# FINAL EVALUATION REPORT

The Project "Strengthening the Voice and Capacity of Vulnerable Ethnic Minority Farmers in Climate Resilience in Northwest Vietnam (VOF)"

Submitted to: Agricultural Development Denmark Asia (ADDA)



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#### ACKNOWLEDGEMENT

The Final evaluation team for the project on "Strengthening the Voice and Capacity of Vulnerable Ethnic Minority Farmers in Climate Resilience in Northwest Vietnam (VOF) project" has been honored to work with Farmer Responsive Groups (FRGs), stakeholders with strong commitment in promoting agricultural production models and implementing linkage chains. This report builds on information and exchanges from the Agricultural Development Denmark Asia (ADDA), the Center for People and Nature (PanNature) and local project partners.

The consulting team would like to thank the project implementation partners at the Farmers' Unions of Son La and Lai Chau provinces for openly sharing their views on the project. The evaluation team gives deep thanks to the FRGs who are willing to share their personal experiences in implementing the agricultural production models and linkages that the project has supported.

Finally, the consulting team would like to thank the enthusiastic organizational and logistical support of the Agricultural Development Denmark Asia and the Center for People and Nature, for arranging the work schedule in the survey area in an effective manner.

We look forward to receiving comments from interested parties!

Consultanting Team

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## **ABBREVIATION**

ADDA	:	Agriculture Development Denmark Asia		
CC	:	Climate change		
DARD	:	Department for Agriculture and Rural Development		
DONRE		Department of Natural Resources and Environment		
FRG	:	Farmer Responsive Group		
FU		Farmer Union		
HH	:	Household		
PanNature	:	Center for People and Nature		
PPC	:	Provincial People's Committee		
VOF	:	Strengthening the Voice and Capacity of Vulnerable Ethnic		
		Minority Farmers in Climate Resilience in Northwest Vietnam		

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#### **EXECUTIVE SUMMARY**

The project "Strengthening the Voice and Capacity of Vulnerable Ethnic Minority Farmers in Climate Resilience in Northwest Vietnam (VOF)" was implemented in two provinces of Son La and Lai Chau from July 2019 to June 2022. The final evaluation has been implemented in the period from August to September 2022, with the aim of reviewing the achievement of the goals, results, and impacts of the project, on that basis, providing recommendations for the future. The evaluation is carried out with qualitative and quantitative methods.

The project has achieved its objectives and 3 outcomes. Some important highlights of the project: i) establishment of FRGs and development of climate change-adaptive agricultural production models with high economic efficiency; ii) select effective agricultural products and promote organic farming practices; iii) implement market linkages between farmers and enterprises for agricultural products; iv) conduct strong communication about project good practices.

Stakeholders rate the project as highly relevant. The relevance of the project to the Government's orientations and strategies on climate change-responsive agricultural development and market linkage. At the same time, the suitability of the project through the selection of suitable project locations, project participants, and project implementation partners. In addition, the project should consider targetingvulnerable groups during project implementation.

The project has ensured performance during implementation. The project management mechanism is compact, the financial management regulations are highly appreciated by the parties. Capacity building activities are carried out by competent agencies, with new technical solutions for the community. Agricultural production models have high investment efficiency, ensuring profits more than 2 times higher than before the project implementation. The participation of beneficiaries in the implementation of the project is also a strong demonstration of the project's performance.

The high income of agricultural production is considered as the highlight of the project. The application of new techniques helps reduce input costs, standard farming practices follow the progress towards organic products. Community ownership in project activities is promoted, the community expands the scale of agricultural production from the project's model, and manages and organizes the construction of a number of works. At the same time, the project's monitoring and evaluation system should be improved, increasing financial disclosure of project implementation finance at the community level.

The project has had positive effects in increasing household agricultural production income, and improving farmers' lives through asset purchases and production expansion investments. Through project implementation, the capacity and reputation of project partners are enhanced. Son La Provincial People's Committee has been allocated a budgetfrom 1 billion VND in recent years, to 7 billion VND by the province in 2022 to organize the implementation of agricultural production models. In Lai Chau province, the Chairman of the Provincial People's Committee participated in a workshop to summarize the model of Nep Tan rice to give directions to develop the results of the project.

Stakeholders rate the VOF project as highly sustainable. Sustainability is demonstrated through production techniques maintained by farmers, model production scale is being replicated. Value chain links have been formed between the core group of farmers and local businesses. The project's good practice communication products were developed and shared with the authorities and relevant agencies.

PanNature has performed well in supporting agricultural production techniques. In addition, PanNature needs to play a stronger role in project management technical support, in order to ensure the effectiveness of project support. Project implementation manuals should be developed to ensure appropriateness, effectiveness and compliance during project implementation.

The project monitoring and evaluation system needs to be developed and implemented effectively, ensuring that project information is shared in a timely manner with stakeholders. The lack of participation of the project partner at the district level will be a challenge for the Provincial FU when the scale of the project is expanded. The partner's ability to monitor, evaluate and apply information technology to project implementation management is current challenge of the project.

The agricultural model has expanded in terms of production scale due to its financial efficiency, suitable to local facilities and farming conditions. However, some new affiliates guarantee partial consumption of products. The business management and market linkage capacity of the FRG needs to be improved to meet the group's production scale. These challenges will directly affect the efficiency and sustainability of the model.

The survey shows that there are many opportunities for the project to make effective contributions in the coming time, specifically:

- Good practices on building agricultural production models to adapt to climate change, linking value chains with enterprises consuming agricultural products, should be applied appropriately to ethnic minority and mountainous programs and other government programs;
- Annual socio-economic development plans at the commune level which requires the participation of the people, integration of climate change adaptation and is market-oriention, should be implemented in accordance with the regulations of the People's Committees of the project implementation provinces.
- The size of FRG has grown strongly, which is not suitable for the current group management structure. Therefore, it is considered a good opportunity to developFRGs into cooperatives to ensure the effectiveness and sustainability of agricultural production models that have been successfully implemented by the project.

Some recommendations for the project:

- For ADDA:
  - Advocacy should be considered as a primary goal if there is a similar project in the future.
  - The scale, scope and number of villages and communes implementing the next project need to be increased to ensure impact.
  - Consider adding additional personnel responsible for managing, monitoring and evaluating project implementation results.
  - Conduct periodic and irregular monitoring, internal audit to ensure compliance with project regulations.

- For Panature:

- Maintain and promote policy advocacy activities in the field of agricultural production adapting to climate change.
- Consulting and technical support on agricultural production adapting to climate change and market linkage should be maintained and developed.

- To do better the tasks of monitoring and technical support, PanNature should act as a support unit, consulting on project techniques and monitoring project implementation with more focus.
- Participate more fully and effectively in the monitoring and acceptance process after each project activity performed by the partner.
- Develop a monitoring and evaluation system and share information with ADDA and project implementation partners, fully and on time.
- Promoting the implementation of gender and community development approaches for vulnerable groups, this content should be integrated in the project's guiding documents and activities.
- For provincial Farmer Unions:
  - Continue to maintain the task of mobilizing and connecting the participation of stakeholders, especially the Department of Agriculture and Rural Development and the Department of Natural Resources and Environment.
  - Perform the tasks of the project implementation management partner in the province, with the tasks of planning, organizing and reporting.
  - Ensure community ownership of project activities is maintained, developed and effectively implemented.
  - Consider the District People's Committee involved in project management and implementation, ensuring a compact management structure through the selection of participating staff in accordance with the clear job description.
  - Gender and community development for vulnerable groups should be integrated in project activities.

## 1. Introduction

## **1.1. Project Introduction**

The project "Strengthening the Voice and Capacity of Vulnerable Ethnic Minority Farmers in Climate Resilience in Northwest Vietnam (VOF)" built on the experience of ADDA and PanNature from the previous project "Climate change and ethnic minorities in North Vietnam (CEMI)". VOF project was implemented from January 2019 to June 2022, the project was sponsored by ADDA and project implementation partners were PanNature and Farmers' Union of Son La and Lai Chau provinces.

**Project objective:**The resilience of vulnerable ethnic minorities to climate change in Northwestern Vietnam is enhanced through the promotion of climate-smart agriculture and their participation in the process. decision making.

#### **Expected specifict objectives of the project:**

**Objective 1:** at least 4 out of 6 farmer responsive groups (FRG) and 2 local NGO partners are increasingly influencing local and national decision making on rural development

**Objective 2:** 6 climate-smart agricultural villages for demonstration and advocacy purposes have been established in Son La and Lai Chau provinces and at least 70% of the 5.000 participating families in the two provinces have increased their income with at least 20 % from sale of PGS certified agricultural products

**Objective 3:** At the end of the project, results and achievements have been recognized by provincial authorities of the target area, broadly shared and discussed for up scaling at national level at different venues in the Lower Mekong sub-region

## **1.2.** Objective of the Final Evaluation

#### **1.2.1.** Objective of the Evaluation

The purpose of this study assesses the outcomes and impact of the objectives of the project. The study should identify the impact of the project on the target groups and beneficiaries and assess the level of community and other stakeholder participation. It will also identify the intended and unintended changes, best practices, lessons learned as well as challenges arose. Finally, the evaluation should come up with conclusions and recommendations for learning and future intervention.

#### **1.2.2. Evaluation Contents**

- The level of achievement of the project's objectives and results: based on the monitoring and evaluation indicators, determine the level of achievement of the project's objectives and results.
- Project relevance: the relevance of project objectives to the problems the project addresses with relevant policies. Relevancy also needs to consider the project's approach and the needs of the target group, as well as the project partners.
- Effectiveness of the project: Consider the extent to which the results are achieved compared to the project's objectives, and the project's activities for the beneficiaries.
- Efficiency of the project: evaluation of the financial performance, costs compared to the results brought by the project. Compare with other implementation methods to determine the optimal project implementation options.

- Impact of the project: the effects of the project on beneficiaries, project implementation partners. At the same time, the project's impacts and contributions to policy goals and agricultural sector development.
- Project sustainability: the ability to maintain the benefits and impacts of the project after the project ends. In particular, consider the ownership of the project results by the beneficiaries, the influence of environmental and policy factors on the project results.
- Lessons learned from the project: lessons learned are reflected in the implementation approach, project management organization, stakeholder and beneficiary participation, and lessons on policy advocacy.

#### **1.3.** Methods of Information Collection

The following methods of information collection were applied:

- Collect information from secondary documents: project documents, project implementation progress reports, mid-term evaluation reports, project monitoring and evaluation system, training reports... and other legal documents on developing green, smart agriculture, adapting to climate change.
- In-depth interview: In-depth interview to clarify lessons learned in project management, project management issues, possibilities to promote institutionalization and application in programs and projects in the future. The group conducted in-depth interviews with representatives of relevant units:
  - ADDA, PanNature.
  - Provincial level: Provincial Farmers' Union, capacity building consultancy.
  - Commune level: Commune leaders, leaders of Farmers' Unions, Women's Unions (WUs), officials in charge of commune agriculture, local facilitators/trainers
  - Village level: members of Farmer Responsive Group.
  - $\circ$  Enterprises and cooperatives participating in value chain linkages with project beneficiaries.
- Group discussion: to learn about the process of implementing agricultural production activities as well as the participants' opinions on the effectiveness of agricultural production, the organization and management mechanism and the operation of FRGs. The consulting group conducting group discussions includes:
  - Commune level: leaders and relevant officials of the Commune People's Committee;
  - Village level: Farmer Responsive Groups.
- Interview with quantitative questionnaire: conducted to measure the achievement of the project's objectives, quantitative interview was carried out for representatives of the Farmer Responsive Groups
- Observe and analyze the economic efficiency of the models: in order to quantify the economic efficiency of the models and the small funded proposalsimplemented.
  - Observe the model of agricultural production, small infrastructure works, agricultural machinery.
  - Analysis of economic efficiency and climate adaptability of agricultural production models: efficiency from crop conversion, efficiency through income and cost analysis.
  - Analysis of small infrastructure construction costs: funded costs and community contributions.

## **1.4.** Sample of the Evaluation

The structure of the evaluation and consultation sample is shown in the following table<sup>1</sup>:

No	Agency/Individual	Total	In-depth interview	Group discussion	Quanlitative questionaire
1	ADDA	1	1		
2	PanNature	2	1	1	
3	Provincial FU	2		2	
4	Commune People's Committee, Farmers' Union and Commune Women's Union	6		6	
5	Farmer Responsive Group	73	12	6	55
6	Enterprise, Cooperative	6	6		
	Total	90	21	14	55

Table1: Structure of the consulting sample

The review team consulted 55 members of the Adaptation Farmer Group, in which:

- Gender: 65.5% male and 34.5% female.
- Ethnicity: 100% of ethnic minorities.

- Regarding household economy: 10.9% of poor households, 7.2% of near-poor households, 65.5% of medium households and 16.4% of well-off households.

#### 2. Assessment on the level of achievement of the project's objectives

The project has made active efforts and realized its goals in the context of the COVID-19 pandemic lasting from 2019 to 2021, which is remarkable. The majority of output and target indicators have been completed. On the basis of focusing on the formation and promotion of the role of pioneer farmer groups in the community, the project established and organized capacity building for the Farmer Responsive Group (FRG) in 6 villages. Members of FRGs have been trained and (study) visited to learn on several important topics such as: i) agricultural production planning that integrates smart agriculture and climate change adaptation topics. Queen; ii) cultivation and animal husbandry techniques, plant protection and veterinary medicine; iii) knowledge of marketing, cooperation for product consumption; iv) skills in communication, promotion, community advocacy and community initiative mobilization, have actively contributed to community development activities in the project villages.

The formation of the Agricultural villages for climate resilience creates a basis to promote community initiatives on green and smart agricultural development, capable of responding to climate change. With the motivation of the FRGs, crop production conversion models (from maize to tea and fruit trees) to increase resilience on sloping lands in Binh Lu and Xuan Nha; model of SRI rice cultivation in Ban Lang and Hat Lot; model of mango growing in Tong Co, Sop Vat, Xuan Nha and others such as raising cow, goat, planting mango mixed with pineapple, as well as improvements in production facilities, have been highly appreciated by the majority of beneficiaries, making a meaningful contribution to the goal of increasing income of households in a sustainable way.

<sup>&</sup>lt;sup>1</sup> Danh sách thành viên tham vấn ở phụ lục 2

The survey also shows that many farmers who do not participate in the project model have approached, learned and applied improved production techniques such as SRI rice farming techniques, mango growing techniques, and tea growing techniques. This is an indirect impact, contributing to the goal of increasing community income in the project area on a larger scale. The specific results are presented below.

## 2.1. Indicators of objective 1

All indicators of the objective 1 were achieved compared to project design. Some highlights of the results are as follows:

- Establishment of 6 FRGs with 60 participants in 2 provinces of Son La and Lai Chau, which were supported by local authorities. The group consists of pioneer farmers in the community, capable of promoting the production planning process, connecting the community in organizing and implementating activities, linking/collaborating and supporting mutual development.
- Implemented 20 training courses, including 6 courses on management, organization, communication and advocacy skills; 6 courses on climate change impacts, climate change policies, smart agricultural production planning and climate change adaptation; 8 ToT training courses; study visits to learn about smart agricultural production and climate change adaptation practices.
- 132 monthly and 33 quarterly meetings organized by 6 groups of FRGs of 2 provinces. Thereby, promoting community participation in sharing experiences; participate in the planning, implementation and monitoring of local activities.

Indicators of the objective 1 are shown on the following table:

Results	Indicator	Level of achievement at the end of the project
<b>Objective#1</b> : at least 4 out of 6 farmer responsive groups (FRG) and 2 local NGO partners are increasingly influencing local and national decision-making on rural development	<ol> <li>Members of the FRGs meet regularly at least once a month</li> <li>Farmers of the 6 target villages participate in the preparation, implementation and monitoring of the current rural agricultural development plan.</li> </ol>	<ul> <li>(1) 60 members of the Farmers</li> <li>Response Group of 6 villages hold</li> <li>monthly meetings in each village,</li> <li>except for some peak months of the</li> <li>Covid-19 pandemic.</li> <li>(2) Farmers in 6 project villages</li> <li>participated in the preparation,</li> <li>planning, implementation and</li> <li>monitoring of production activities of</li> <li>the village, including project activities</li> </ul>
<b>Output 1.1</b> FRGs in six target villages possess the required capacity to apply	(1) 6 FRGs will be established and training to expand smart agricultural models for farmers	(1) 6 FRGs of 6 project villages have been established and trained to expand smart agriculture models
action learning in response to climate change	(2) 2 workshops in two project provinces	(2) 2 project kick-off workshops in 2 provinces were held
	(3) 50 farmers from the 6 village's FRGs selected and recognized by commune authorities.	(3) 60 farmers from 6 FRGs selected and recognized by the commune authorities
	(4) 6 training courses (2-3 days) per FRG, on management and	(4) 6 training courses on management skills, organization, communication,

## **Table2: Indicators of objective 1**

Results	Indicator	Level of achievement at the end of the project
	organization skills, advocacy, negotiation skills, communication skill	advocacy, presentation skills, negotiation for each FRG were organized.
	(5) 6 training courses (2-3 days) per FRG, on CC impact, smart agriculture and climate-friendly planning	(5) 6 training courses on CC impacts, CC policies and regulations, smart agricultural planning and CC adaptation
	<ul> <li>(6) 10-day training and study tour</li> <li>to CSA models in the Northern</li> <li>Vietnam.</li> </ul>	(6) 10 days of training and visiting the smart agricultural model in the North for groups of FRGs, commune farmers' Unions, commune officials
	(7) 3 ToT trainings for 30 local	(7) 8 ToT trainings for 95 local trainers
	facilitators in 3 zones (8) Monthlymeetingof6FRGs	(8) 132 monthly meetings of 6 FRGs were conducted
	(9) Quarterly meetings in each village	(9) 33 quarterly meetings held in project villages
<b>Output 1.2</b> Farmers community participate in agricultural planning and management	(1) The production plan of the target villages is discussed and agreed upon by the villagers from the time of preparation to the implementation of the plan.	<ul><li>(1) The production plan of the projects has the participation of the people in planning and implementation, however, it should be more active.</li><li>(2) The contents of CC response in</li></ul>
	(2) Elements of adaptation to CC in agriculture are integrated	agriculture are integrated into the production plans of 6 villages
	in the plan (3) PRA and CRAI reports for 6 villages.	<ul><li>(3) Rapid assessment and impact assessment of climate change in 6 project villages has been carried out</li></ul>
	(4) 6 village production plans integrate CSAs	(4) Production plan to integrate smart agricultural models in 6 villages is implemented
	<ul><li>(5) 6 communes use CRAI index in their plans and reports</li><li>(6) Transition like tensors</li></ul>	(5) 6 communes have integrated CC response content in their annual reports and plans. However, specific CRAI
	(6) Target indicators areas signed for the villages in the commune's annual development plan	<ul><li>indicators have not been seen.</li><li>(6) 7 targets have been assigned to the villages, but not yet clearly specified in the annual development plan of the</li></ul>
	(7) Legal regulation with communes and villages for participation in agricultural planning is established	commune. (7) 6 cooperative documents between communes and villages on the participation of FRGs in village and commune agricultural production planning were developed

## 2.2. Indicators of Objective 2

Allthe indicators of the objective 2 were achieved by design. Some highlights of the results are as follows:

- Through the results of the survey of agricultural products value chains in the project villages

and the need to improve the capacity of farmers, the project has organized 46 training courses for 6 FRGs, facilitators and commune agriculture staff on farming techniques and disease prevention for key crops such as SRI rice, round mango, high yielding mango, tea, longan, litchi (24 courses); raising goats, cows, pigs and chickens; composting method from agricultural waste (10 courses); business planning, cooperation, marketing and product communication (12 courses).

- The smart agricultural techniques such as growing SRI rice, growing clean tea and mango is applied by most households participating in the project and other households in the community apply the techniques supported by the Project. Converting the crop towards CC adaptation such as the conversion from planting maize to mango.
- The adaptive farmer group has doubled the income of the project-supported models; income from the products of the models supported by the project accounted for 29% of the total income from agricultural production of the household.
- Agreement on supplying agricultural materials and selling products signed by local people of 6 villages with agriculture product purchasing unit such as Northwest Agricultural Materials and Seeds Company, Tam Duong Tea Company, certified by the Commune People's Committee and facilitated during the implementation of the project.

Indicators of the objective 2 are shown on the following table:

Results	Indicator	Level of achievement at the end of the project
<b>Objectives#2:</b> 6 climate- smart agricultural villages for demonstration and advocacy purposes have been established in Son La and Lai Chau provinces and at least 70 % of the primary target group in the two provinces have increased their income with at least 40 % from sale of certified agricultural products 5000 secondary beneficiaries benefit from the agricultural production improvements	<ul><li>(1) 3,500 poor families report a 20% increase in income and at least 40% from sellingorganic products</li><li>(2) Improved household economic assessment</li></ul>	<ul> <li>(1) FRGs groups have more than doubled the income of the project-supported model; Income from products of the model supported by the project accounted for 29% of the total income from agricultural production of the household.</li> <li>(2) Household economic assessment shows that there is a clear improvement in income from the models of growing SRI rice, tea, mango, and raising goats (mango trees have not yet produced fruit but are forecasted). In addition, the new way of doing things helps to reduce labor time (e.g. SRI rice transplanting 50-70% time), reduce seed costs (at least 50%), reduce pesticides, improve soil quality and increase product quality.</li> </ul>
<b>Output 2.1.</b> Climate friendly agriculture techniques and methods are applied by the majority of farmers in the target villages	<ul> <li>(1) At least 1 climate smart agriculture technique in both livestock and crop fields applied by at least 50% of farmers in each target village</li> <li>(2) 3 FFSs on crop production/village; 3 farmer</li> </ul>	(1) At least 01 smart agricultural technique such as SRI rice cultivation, improved tea and mango cultivation is applied by 100% of rice, tea and mango growing households in the 6 target villages of the project. In addition, there were a conversion of crops to effectively adapt to climate change in 2

#### **Table3: Indicators of objective 2**

	interest groups/village.	villages.
	<ul> <li>(3) 3 FFSs on animal raising/village; 3 farmer interest groups/village.</li> <li>(4) Successful cases for improvement of agriculture facilities</li> <li>(5) Assessment reports on CRFC and CRAI for 6 villages</li> <li>(6) 3 policy briefs</li> <li>(7) 18 training courses for FRGs, 3 courses for each village</li> </ul>	<ul> <li>(2) 24 crop training courses were trained for farmer interest groups.</li> <li>(3) 10 training courses on husbandry techniques were held</li> <li>(4) 4 success stories on improving agricultural production facilities created</li> <li>(5) 01 Assessment report on the model of farmers to respond to CC and CC impacts of 6 villages was prepared</li> <li>(6) 3 policy briefs developed</li> <li>(7) 12 training courses on business planning, cooperation, product marketing for the FRGs of 6 villages were organized.</li> </ul>
<b>Output 2.2.</b> Agricultural inputs for the application of CSA available and options for market access at hand	<ul> <li>(1) Contracts, agreements and the number of transactions for the supply and sale of agricultural products</li> <li>(2) Participation of 3 PanNature staff in 3 training workshops</li> <li>(3) Value chain analysis reports for 6 villages</li> <li>(4) 2-3 initiatives per village</li> <li>(5) 18 suppliers, 6 key CSA inputs available</li> <li>(6) 6 signed agreements for agriculture products</li> </ul>	<ul> <li>(1) Contract for supplying agricultural materials and selling products between farmers in 6 villages and service company/cooperative was signed</li> <li>(2) PanNature staff participated in 3 training conferences</li> <li>(3) Value chain analysis report of 4 project village</li> <li>(4) 8 small community initiatives were implemented</li> <li>(5) 6 suppliers providing input materials for smart agriculture production at villages signed</li> <li>(6) Agreement to supply agricultural materials and purchase output products signed by representatives of 6 villages to cooperate with service providers</li> <li><i>Other outputs:</i></li> <li>Support seeds and microbial fertilizer to develop 7 hectares of SRI rice models in Ban Lang and Sap Vat; 30 households grow round mango and hybrid mango in Xuan Nha, Tong Co, Sop Vat; 10 households grow clean tea in Binh Lu; 10 households raising chicken in Ban Lang; raising goats in cages for 10 households in Tong Co; support breeding bull; support to build 3 captive pig barn in Binh Lu; supporting 10 households in Tong Co to relocate their cow barn to the field to ensure sanitation (currently up to 110 households have moved); models of growing elephantgrass and high-yield bananas as fodder for cattle; concrete road</li> </ul>

construction; supporting improved production facilities such as transplanters, fruit dryers, coffee peelers, lawn mowers, multi-numere tillers, water storage tanks to
multi-purpose tillers, water storage tanks to prevent drought for fruit trees

## 2.3. Indicators of Objective 3

All indicators of the objective 3 were achieved by design. Some highlights of the results are as follows:

- The Chairman of the People's Committee of Lai Chau participated and direct the agriculture sector to promote the project results at the SRI rice field seminar. The model of farmer community to respond to climate change in a news report about agricultural villages adapting to climate change on VTV2. This is an important indicator showing the provincial government's interest in the SRI rice model and its effectiveness for the community.
- 9 workshops were organized, including 4 provincial and 5 district workshops in 2 provinces of Son La and Lai Chau to share and promote experiences in implementing the Climate Resilience Farmer Community model - CRFC, clean and smart agriculture and good practices.
- Develop 01 documentary on VTV2, 3 videos and 10 articles published through the mass media, in order to spread the project's experience in implementing the project's smart and climate-friendly agricultural model and related issues.

Results of the objective 3 are shown in the following table:

Results	Indicator	Level of achievement at the end of the project	
<b>Objective#3.</b> By the end of the project, the results and achievements will be recognized by the project province government and widely shared and discussed for scaling up the model at the national level in the lower Mekong sub-regions.	<ol> <li>(1) The provincial government at least once mentioned the CRFC model in the official report and expressed interest in replicating smart agriculture and CRFC.</li> <li>(2) lessons and experiences of climate-friendly practices documented and presented and discussed in at least one provincial, national and regional forum</li> </ol>	<ul> <li>(1) The top leader of the provincial government (Lai Chau) visited the SRI rice model and mentioned the CRFC model in the reportage on agricultural villages adapting to climate change on VTV2.</li> <li>(2) Lessons learned on good practice are documented and shared at provincial workshops, broadcasts, and online forums.</li> </ul>	
<b>Output 3.1</b> Experiences and lessons learnt from CRFC model informed to local authorities for up- scaling and shared widely at national and international levels	<ul> <li>(1) The climate change response patterns are reflected in local development plans and reports.</li> <li>(2) The model for farmers' participation in climate change response is shared and recognized at the regional level</li> <li>(3) 2 thematic workshops in Son La and Lai Chau</li> </ul>	<ul> <li>(1) Climate change response practice is mentioned in local socio-economic reports. However, the project's practices on CC response have not been specifically and clearly mentioned in local plans and reports.</li> <li>(2) The model of CRFC has been shared on mass media (including English newsletter).</li> <li>(3) 3 thematic workshops on</li> </ul>	

<ul> <li>(4) 6 district workshops</li> <li>(5) 2 provincial workshops on experience sharing on CRFC models</li> <li>(6) 1 VTV report, 10 journal articles</li> <li>(7) 1 final evaluation and</li> </ul>	agricultural practices to respond to CC were held in Son La and Lai Chau (4) 5 district workshops (5) 1 provincial workshop to share successful models of farmers' experience in responding to CC (6) 1 documentary on VTV2 3 yideos
(7) 1 final evaluation and workshop	(6) 1 documentary on VTV2, 3 videos and 10 articles published via mass media
	(7) 1 final evaluation and workshop conducted

#### 3. Project Impacts

## **3.1.** Relevance of the Project

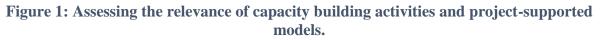
- **Implementation partners and stakeholders highly appreciate the relevance** of the project "Strengthening the voice and capacity of vulnerable minority farmers to respond to climate change in Northwest Vietnam". The reasons why partners and beneficiaries consider the Project very suitable will be explained in the analysis below.
- Policy relevance: The project is designed to fully conform to the climate change adaptation plan for the period 2021 2030. The Prime Minister issued Decision No. 1055/QD-TTg dated 20 07/2020 on the promulgation of the National Plan to adapt to climate change (CC) for the period of 2021 2030, with a vision to 2050. One of the tasks of the plan is: i) development and expanding ecosystem-based and community-based climate change adaptation models; ii) raising awareness and knowledge about climate change and natural disasters of all levels of government, social organizations and communities.
- Son La Provincial People's Committee has issued Decision No. 860/QD-UBND dated May 10, 2021 on approving the scheme to develop the crop field. In particular, one of the tasks is to promote green, sustainable agriculture, apply good agricultural practice standards to ensure safety for producers and consumers, less negative impact on the environment, contribute to slowing down the process of climate change; reducing chemical fertilizers and pesticides, effectively using natural resources, and protecting the environment.
- Lai Chau Provincial People's Committee issued Decision No. 1877/QD-UBND dated June 3, 2022 on the implementation of the agricultural development strategy in the province in the period of 2021 2030, with a vision to 2050. The tasks are management and rational use of natural resources to serve the requirements of sustainable development, especially management of land use for the right purposes according to the planning, prevention of land resource degradation.

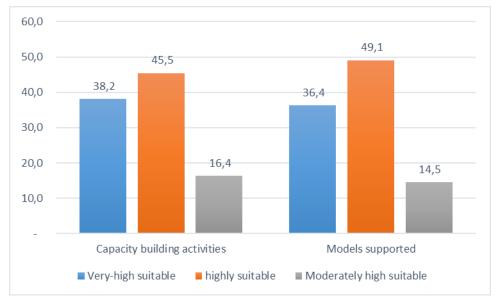
**Project area selection**: The project design was determined to build agricultural production models adapted to climate change in the Northwest region of Vietnam. The project area is located in Son La and Lai Chau provinces, which are two provinces that have developed strongly in agricultural production but have been affected by climate change in recent years. Some climate change phenomena have been confirmed as the number of sunny days and hours of sunshine in the year are more, the rainy days are less but the amount of rain increases, and at the same time, the water flow and water volume in the year also change, increasing the likelihood and intensity of flash floods. In addition, the effects of climate change such as hoarfrost, frost, and hail have also caused significant impacts on agricultural production in the Northwest region of Vietnam.



Photo 1: Meeting with the FRG in Na Khai village, Sop Vat commune, Yen Chau district, Son La

**Beneficiaries:** The project identifies beneficiaries as rural and mountainous communities and ethnic minorities, who are disadvantaged groups. The important point that the project has set and implemented is relatively successful for the development of interventions in the direction of following the needs and priorities of the communities, taking into account economic, environmental/climate performance and market factors of supported agricultural products. Field surveys show that the project places specific requirements on promoting community participation in the implementation process. On the other hand, there is the full participation of representatives of all disadvantaged groups in the community. The chart below shows a high rate of support of the beneficiaries when participating in project activities, 100% of households believe that capacity building activities and project-supported models are relevant, in which high and very high rate of relevance accounted for over 83.6% of the interviewees.





Source: Quantitative questionnaire for adaptive farmer groups

The suitability of participating partners at all levels and implementing agencies: Select partners to participate in project implementation and technical support partners, suitable to the functions and tasks of the unit in terms of management, and organizing the implementation of agricultural development programs. Specifically:

- **Project implementation partner in the province:** Provincial FU is the main project implementation partner in the province, considered a suitable unit to implement the project. Relevancy is demonstrated: i) functions and responsibilities of the Association to organize services and consultations to help farmers develop production; cooperate with domestic and international non-governmental organizations to study, exchange experiences and advance science and technology; ii) The association has a network of farmers up to the grassroots and district and commune levels, which is convenient in organizing the implementation of projects and replicating them after success.
- **Technical support partner**: with the goal of finding possible solutions to balance the relationship between people and nature, which has been and is being disrupted by pressures from economic development activities and market factors, PanNature is considered as a suitable partner for technical support in project activities.

**Donor policy relevance**: The project's choice of intervention in research and implementation of local good practices is highly consistent with the priorities of ADDA. The project is consistent with ADDA's objectives: i) promoting self-sufficiency and improving financial conditions in the poorest rural areas in developing countries by supporting self-help activities; ii) support for sustainable social and environmental development among target groups; iii) capacity building of target partners such as agricultural universities and local farmers' Unions.

The project has collaborated with the agricultural sector in project activities, including participation in training courses, hands-on experiences and seminars. Linkage activities are carried out through the direction of the District People's Committee - for the District Agricultural Service Center, and the direction of the Commune People's Committee - for the commune agricultural staff. In addition, the project also has a connection with the Department of Natural Resources and Environment to carry out capacity building activities and communicate knowledge and skills on climate change.

The consulting team felt it would be more appropriate if the project focused much more on the poor and near-poor groups, and integration of gender equality among the FRGs. The survey results show that the group of project participants accounts for a low proportion of: i) the group of poor and near-poor households – only 18.2% of the interviewed households, typically there are groups without participation of poor and near-poor households; ii) the proportions of men and women participating in the FRG are still high, there are all-male and female-only groups. Explaining the above situation, the project implementation units said that there was a lack of specific regulations and guidelines in the project implementation documents.

## 3.2. Project Efficiency

The project implementation structure is optimally designed to minimize management costs and use the mass network to organize the implementation of project activities. The project implementation system operates based on the coordination role of ADDA and technical support from PanNature. The project is implemented through the Provincial Farmers' Union, which directly organizes the implementation of project activities in the field.

The capacity building is closely linked with the necessary content and topics of project activities in the field. The training needs survey process is conducted with quality and selective, high demand-oriented. Within the scope of the Project, training topics are identified, and training contents were applied right in the process of implementing activities at field. At the time of the assessment, the members of the FRGs had all the knowledge and skills learned and applied in practice. Many members also expressed confidence to re-introduce to other villages and hamlets. The survey results showed that 100% of the members of the adaptive farmer group assessed the

high application rate of trained knowledge and skills, in which the rate of high and very high assessment accounted for 58.2%.

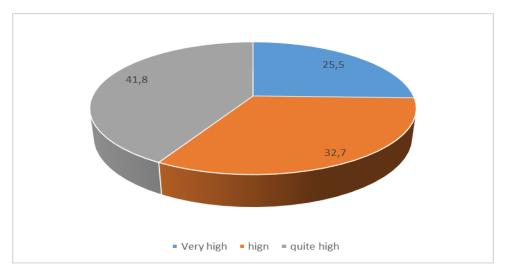


Figure 2: Degree of application of trained knowledge and skills

The capacity building activities are carried out with the participation of competent local organizations. Most of the training activities in the project provinces are organized in the direction of optimizing the transfer of training techniques and methods to local training units. The project selects trainers who have experience in implementing development projects, especially in the community management approach to local development subprojects. Individuals and units providing technical training in agricultural production for farmers from universities and businesses located in the area. Therefore, the operation has high efficiency in terms of application of knowledge and skills in agricultural production for FRGs , and at the same time, building capacity for the training units.

The efficiency of agricultural production models is one of the key highlights of the project for the FRGs group. The project's consulting activities to convert to other crops and/or apply new scientific and technical knowledge to bring about higher financial performance, and better local adaptation to climate change. The results of the survey on agricultural production models of 55 households members participating in the FRGsshow that, with the investment cost for the model increased by 130.9 million VND - equivalent to a 76.1% increase in the cost of agricultural production, but resulted in an increased profit of VND691.1 million – representing a 428% increase in efficiency compared to farmers' previous investment.

Source: Quantative questionaire for FRGs



Photo 2: SRI rice model at Na Khai village, Yen Chau, Son La

**Project performance is also demonstrated through construction efficiency and utilization efficiency of some small infrastructure projects (small initiatives) funded by the project.** The financial performance of buildings is enhanced by the contribution of the community in terms of labor, cash and locally available materials. At the same time, the construction site of the works has also carefully calculated the efficiency of use, the large number of households benefiting and the large scale of cultivation benefiting from the project.

Box 1: Performance of small infrastructure works in Na Khai village, Sap Vat commune, Son La

**Performance 1**: The construction performance that comes from being left to the community to do it themselves.

The concrete road was built leading to the production area of the village, with a length of 300m, a width of 2.5m and a thickness of 14cm. With a local unit price of fresh concrete of 1.1 million VND/m3, if this project is built by hiring 100% outside units, the total budget is estimated at 115.5 million VND (as it needs 105m3 of fresh concrete).

However, with the community self-implementation plan, with the support of 30 million VND from the project to buy cement, other costs are contributed by the community, including available labor and materials, construction works. It was completed with high quality.

**Performance 2**: the community chooses the right work, bringing high using efficiency.

The road leads to about 30-40 hectares of rice in all 3 villages with about 300 households passing through, including about 40 poor households. In addition, the road also leads to the production forest of some households. The road is designed with a size to ensure that vehicles can transport agricultural products after harvesting.

Source: Interview households of Na Khai village

Some activities to support agricultural production machinery of the project have not been specifically calculated and analyzed options for implementation, so the financial performance has not been confirmed. The consulting team learned about the operation results of the project management plan for machinery supported by the project such as transplanters, grass cutter, fruit dryers, tillers, and coffee peelers. In addition to transplanters and grass-cutter for efficient operation, which are highly appreciated by people, other types of machines have not been confirmed to be effective and efficient. Some agricultural production machinery and equipment equipped by the project have some points to consider: i) not yet aiming to provide agricultural production services but only used on a household scale/small group of households family; ii) in terms of investment finance, the selection of machinery is too focused on the suitability of the project budget without or lack of analyzing the different options to bring the highest investment efficiency.

#### Box 2: Efficiency of investment in agricultural production machinery

The fruit dryer was supported by the project for a group of FRG in Xuan Nha commune, Son La province in March 2022. Team members, when in need of drying, are responsible for paying the costs incurred. Each batch of drying for 6 hours makes 2kg of dried product. With this capacity, it can only ensure the drying of products for household use, it is not possible to provide drying services for outsiders.

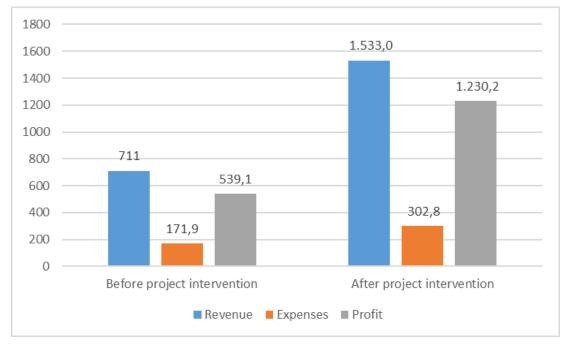
If the dryer is larger with a price of about 100 million (the machine supported by the project is of 26.5 million VND), the group provides local drying services. The fruit drying service may be fully developed in the commune because there is no warehouse to preserve fresh products, the area is in the urban-commune, where main products are consumed, and there is an area of raw materials for drying in the commune such as bamboo shoots (more than 1,000 tons), jackfruit (more than 20ha), longan (more than 100 tons)... For example, for longan, each batch of dried longan is 100kg of peeled longan, 11kg of dried longan is obtained with a value of 2,970,000 VND. In which, the cost of fresh longan is VND 1,400,000, the cost of peeling is VND 100,000, the work of drying workers is VND 100,000, electricity is VND 100,000, machinary depreciation is about VND 50,000 (if used in 3 years). Thus, the profit of each batch of drying is VND 1,220,000, each day drying 3 batches, after only 1 crop of longan (3 months), the group will recover the investment.

Source: discussion with FRGs

#### **3.3. Project Effectiveness**

The financial efficiency of the models has brought a significant source of income for households. The FRG are the highlight of the project's effectiveness. Supported project models such as organic tea, SRI rice, and mango models have significantly improved financial efficiency through: i) conversion from low-income crops to high-value crops, adapting to climate change; ii) Apply technical solutions to reduce input costs and increase product yield; iii) using organic farming helps to raise the cost of products; iv) develop linkage networks, cooperate in providing agricultural inputs and selling agricultural products in a convenient way.

Applying new techniques helps to reduce some input costs and labor costs, higher productivity, thereby bringing higher incomes to project beneficiaries. The sharing of SRI rice model households in Ban Lang and Hat Lot communes said: "New farming techniques have helped reduce seed costs by 2-3 times; reduce the labor force in rice cultivation by at least 50%". Quantitative survey results of 55 households participating in the model show that the application of science and technology has increased revenue to 1,533 million VND (from 23.34 ha of 55 households) - equivalent to 2 times compared to the revenue before the implementation of the model. Since then, the profit of production also increased to 1,230 million VND - equivalent to 2.3 times higher than that of previous practices.



### Figure1: Households' income after participating project's supported models

Unit: million VND

Source: Synthesis of evaluation sheets of the FRGs

#### Box 3: effectiveness of project-supported tea growing model Assessment 1: Improve efficiency through proper farming techniques

Na Ca village, Binh Lu commune, Lai Chau province has 12.6ha of tea grown since 1997. However, due to low tea yield, households have not taken care of tea for 10 years (as of 2018). left empty, no one picked, sometimes sold for 500 dong/kg but no buyer. With the support of the project, tea cultivation techniques have changed such as fertilizing, not using pesticides, changing planting techniques...

Mr. Lo Van Tac shared, "In the past, with an area of 2,500 m2 of tea, each year, he collected about 1.8 tons for an income of about 2 million. Currently, applying the project's new technology, the total output of tea is about 4.5 tons per year (collected in 9 months, 5 quintals per month), giving an income of 22.5 million VND.

#### Assessment 2: Conversion of plant varieties brings high economic efficiency.

Realizing that growing tea brings high income, many households have converted inefficient maize to tea that makes economic effectiveness and CC adaptation. As for Mr. Thoc's household, previously, with an area of 2,500 m2, the yield of corn was only about 1 million / 1 crop, after deducting costs of about 200,000 VND, the profit was about 800,000 VND. Realizing that the production efficiency was inefficient, the family converted from corn to growing tea. Because it was newly planted, the annual yield was about 2.2 tons, equivalent to an income of about 11 million dong. This income will increase when the tea plant reaches a good harvest stage.

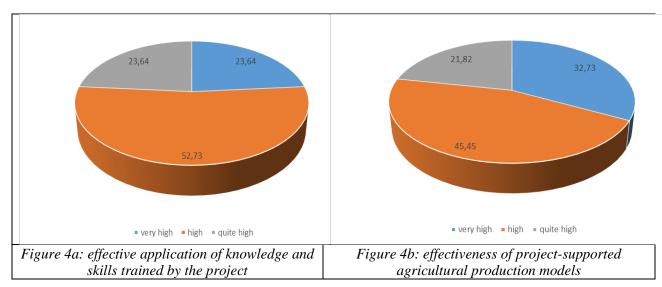
Source: discussion with FRGs

Agricultural production models have been selected and implemented by the project based on the criteria of adaptation to climate change, which ensures high efficiency of using agricultural land. The results of household discussions showed that extreme weather events had negative effects on agricultural production. Therefore, the criteria for climate change adaptation have been developed to include in the analysis and selection of agricultural products to implement the model. For example tea and mango has been substituted for maize planted previously. One of the important reasons for the conversion is that the crop has good resistance to climate change in the area.

**Community ownership of the models during the survey is a highlight of the project's effectiveness**. After successful agricultural production models, FRGs members actively expanded cultivation areas and scale of households. One of the proofs for this statement is shown in Nep Tan rice model in Ban Lang commune, with new techniques, the yield has increased by about 500kg/ha, and the selling price has increased around 1,000 to 2,000 VND/kg.With the effectiveness of the model, the community has gradually expanded the area of product cultivation, bringing high income for households.

Stakeholders highly appreciated the effective application of knowledge and skills from the agricultural production activities, and the effectiveness of the agricultural production models supported by the project. Capacity building activities carried out in the field, by handheld method, monitored and supported throughout the production cycle. Therefore, most of the FRG members can apply it to actual production, and support others. This assessment is absolutely consistent with the results of the interview with the FRGs, with 100% of the interviewees said that the effectiveness of the agricultural production activities and the models supported by the project was at a "fairly high" level to "very high". Specifically:

- 76.36% of the adaptive farmer group members rate the effectiveness of applying the trained knowledge and skills as "very high" and "high".
- 78.18% of the members of the adaptive farmer group rated the effectiveness of the project-supported models at "very high" and "high".



#### Figure2: Assessment on activities effectiveness supported by the Project

Sourse: Analysis of FRGs 'assessment sheets

Linking the value chain between farmers and enterprises purchasing and processing agricultural products to ensure efficiency in the production process. The analysis and assessment of the value chain at each project site is important in determining the strengths and key products in each locality, thereby providing solutions to promote production and connect markets. Value chain linkage activities have been implemented by FRGs, connecting local businesses and cooperatives. Some links bring practical effects to farmers such as linking Nep

Tan rice with Northwest Seedling and Agriculture materials company, and tea purchasing with Tam Duong Tea Joint Stock Company.

The core group highly appreciates the ownership of the small infrastructure subprojects by the community, ensuring the quality and efficiency of the works after they are completed. This is completely consistent with the construction in Son La province, because the investment in the project is selected by the community, and implemented right from the planning stage, purchasing input materials, organizing construction and taking over the project into use. There were no unfavorable factors such as material loss or low construction quality, while ensuring safe and long-term operation after the project completion.



Photo 3: Community peoples of Na Khai village, Sap Vat commune are preparing materials (community contribution) for building the road

In some cases, the construction of small infrastructure works without community participation has affected the effectiveness of the works. In Lai Chau province, construction of two small infrastructure works in Na Ca village, Binh Lu commune is undertaken by outside contractors and hired labor in the area to perform, the community lacks information on the financial and technical aspects of this construction works. The supervision and acceptance of the project lacks the participation of the parties, so the consulting team expressed concern about the accuracy of the scale, size and quality of the work after completion compared to thedesign.

The project has played a good role in providing technical assistance to identify and implement climate change adaptive agricultural production models. With the participatory planning process of the community, the agricultural production models selected for the project support have brought high economic benefits to the community. At the same time, the implementation process has been supervised on agricultural production techniques, to ensure that the model implementation results are achieved according to the design. The project partner has been effective in providing technical support for agricultural production of the project continuously and in a timely manner.



Photo 4: Organic tea model at Na Ca, Binh Lu, Lai Chau

There is a difference in the method of construction of small infrastructure works in the two project provinces, which has affected the effectiveness of the work if the implementation method is notreally suitable. In Son La, the concrete road works in the field are completely managed and organized by the community, so the scale and quality are guaranteed according to the design, and mobilize the high participation of the community. However, in Lai Chau province, the project was built by an outside unit, the community has no role in the implementation process. The image below showsthe two roads funded by the project with the same amount in two provinces showed the difference in the effectiveness of the works.



## 3.4. Project Impact

**Expansion of agricultural production area after successful implementation of the model is one of the obvious impacts of the project**. Through a successful agricultural production models, the FRGs has practical assessments to expand the production scale. Some models have been replicated after success:

- The model of growing Nep Tan rice: with the initial implementation area of the model in 2019 is 5 hectares in Hop 1 village, Ban Lang commune, due to its effectiveness, the area has been expanded to 30 hectares in 2021. Up to now, The community has actively scaled

up to an area of 135ha, and plans to develop to an area of 150ha for the whole commune in the near future.

- Model of growing organic tea: Na Ca village, Binh Lu commune has converted a part of corn growing area to tea cultivation to bring high economic efficiency, the total tea growing area is currently 22.5ha, of which the newly planted tea area is 9.6ha.

Change the agricultural production method of the FRG towards organic farming, is the project impact in terms of income and safety for users. The methods of organic agricultural production have been guided and supervised by the project in each model. As for the tea model, previously there were much herbicide residues and worms remained in the soil, but now the glipoxide active ingredient is 0.005. Although higher than European standards (0.001), it is forecasted that by 2023, tea products will meet the standards for export to Europe.

## Table5: Changing of the production method towards organic farming

i) SRI rice model

Items	Before applying the model	After applying
Seedling	<ul> <li>Thickly transplanted, each cluster has many plants, 6 kg of seeds</li> <li>30 people all day unfinished</li> </ul>	<ul> <li>Transplant sparsely, reduce the amount of seed to 3kg.</li> <li>15 people transplanted and finished early in the day.</li> </ul>
Fertilizer	<ul> <li>Less fertilizer, fertilizing only if the rice is growing badly</li> <li>use nitrogen fertilizers</li> </ul>	<ul> <li>Fertilize according to the growth cycle of the plant.</li> <li>Apply manure, microbiological fertilizer and NPK.</li> </ul>
Crop protection	<ul> <li>Planting densely so many pests and planthoppers</li> <li>Spray pesticides: spray according to the instructions of the sellers, spray when there are pests</li> </ul>	<ul> <li>Spray effectively, limit the use of pesticides.</li> <li>Using organic insecticides solution.</li> </ul>
Productivity	- Productivity is of around 4800- 5000kg/ha.	- The yield increased by about 30%, seeds are firmer, rice branch is longer, seeds are larger and shiny
Selling products	<ul> <li>Mainly selling to traders</li> <li>Do not know the price, selling at the price proposed by the trader.</li> </ul>	<ul> <li>Sell to the company through cooperation-association</li> <li>Price information is exchanged and agreed within the group.</li> </ul>

## i) Organic tea model

item	Before applying the model	After applying
Planting, care and harvesting techniques	<ul> <li>Planting more sparsely: row - row 1.2m; spacing in each row is 10cm</li> <li>without care</li> <li>Had to climb up to pick because the tree was very tall</li> </ul>	<ul> <li>Planting more sparsely: row-to-row 1.6-1.7m; tree-tree: 20-40cm</li> <li>Care and weeding in cycles</li> <li>Low plant, easy picking</li> </ul>
Fertilization	- No or little fertilizing	- Apply manure, microbiological fertilizer and NPK.
crop protection	- Didn't spray pesticides before	<ul> <li>Spray effectively according to technical instructions to minimize residue</li> <li>Supervised and guided by Tam Duong Tea Joint Stock Company.</li> </ul>

Productivity	- 1 hectare after harvest minus the cost is about 3.2 million VND	- 1 hectare after harvesting, minus the cost brought about 45 million VND
Products selling	<ul> <li>no one buys or sells at a cheap price, just enough labor.</li> <li>sometimes can not be sold and took away for some cases</li> </ul>	<ul> <li>Sell to the company through cooperation, association</li> <li>Price information is exchanged and agreed within the group with Tam Duong Tea Joint Stock Company.</li> </ul>

#### ii) Traditional round mango and high yield mango

Item	Before applying the model	After applying
Planting,	- Growing corn, cassava, converted	- High yield mango
care and	to Taiwanese mango	- Localround mango
harvesting	- Native round mango: less	- Technical training and more
techniques	intensive farming	intensive farming
Fertilization	- The level of intensive farming is	- microbiological fertilizer, organic
	not high, NPK fertilizer is applied	fertilizer, NPK
Productivity	<ul> <li>Growing corn, giving income 2-5 million/ha due to drought, dead crops</li> <li>Planting cassava, harvesting 10-20 million/ha</li> <li>Round mango: 0.8-1.5 tons/ha, 25- 30 million VND</li> </ul>	<ul> <li>new varieties of mangoes, yielding 5-7 tons, earning 30-50 million/ha after deducting costs</li> <li>Round mango: 1-1.7 tons/ha, 25- 35 million VND</li> </ul>
Product	- Sell locally and in other provinces,	- Convenient, purchasing links with
selling	price is very stable, easy selling	companies like Van Ho Fruit
	during the year time	Company.

**Enhancing the lives of farmers through effective use of increased income sources to purchase living and productive assets**. The survey results of 55 households of FRGs show that 69.09% of households have purchased additional assets from household income in 3 years of project implementation, with the average asset value being shopping is 83 million Dong. Forms of purchasing additional assets include: i) purchase of living equipment; ii) repair or build a new house; iii) investment in agricultural production; iv) debt repayment or savings.

#### Table6: Purchase more assets from household income in 3 years of project implementation

No.	Content	Number of HH	Percent of HH (%)	Total (million VND)	Average value/HH (million VND)
1	Buy household appliances	18	32,73	198,6	11,03
2	Repair/build a new house	10	18,18	2.053	205,30
3	Purchase equipment/build facilities for agricultural production	19	34,55	440,5	23,18
4	Pay off loan or save money	11	20,00	462	42,00
5	Have property to be purchased	38	69,09	3.154,1	83,00

Source: Compilation of the evaluation form of the FRGs

The capacity and reputation of the provincial FU have been enhanced after participating in the project, serving as a basis for the province to allocate budget to organize the implementation of agricultural production support activities in the coming time. Specifically: i) in Son La province, with the success of the project, the Provincial FU proposed to the Provincial Party Committee and the Provincial People's Committee to allocate a budget to implement agricultural production models – the previous budget was allocated only to the agricultural units. Previously, the annual budget was about 1 billion VND, now the budget has increased to 5 billion in 2021 and 7 billion in 2022; ii) in Lai Chau province, the Chairman of the Provincial People's Committee participated in the workshop to summarize the project's Nep Tan rice model and gave direction to the agriculture sector on promoting the model.



Photo 7: Chairman of Lai Chau PPC visits the SRI rice growing model in Hop 1 village

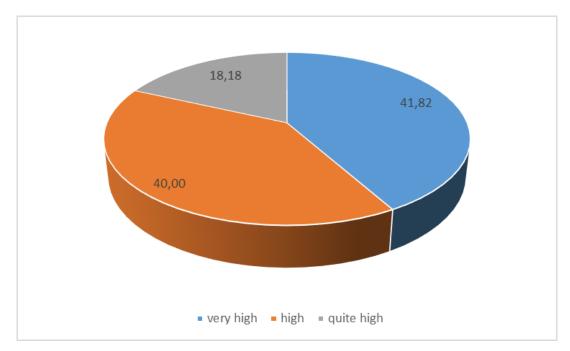
The project has made positive impacts on the agricultural sector and on environmental resources in terms of good practices for agricultural production models. Coordinating withDARD to implement the vertical direction on agriculture, coordinating withDONRE to participate in training on the contents of climate change. Simultaneously, the FU of Lai Chau province conducted discussions with the District People's Committee to direct the District Agricultural Service Center to participate in agricultural production models supported by the project. The coordination is to ensure that the lessons learned from the project are inherited and applied to programs and projects in the province.



Photo 8: Improved rice thresher supported by the project for Hop 1 village, Ban Lang commune

#### 3.5. **Project Sustainability**

There are many evidences that the project's agricultural models ensure sustainability even after the project ends. The evidence for this statement: i) techniques have been applied by a group of farmers who are adopted and have the capacity to guide others when needed; ii) financial efficiency is more than 2 times compared to that done before, this is the motivation for the team to maintain the model; iii) 100% of FRG members actively extended the current model. This assessment is also relevant when 100% of the members of the FRGs consider the sustainability of the model high, of which 41.82% of the members consider the sustainability to be "very high".



**Figure3:** Assess the sustainability of the model supported by the project

Source: compilation of assessment sheets of FRGs

The sustainability of the project is demonstrated through agriculture products that have met the demand of customers, in the context of increasingly strict requirements for technical standards of agricultural products. To ensure that products are consumed with high efficiency, the agricultural products supported by the project are: i) produced according to organic standards; ii) implementing value chain linkages with enterprises and cooperatives to consume products; iii) OCOP trademark registration for the product; and iv) products have been introduced into the agricultural product showrooms managed by the provincial FU. At the same time, the products of the FRGs regularly participate in fairs and exhibitions held in the province.



Photo 9: Agricultural product introduction store of Lai Chau FU (source: NADzung)

The development of communication materials and the promotion of project communication through various channels by PanNature and the provincial FU are signals to the sustainability of the project. Communication solutions have been implemented during project implementation, including: i) publishing articles on mass media such as electronic newspapers, website of provincial FU, PanNature and ADDA, a number of bilingual English publications; ii) coordinate with VTV2 Television, Provincial Radio and Television Station, Son La Newspaper, and Rural Today Newspaper in the Northwest region to organize one topic per month; iii) build media products such as videos, publications. With diverse communication channels, it has provided sufficient information to farmers and stakeholders, promoted behavior change and applied the project's experiences, especially in the field of smart and CC adaptive agriculture.

**Regular monitoring and technical support activities by FU and enterprises to ensure farmers apply to agricultural production in a sustainable way.** With 36 production training courses and model visits in other areas, most of the beneficiaries are very confident with the knowledge acquired and applied in practice. FU of Son La province has integrated training courses to strengthen capacity and support building smart agricultural models to adapt to CC. At the same time, companies participating in value chain linkages regularly control the production techniques of groups of farmers, gradually bringing their products to the international market.

There is evidence that the FRGshave done a good job as a bridge between farmers - local authorities - businesses to ensure the sustainability of the project's support activities. Examples of this assessment include: i) based on the results of agricultural models supported by the project, groups of FRG have contributed ideas to thelocal government to implement the

annual socio-economic development plan at commune level; ii) develop a plan for production and product consumption, and agree upon the estimated annual consumption volume with the enterprise. With the leading and connecting role of the FRGs, ensuring that agricultural production activities in the project area are continuously maintained and expanded.

The evaluation results show that the project can completely expand the technical interventions to apply the implementation experience to the National Target Program for socio-economic development in ethnic minority and mountainous areas in the period 2021 - 2030, to ensure greater sustainability. In fact, with the current regulations of the Government, the experience of implementing agricultural production activities adapted to CC can completely achieve a higher level of experimental acceptance as more communes participate in the ethnic minority and mountainous areas program. Empirical evidence in this way, combined with proactive adjustment of the project's technical approach, will help partner agencies and management agencies implement project/programs on agricultural production more efficiently.

In addition, the consulting group expressed concern about the sustainability of the agriculture production machinery and equipment assigned to the FRGs to manage. The project's agricultural machinery and equipment are provided to the households. The machinaries and equipments provided to FRGs based on the needs of the households, and based on the project's budget. However, all machines (except for grass-cutters) were equipped for groups of households, used in the form of "revolving" among them. In particular, with the group's rule "when the machine is damaged at the time of use, that household will be responsible for paying the repair cost" will be one of the causes affecting the efficiency of machine use.

## 4. Challenges, Opportunity and Recommendation

## 4.1. Challenges during the implementation of the project

PanNature should take on a stronger and more focused role as technical support and project monitoring, in order to ensure more effectiveness of project support. PanNature should directly involve and be responsible in the process of monitoring project results, such as monitoring and acceptance of small grant activities, ensuring community participation at the highest level – decision making and self-managed in the implementation process. Avoid the case that the project implementation process is carried out by an external unit in the context of small projects that the community is fully capable of implementing.

The project management& organization design without the official participation of the FU at district and commune levels to ensure a streamlined management system. With this design, the lessons learned from project implementation have not been fully updated and applied by the District People's Committee to communes outside the project area. At the same time, the participation of the agricultural agencies is limited to a collaborating role in each specific activity, not officially assigned to the project design. Therefore, good agricultural practices may lack strong outreach to other areas through state management agencies and service providers on agricultural production.

Some models have expanded in production scale due to financial efficiency, suitable with local facilities and farming conditions. However, rapid development without taking into account the market will be a challenge if production output exceeds consumption capacity. In fact, for Nep Tan rice products, the consumption capacity of the associated enterprises is only about 10% of the harvested output at the time the model is replicated. In addition, OCOP certification of Nep Tan rice products registered by enterprises will also be a challenge if the FRGsactively sell their products to the market.

The business management capacity of the FRGs is also considered a concern of the project. In some groups, the unit that cooperates with FRG is the local agricultural trader, the group has not

actively assessed the market to choose a more effective affiliate. At the same time, the analysis of financial efficiency has not been actively carried out by the group to choose other more effective production options. Forms of building financial funds and linking production input supply chains have not been analyzed and given a strategy for implementation by the FRGs.

## 4.2. Opportunity to expand the project in the next phase

The Prime Minister issued Decision No. 1719/QD-TTg dated October 14, 2021 approving the National Target Program for socio-economic development in ethnic minority and mountainous areas for the period 2021 - 2030. Therefore, good practices on building climate change-responsive agricultural production models and linking value chains with businesses consuming agricultural products should be appropriately applied to this program, especially for Project 3 "Development of sustainable agricultural and forestry production, bringing into play the potentials and strengths of regions to produce goods along the value chain". This is considered a good opportunity for the project to expand its implementation scale and influence the policies in this regard.

The project's good practices on climate change-adaptive agricultural production models associated with value chain linkages are evaluated as suitable for application in the Government's strategies and programs. Develop the project's useful contributions to the National Climate Change Adaptation Plan for the period 2021 - 2030, with a vision to 2050. At the same time, the lessons learned from the project can be effectively applied for the provincial agricultural development strategy in the period of 2021 - 2030, with a vision to 2050 of the project provinces.

Making the annual commune-level socio-economic development plan requires the participation of the people, integrates climate change adaptation and is market-oriented, which is reflected in the regulations of the NorthWest provinces. Therefore, the good practices and lessons learned from the project are useful inputs for the effective implementation of the above mentioned polocies effectively. At the same time, the expansion project is an opportunity for the FRGs to participate appropriately in the commune's disaster risk prevention planning.

The FRGs have had a large number of members, large production scale and have been involved in some agricultural production activities. Therefore, this is considered a good opportunity to develop FRGsinto cooperatives to ensure the effectiveness and sustainability of the agricultural production models successfully implemented by the project. This approach is also consistent with the agricultural development strategy of Son La province on "Building and developing cooperatives and unions of agricultural cooperatives to link farmers and businesses, forming a chain production, processing and consumption of agricultural products".

## 4.3. Recommendation

#### 4.3.1. For ADDA

Policy advocacy should be considered as a main objective if there is a similar project in the near future. This design should go hand-in-hand with project activities in the field and promote strong participation of project partners in every step of the advocacy activity. The best way to improve advocacy effectiveness is to help partners master the advocacy process while actively participating in the field coordination process. At the same time, FRGsshould be considered as the target group to participate in policy advocacy activities.

The scale, scope and number of villages and communes implementing the next projectshould be improved to ensure: i) the ratio of communes' coverage in the province; ii) be representative by locality in the province; iii) specific priorities for poor and near-poor households. The entire project implementation process needs to be closely monitored, evaluated and continuously updated, analyzed and shared with partners to accumulate knowledge about the transformation process at the grassroots level, thereby identify appropriate institutionalization aobjectives.

Consider adding personnel responsible for managing, monitoring and evaluating project performance. Positions recommended in the project management component include: i) project coordinator; ii) financial management; iii) monitoring and evaluation; iv) expert in business management and community development; v) advocacy and communication specialist. At the same time, monitoring, evaluation and internal audit activities should be focused on, ensuring the empowerment of partners but also having sanctions to control compliance with regulations during implementation.

#### 4.3.2. For PanNature

Technical advice and support on climate change adaptation and market linkages should be maintained and developed. Project communication activities should be continued, especially with regard to manuals, short reports, web news and local television. At the same time, it is necessary to promote the development of communication documents providing technical guidance for the implementation of programs and projects on agricultural production adapting to climate change and market linkage.

In order to perform well and objectively for the task of monitoring and providing technical advice on project implementation, PanNature should not be the recipient of funds to organize the implementation of project activities as planned. The task of receiving funding to organize the project implementation should be assigned to the project partner and under the supervision of PanNature. This provision would be appropriate to separate the two main project roles: project implementation and monitoring and evaluation.

PanNature should act as a support unit, consulting on project techniques and monitoring project implementation. To fulfill this role, PanNature should: i) develop an appropriate and specific project implementation manual system; ii) building a project monitoring and evaluation system with the participation of stakeholders, ensuring that information is updated and provided continuously and in a timely manner for stakeholders to make effective management decisions. fruit; iii) technical support and advice to partners and stakeholders throughout the project implementation.

PanNature should participate more fully and effectively in the monitoring and acceptance process after each project activity performed by the partner. Monitoring and acceptance should be based on the design objectives and performance results of each activity. The arising problems need to be detected and proposed to ADDA for timely adjustments to ensure the effectiveness of project activities.

PanNature should develop a monitoring and evaluation system and share information with ADDA and project implementation partners. Project activities are shared, discussed and agreed upon with ADDA before coordinating with partners to organize implementation. Information technology applications should be promoted in the project's monitoring, evaluation and reporting system.

In order to fully and effectively carry out the tasks of technical support and monitoring and evaluation of VOF project, in addition to experts in agriculture and project management, PanNature needs experts to carry out technical consultancy on business management and policy advocacy. At the same time, gender and community development approaches for vulnerable groups need to be integrated in project manuals and activities.

#### **4.3.3.** For Provincial Farmer Union

In the coming time, the Provincial FU will continue to maintain the task of mobilizing and connecting the participation of stakeholders, especially the DARD and DONRE. At the same time, the experiences in policy advocacy on budget allocation to implement agricultural production models of Son La FU should be maintained and shared with relevant partners.

The Provincial FU performs the duties of the project implementation management partner in the province, with planning, organizing, and reporting tasks. The information of this process should be updated and shared promptly with stakeholders, especially for ADDA and PanNature. Information technology applications should be applied in the process of exchanging information with stakeholders, especially the community.

Ensure community ownership of project activities is maintained and effectively implemented. Well implement activities towards the goal of empowering the community to manage the implementation of project activities. Methods of communication and transparent disclosure of project inputs and results continue to be implemented through a variety of communication channels appropriate to the community.

Considering the district FU participates in project management and implementation, ensuring a compact management structure through the selection of participating staff in accordance with the job description. This organizational structure ensures: i) reduce pressure on the provincial FU when the project scale is expanded; ii) supporting activities and project management should be taken regularly; iii) there is an opportunity to replicate good practices to communes outside the project.

Gender outreach and community development for vulnerable groups should be integrated in project activities. The comments and suggestions of the community need to be absorbed by People's Committees at all levels and reflected in the annual socio-economic development planning at commune level. Encouraging and strengthenning the participation of the community in disaster prevention planning at all levels in the locality.

## Annex

# Annex 1: Field Agenda

Date	Time	Activity	Participants	Location
Sunday, August 14, 2022	Full day	Travel from Hanoi to Lai Chau	m Hanoi to Lai Chau	
Monday, August 15, 2022	7h45 - 9h00	Discussion with Commune People's Committee officials Leaders of the Commune People's Committee, agricultural officers, leader of the Commune Farmers' Union, leaders of the Commune Women's Unior		Ban Lang Commune, Phong Tho District
	9h15 - 11h00	Discussion with the FRG	8-10 FRG members	Hop 1 hamlet, Ban Lang commune
	13h45 - 15h30	Group discussion with HHs participated in the models	8 households participating in the model in Hop 1 village	Hop 1 hamlet, Ban Lang commune
	15h30 - 17h00	Visit the agricultural model supported by the project in the commune	Officers of the Commune Farmers' Union participated	Model execution location
Tuesday, August 16, 2022	8h00 - 10h00	Discussion with Project Management Board of Lai Chau province	Project Management Board of Lai Chau province	Farmers Union of Lai Chau Province
	13h45 - 15h00	Interview with staff of Tam Duong Tea Development and Investment Joint Stock Company	Leaders of the sales department and support staff linking the tea chain with the project model	At the company
	15h30 - 16h45	Interview with representatives of Northwest Agricultural Seeds and Supplies One Member Co., Ltd	Leaders/officers involved in supporting the implementation of the chain associated with the project	At the Company's headquarters
Wednesday, August 17, 2022	7h45 - 9h15	Discussion with Commune People's Committee officials	Leaders of the Commune People's Committee, agricultural officers, leaders of the Commune Farmers' Union, leaders of the Commune Women's Union	Binh Lu Commune, Tam Duong District
	9h30 - 11h00	Discussion with FRG	8-10 FRG members	Na Ca village, Binh Lu commune
	13h45 - 15h15	Group discussion with HHs participated in the models	8 households participating in the model in Na Ca village	Na Ca village, Binh Lu commune
	15h30 - 17h00	Visit the agricultural model supported by the project in the commune	Officers of the Commune Farmers' Union participated	Na Ca village, Binh Lu commune
Thursday, August 18,	Morning	Travel from Lai Chau to Son La		
2022	13h45 - 16h00	Discussion with Project Management Board of Son La province	Project Management Board of Son La province	Farmers Union of Son La Province
	16h15 - 17h00	Interview with Northwestern University staff	Staff participating in project activities	Northwestern University

Friday, August 19, 2022	7h45 - 9h15	Discussion with Commune People's Committee officials	Leaders of the Commune People's Committee, agricultural officers, leaders of the Commune Farmers' Union, leaders of the Commune Women's Union	Tong Co Commune, Thuan Chau District
		Discussion with FRG	8-10 FRG members	Tong Co Commune, Thuan Chau District
		Group discussion with HHs participated in the models	8 households participating in the model in Phe A village	Phe A village, Tong Co commune
	9h30 - 11h15	Visit the agricultural model supported by the project in the commune	Project support officer at the commune	The location of the model implementation is in Phe A village, Tong Co commune
		Meet some beef purchasing units of the model group in the commune	Project support officer at commune	Phe A village, Tong Co commune
	13h45 - 15h15	Discussion of Commune People's Committee officials	Leaders of the Commune People's Committee, agricultural officers, leaders of the Commune Farmers' Union, leaders of the Commune Women's Union	Hat Lot Commune, Mai Son District
		Discussion with FRG	8-10 FRG members	Hat Lot Commune, Mai Son District
		Group discussion with HHs participated in the models	8 households participating in the model in Na Si . village	Na Si village, Hat Lot commune
	15h30 - 17h00	Visit the agricultural model supported by the project in the commune	Project support officer at commune	The location of the model implementation is in Na Si village, Hat Lot commune
		Interview with representatives of cooperatives participating in the value chain with the project in the commune	Leaders of cooperatives	Hat Lot Commune, Mai Son District
Saturday, August 20, 2022	7h45 - 9h15	Discussion with Commune People's Committee officials	Leaders of the Commune People's Committee, agricultural officers, leaders of the Commune Farmers' Union, leaders of the Commune Women's Union	Sap Vat Commune, Yen Chau District
	9h30 - 11h00	Discussion with FRG	8-10 FRG members	Sap Vat Commune, Yen Chau District
	13h45 - 15h15	Group discussion with HHs participated in the models	8 households participating in the model in Na Khai village	Na Khai village, Sop Vat commune
	15h30 - 17h00	Visit the agricultural model supported by the project in the commune	Project support officer at the commune	The location of the model implementation is in Na Khai village, Sop Vat commune

		Interview representative of Xuan Tien Cooperative	Leaders of cooperatives	Sap Vat Commune, Yen Chau District
Sunday, August 21, 2022	7h45 - 9h15	Discussion with FR group	8-10 FRG members	Xuan Nha Commune, Van Ho District
	9h30 - 11h15	Group discussion with HHs participated in the models	8 households participating in the model in Thin village	Thin village, Xuan Nha commune
	13h30 - 15h00	Visit the agricultural model supported by the project in the commune	Project support officer at the commune	The location of the model implementation is in Thin village, Xuan Nha commune
		Interview with a representative of Truong An Cooperative	Leaders of cooperatives	Xuan Nha Commune, Van Ho District
Monday, August 22, 2022	7h45 - 9h15	Discussion with Commune People's Committee officials	Leaders of the Commune People's Committee, agricultural officers, leaders of the Commune Farmers' Union, leaders of the Commune Women's Union	Xuan Nha Commune, Van Ho District

## **Annex2: List of consulting members**

## i) List of consultations with ADDA and project implementation partners and stakeholders

No.	Full name	Sex	Position/Agency	
1	Trần Hoa Lê	female	Assistant to Manager- ADDA	
2	Nguyễn Đức Tố Lưu	male	Project Coordinator VOF- Panature	
3	Phan Văn Thăng	male	Project Officer - Panature	
4	Đặng Trọng Đại	male	Head of Agriculture Department - Tam Duong Tea	
			Company	
5	Đỗ Viết Trung	male	Director of Northwest Plant Seeds & Agricultural	
			Materials Co., Ltd	
6	Quàng Văn Xuân	male	Director of Xuan Tien Agricultural Service	
			Cooperative	
7	Chị Lò Thị Dự	female	Chairman of the Farmers' Union in Ban Lang	
	~		Commune, Phong Tho Province	
8	Nguyễn Ngọc Dương	male	Officer of Cadastral-Agriculture in Ban Lang	
	~		Commune	
9	Nguyễn Ngọc Chản	male	Local Facilitator, Ban Lang Commune	
10	Mùa A Trừ	male	Director - Project Management Board of Lai Chau	
			province	
11	Trần Thu Hương	female	Deputy Director- Project Management Board	
12	Phạm Thị Thoa	female	Project Accountant	
13	Nguyễn Đình Lợi	male	Cadastral and Agriculture Officer in Binh Lu	
			Commune, Tam Duong Province	
14	Lò Văn Hào	male	Officials of Binh Lu Commune Farmers' Union	
15	Đặng Thị Hướng	female	Local Facilitator, Binh Lu commune	
16	Nguyễn Hoàng Phương	male	Northwestern University	
17	Cầm Văn Minh	male	Deputy Director - Project Management Board of	
			Son La province	
18	Lò Văn Hồng	male	Member of Project Management Board, Officer	
19	Nguyễn Hồng Tâm	male	Member of Project Management Board, Accountant	
20	Anh Lò Văn Hướng	male	Chairman of People's Committee of Tong Co	
			commune, Thuan Chau	
21	Lò Văn Hảo	male	Vice Chairman of Tong Co Commune People's	
	/		Committee	
22	Anh Quàng Văn Thiết	male	Commune Agriculture and Forestry Officer	
23	Lò Thị Duyên	female	Vice President of the Commune Women's Union	
24	Lò Văn Quyền	male	Local Facilitator	
25	Tòng Văn Tâm	male	Vice Chairman of Hat Lot Commune, Mai Chau	
26	Tòng Văn Diên	male	Chairman of the Commune People's Committee	
27	Lò Văn Bình	male	Local Facilitator	
28	Quàng Văn Chiến	male	Vice Chairman of the People's Committee of Sap	
			Vat Commune, Yen Chau	
29	Quảng Văn Thưởng	male	Chairman of the Commune People's Committee	
30	Hoàng Văn Quyết	male	Commune agro-forestry officer	
31	Lò Thị Giang	female	Chairman of the Commune Women's Union	
32	Lò Thị Hậu	female	Local Facilitator	
33	Mùi Văn Huyên	male	Chairman of Farmers Union in Xuan Nha	
	,		Commune, Van Ho	
34	Khuất Hữu Dương	male	Communal Agricultural Extension	

## ii) List of FRG members were interviewed

No.	Full name	Sex	Commune
1	Vi Văn Thu	male	Xuân Nha
2	Hà Văn Tiếp	male	Xuân Nha
3	Hà Văn Hùng	male	Xuân Nha
4	Mùi Văn Xuân	Female	Xuân Nha
5	Vì Văn Quản	male	Xuân Nha
6	Đinh Văn Hòa	male	Xuân Nha
7	Hà Kim Lôc	male	Xuân Nha
8	Ví Văn Tỏa	male	Xuân Nha
9	Vì Thị thịnh	Female	Xuân Nha
10	Lò Thị Dung	Female	Bản Lang
11	Lò Thị Lan	Female	Bản Lang
12	Hà Thị Hiên	Female	Bản Lang
13	Lù Thị Séo	Female	Bản Lang
14	Lành Thị Tâm	Female	Bån Lang
15	Vàng Văn Chẻo	male	Bån Lang
16	Lò Thị Nhớn	Female	Bån Lang
17	Vàng Thị Sợi	Female	Bån Lang
18	Lò Văn Sâm	male	Bình Lư
19	Bùi Thị Hường	Female	Bình Lư
20	Lương Văn Giang	male	Bình Lư
21	Lò Văn Túc	male	Bình Lư
22	Lò Văn Chương	male	Bình Lư
23	Lò Văn Chim	male	Bình Lư
24	Lò Thị Son	male	Bình Lư
25	Quàng Văn Thóc	male	Bình Lư
26	Quàng Văn Xiên	male	Bình Lư
27	Lường Văn Ảo	male	Bình Lư
28	Quàng Thị Tâm	Female	Tông Cọ
29	Lò Văn Nhật	male	Tông Cọ
30	Lò Văn Hương	male	Tông Cọ
31	Lò Văn Nhâm	male	Tông Cọ
32	Quàng Văn Khánh	male	Tông Cọ
33	Lò Văn Som	male	Tông Cọ
34	Quàng Văn Thảo	male	Tông Cọ
35	Lò Văn Họp	male	Tông Cọ
36	Quàng Thị Tươi	Female	Tông Cọ
37	Lê Văn Linh	male	Hát Lót
38	Lò Văn Xuân	male	Hát Lót
39	Lò Văn Dấu	male	Hát Lót
40	Lò Hữu Hải	male	Hát Lót
41	Lò Văn Phương	male	Hát Lót
42	Lò Văn Minh	male	Hát Lót
43	Lò Văn Bình	male	Hát Lót
44	Lò Văn Phương	male	Hát Lót

No.	Full name	Sex	Commune
45	Hà Văn Chiến	male	Hát Lót
46	Quàng Văn Thiền	male	Sặp Vạt
47	Quàng Văn Hoàng	male	Sặp Vạt
48	Quàng Văn Thân	male	Sặp Vạt
49	Quàng Thị Việt	Female	Sặp Vạt
50	Quàng Thị Khuyến	Female	Sặp Vạt
51	Quàng Thị Giang	Female	Sặp Vạt
52	Lừ Thị Mùi	Female	Sặp Vạt
53	Hà Thị Bông	Female	Sặp Vạt
54	Quàng Thị Thương Kiểu	Female	Sặp Vạt
55	Vàng Thị Tao	Female	Sặp Vạt

### Annex 3: Quantative questionaire for FRG

## **QUESTIONS FOR HOUSEHOLDS**

In order to evaluate the Project "Strengthening the Voice and Capacity of Vulnerable Ethnic Minority Farmers in Climate Resilience in Northwest Vietnam", we would like to receive information from you according to the following questions. Thank you very much for your participation!

Commune 1. Tông Cọ 2. Hát Lót 3. Sặp Vạt 4. Xuân Nha 5. Bình Lư 6. Bản Lang

#### 1. General Information

1.1	Full name					
1.2	Your relationship with the head of the household	1. head of the hh 2. wife/husband is the head 3. others				
1.3	Sex	1. male 2. female 3. others				
1.4	Ethnic group	1. Kinh 2. others (name):				
1.5	Economic ranking of the household	1. poor2. Near poor3.average4. Quite rich/rich				
1.6	Number of persons in the household					
1.7	Number of labors in the household (18-60 years old)					

## 2. ASSETS OF THE HOUSEHOLD

#### CURRENT ASSETS OF THE HOUSEHOLD

#	Asset	Discription
2.1	house	<ol> <li>Temporary house 2. Level 4 house</li> <li>Semi-permanent house 4. Permanent house</li> </ol>
2.2	Source of living water	<ol> <li>Tap water 2. Drilled/dig well water</li> <li>Other:</li> </ol>
2.3	Number of motorbikes	unit
2.4	Number of TVs	unit
2.5	Number of refrigerators	unit

## ADDITIONAL PROPERTY PERCHASING IN THE LAST 3 YEARS

2.6.1	2.6. Buy more assets from household income (not counting from borrowing)			
1	Does your family have additional assets from household income in the past 3 years? (from 2019 to 2022)	1. yes		

		2. no ( <i>move to item 3</i> )
2	If yes, then the property that your family buys more?	amount (1.000 VND)
А	Household living equipment	
В	Renovate/build a new house	
С	Equipment/construction of facilities for agricultural production	
D	Loan repayment or Savings	
	Total	

## 3. AGRICULTURE PRODUCTION

## **3.1.**For model products supported by the project

No	Content	Unit	Quantity/content
1	Products from the model that your household participates in the project (eg tea, mango)	kind of products	
2	Area/Number of cultivation of the type of product that the family has been supported by the project	Ha (crop) Unit (animal)	
3	Income earned per year for the model's product (the amount collected from the sale of the post-harvest product)	1.000 VND	
4	Production input costs per year for models (excluding family labor)	1.000 VND	

## **3.2.** For the previous product without the project's support

No	Content	Unit	Quantity/content
1	Products obtained before the project (for example, before planting corn, after the project supported, they switched to growing tea)	Kind of product	
2	Income earned per year (the amount obtained from selling the post-harvest product, same area/quantity as implementing the model above)	1.000 VND	
3	Production input costs per year (excluding family labor)	1.000 VND	

## 4. PROJECT ASSESSMENT

### 4.1.Assessment on capacity building effectiveness

No	Content	Self-assessment				
		Very high	high	Quite high	average	low
A	Relevance of the training contents to the individual.					
В	The degree of application (more or less) of the trained knowledge and skills in project activities.					
С	The degree of effectiveness in applying the trained knowledge and skills.					

# 4.2. Assessment on the models supported by the project

No	Content	Self-assessment					
		Very high	High	Quite high	Average	low	
А	The relevance of the supporting project model.						
В	The level of model effectiveness supported by the project.						
С	Sustainability/scalability of the model supported by the project.						

Thank you!