extension workers are representative of the people they are trying to reach, meaning female extension workers should be highly present in women's project activities.

Provide adaptive training that is sensitive to the climate crisis and community evolution

>> Extension services need to include adaptive training that is responsive to changing climatic conditions, focusing on women's domains and changing agricultural contexts. Adaptive measures should additionally consider policy support projects to ensure women's rights and empowerment from government agencies.

>> Adaptation to unprecedented situations like the COVID-19 pandemic should include measures such as social-distanced training and the inclusion of gender-sensitive and accessible technologies for training purposes.

Maintaining on-going support that considers changing socio-cultural conditions is highly important in ensuring continual empowerment for communities, and extension plans should include support services, repeat activities/refresher courses, technological and information support, and evaluation procedures to ascertain changing community contexts.

emplar landscape in a Tinh commune Photo: ©Nguyen Ma



#### Time poverty

Recommendation

constraints of women and propose project interventions that are sensitive to this and include support services such as childcare in tandem

Consider the time

Reasoning

>> Project activities should not only accommodate women's schedules by offering short, regular meetings which occur at varying times as dictated by members of the community but should also include resources to assist women in addressing their responsibilities such as childcare or meal services when activities overlap with scheduled meal preparation.

Identify and address time-consuming constraints to communities

> Both Thai and H'mong women are impacted by poor road conditions which consume time in their day-to-day activities.

>> Time-consuming constraints are nuanced and will differ between communities but impact women's access to resources all the same.

Implement regular, infield training sessions with individuals

- >> Training where individuals are met during their daily activities do not require a substantial time commitment from women who are time-constrained. Training on timesaving practices can reduce time spent in the field on a particular day.
- >> Training should occur regularly to ensure that participants retain relevant information.

References

Brandth, B. 2002. Gender identity in European family farming: a literature review. Sociologia Ruralis. 42(3), pp. 181-200.

CARE International. 2017. Social Analysis & Action (SAA), Global Implementation Manual. USA: CARE.

CIFOR-ICRAF, n.d. 2020-2030 Strategy. Transforming Landscapes, Sustaining Livelihoods.

Catacutan, D. & Naz, R. 2015. Gender roles, decision-making and challenges to agroforestry adoption in Northwest Vietnam. International Forestry Review. 17(4), pp. 22-32.

Chikoko, M.G. 2002. A comparative analysis of household owned woodlots and fuelwood sufficiency between female and male headed households: a pilot study in rural Malawi, Africa. PhD dissertation. United States of America: Oregon State University.

Diawuo, F., Kosoe, E.A. & Doke, D.A. 2019. Participation of women farmers in agroforestry practices in the Jaman South Municipality, Ghana. Ghana Journal of Development Studies. 16(2), pp. 267-289.

FAO. 2019. Country Gender Assessment: Of Agriculture and the Rural Sector in Viet Nam. Hanoi: FAO.

Green Climate Fund, 2020. Gender Assessment: FP125: Strengthening the resilience of smallholder agriculture to climate change-induced water insecurity in the Central Highlands and South-Central Coast regions of Vietnam. 18th Feb 2020. Vietnam: UNDP.

Kawarazuka, N. & Prain, G. 2019. Gendered processes of agricultural innovation in the Northern uplands of Vietnam. International Journal of Gender and Entrepreneurship. 11(3), pp. 210-226.

Luke, N. & Munshi, K. 2011. Women as agents of change: Female income and mobility in India. Journal of Development Economics. 94(1): pp. 1-17.



Mbo'o-Tchouawou, M. & Colverson, K.E. 2014. Increasing access to agricultural extension and advisory services: How effective are new approaches in reaching women farmers in rural areas? ILRI Project Report. Nairobi, Kenya: ILRI.

Meinzen-Dick, R., Quisumbing, A., Behrman, J., Biermayr-Jenzano, P., Wilde, V., Noordeloos, M., Ragasa, C. & Beintema, N. 2010. Engendering agricultural research: IFRI Discussion Paper 00973. Washington, DC: IFPRI

Petesch, P., Badstue, L. & Prain, G. 2018. Gender norms, agency, and innovation in agriculture and natural resource management: The GENNOVATE methodology. Mexico, D. F.: CIMMYT.

Qian, N. 2008. Missing women and price of tea in China: the effect of sex-specific earnings on sex imbalance. Quarterly Journal of Economics. 123(3): 1251-85.

Raghunathan, K., Kannan, S. & Quisumbing, A.R. 2018. Can women's self-help groups improve access to information, decision-making, and agricultural practices? The Indian case. Agricultural Economics. 50(5), pp. 567-580.

Sraboni, E., Quisumbing, A.R. & Ahmed, A.U. 2014. How empowered are Bangladeshi women in agricultural Setting? Empirical evidence using a new index. Bangladesh Development Studies. 138(3):

UN Women. 2017. Figures on Ethnic Minority Women and Men in Viet Nam 2015. Ha Noi, Viet Nam: United Nations Entity for Gender Equality and the Empowerment of Women (UN Women).

World Agroforestry (ICRAF). 2017. Gender-Responsive Participatory Tools: A Guide for Facilitators.



www.worldagroforestry.org/