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# Thesis

**Research title:**

**“The benefits and barriers of participatory communication to facilitate agricultural research in Vietnam”**

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## Abstract

*Participatory approaches have been applied in agricultural research in Vietnam for a few decades. The approaches have not become a common practice yet, although they have been shown in certain circumstances to enhance research outcomes. This study looks into the application of participatory communication strategies in an agricultural research project and how it contributed to the success of the projects in the Vietnamese situation. Evidence of the study was taken from an on-going project funded by ACIAR in the north-western highlands of Vietnam, where participatory research and communication approaches have been applied for four years (2009-2013). Findings were obtained by analysing the participation of farmers who were directly involved in the research, their interaction with scientists, and the outcomes of this process. Data were collected using a qualitative approach through literature review, photovoice, and semi-structured interviews. The data were then analysed, using Neef and Neubert's (2011) analytical framework of six dimensions: project type, research approach, researcher's characteristics, interaction between researchers and other stakeholders, stakeholders' characteristics, and their benefits. The study concludes that applying a participatory approach, it is constructive for scientists to better understand and acknowledge farmers' needs and preferences so that appropriate technologies can be developed that benefit farmers via long-term practice change. However, real participation is affected by the readiness of not only project implementers (both scientists and farmers), but also project designers and approvers for embracing farmers' participation in the research process, as well as support from local government for the research results' dissemination. Appropriate levels of participation will vary depending on the specific contexts, knowledge of farmers, willingness to be involved in decision making, and its application should be flexibly adapted to optimise its outcomes.*

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## List of abbreviations

ACIAR	Australian Centre for International Agricultural Research, The
ADDA	Agricultural Development Denmark Asia (a Danish NGO)
CASRAD	Center for Agrarian Systems Research and Development (Vietnam)
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer Field School
GDP	Gross Domestic Product
GSO	General Statistics Office, The (Vietnam)
JICA	Japan International Cooperation Agency
MARD	Ministry of Agriculture and Rural Development (Vietnam)
MPI	Ministry of Planning and Investment (Vietnam)
NGOs	Non Government Organisations
NOMAFSI	Northern Mountainous Agriculture and Forestry Science Institute (Vietnam)
NWP	North West Project (short name of the AGB/2008/002 project)
ODA	Official Development Assistance
PM&E	Participatory Monitoring and Evaluation
PNOA	Participatory Needs and Opportunity Analysis
PPRI	Plant Protection Research Institute (Vietnam)
PRI	Partner Research Institutes (of the AGB/208/002 project)
TBU	Tay Bac University (Vietnam)
UQ	University of Queensland, The

## **Chapter 1: Introduction**

### **1.1 Background to the research problem**

Vietnam's economic development has achieved significant results over the last few decades. From being a poor country with a long-term food-deficit in the 1980s, Vietnam has in recent years become a lower middle income country (World Bank, 2011). The agricultural sector, in particular, has seen tremendous achievements, causing Vietnam to become one of the world's leading exporters for rice, coffee and seafood. Nevertheless, rural areas, where 70% of the population reside, produce only about 20% of the GDP (World Bank, 2011). There is a great contrast between rural and urban living conditions and incomes. People in urban areas have earned about twice the amount earned by those in rural areas in recent years (GSO, 2010).

In an effort to reduce poverty and narrow the urban-rural gap, the Vietnamese government has carried out many national development programs. For example, Program 30A and Program 135 for poor locations nationwide (Vietnamese Government, 2007, 2008); or a recent significant investment in the "New Rural" program (MPI, 2013); or support for long-term projects funded by international organizations and NGOs, such as FAO, World Vision and Oxfam, etc. in rural areas. While funding is important, approaches to ensure aid effectiveness have also been attracting much attention. Greater focus on the needs of local people has been embraced to a considerable extent.

The terms "participation" and "participatory communication" have been debated and increasingly used by international organizations in development initiatives since the 1980s (De Campos Guimarães, 2009). In the 1990s, the Government of Vietnam expressed its intention to invest more into the agricultural sector by increasing the budget for MARD and announcing an intention to introduce participatory approaches into its research and extension system (Geppert, Dang, & Buchenrieder, 2002). In a more recent effort, the Government has been promoting the link among farmers-entrepreneurs-scientists-policymakers (Can, Tu, & Sanh, 2011). However, the long-term existence of the top-down government decision-making culture was considered a barrier to slow down these initiatives. Recent work by A. Neef et al. (2007) noted that although a large number of research activities carried out by the national research institutions in Vietnam was in

the form of on-farm experiments, the participation of farmers in these experiments were still limited.

Amongst a wide range of collaborative research projects funded by foreign donors in Vietnam, the Uplands Program funded by the German government from the early 2000s until 2012 (see A. Neef, 2008; A. Neef et al., 2007; A. Neef & Neubert, 2011) was often used as a case study to examine participatory approaches. In research to measure cost-benefit effectiveness of traditional agricultural research by applying participatory elements, A. Neef (2008, p. 588) concludes that “*participatory approaches can inform conventional agricultural research in a cost-effective way by widening the scope of site-specific experimental set-ups, by supporting the scaling up of micro-level data, and by highlighting farmers' specific constraints in early stages of the innovation process*”. However, to date there has not been an empirical evaluation of how the participatory approaches work in the agricultural research programs, funded by other donors, such as the Australian Centre for International Agricultural Research (ACIAR), CIRAD and JICA in Vietnam.

Particularly for ACIAR in Vietnam, application of participatory approaches in agricultural research programs has not been a common practice. An inventory of 20 projects currently funded by ACIAR shows that 50% of them are characterized as applied and adaptive research, where improved technology is aiming at adoption by farmers for practice change. Only 25% of these projects claim to use participatory approaches for at least one or two activities (ACIAR, 2013a). However, to date whether participatory approaches support the innovation and strengthen ownership of smallholder farmers, and what are the best strategies to apply the participatory approaches effectively, probably still remain as questions for those who are working in the ACIAR Vietnam program.

While one of ACIAR's stated aims is to increase incomes of smallholders through its research in Vietnam (ACIAR, 2013b) understanding farmers needs to provide appropriate technology is essential. Participatory approaches applied in a number of ACIAR projects may bring positive effects for smallholder farmers. However, there has not been any evaluation on this matter.

This study examines what the key elements of a participatory research for development approach are that tend to lead to better impacts of ACIAR projects in Vietnam and how

these elements should and could be internalized in ACIAR project design. The approach to achieve this purpose is done by investigating a current project that has applied participatory research and communication methods throughout all project phases over a period of four years (2009-2013).

## **1.2 Aim, objectives and research questions**

The aim of this study is to understand what elements of participatory communication and participatory research are beneficial for ACIAR funded projects in Vietnam. By reference to an ongoing project, the objectives are:

1. To understand how participatory approach has been applied within an agricultural research project supported by ACIAR;
2. To analyse what effects the participatory approach has had on the practices of Vietnamese farmers and scientists within the selected project;
3. To assess the influence of the participatory approach on the Vietnamese partner organisations; and
4. To provide recommendations on the application of participatory communication mechanisms in project design for future projects funded by ACIAR in Vietnam as well as its partner institutions.

Research questions have been framed to reflect the study objectives and are as follows:

- RQ1: To what extent and by what means have participatory approaches been applied in an agricultural research project currently funded by ACIAR in Vietnam?
- RQ2: What effect have participatory approaches had on the practices of farmers and scientists within the project?
- RQ3: What importance do Vietnamese project partners give to the participatory approach applied in the project?
- RQ4: What effect have the participatory approaches had on the research planning and management practices of the partner institutions?

### **1.3 Scope of the study**

This study used a case of an on-going project funded by ACIAR in Vietnam. Farmers and researchers who were involved in the field experiments in one of the five project sites were approached for primary data collection. The study site is located in Pieng Sang village, Phieng Luong commune, Moc Chau district, Son La province. Detailed descriptions of the case study and methods for data collection are presented in chapter 3.

#### *Ethical considerations*

The study complied with the ethical regulations for social science research of the University of Queensland. An ethical clearance form was approved by the School of Journalism and Communication before the investigator collected data through interviews. The research purpose and requirements to participants were clearly explained to make sure their participation was voluntary and that they understood that they could withdraw from the research at any time. A consent form was presented to each participant, and the participant's written agreement was obtained before he or she participated in the research.

#### *Limitations of the study*

The research conducted has some limitations. First, it is a single case and may not be representative of all ACIAR projects in Vietnam. Second, the research was carried out in a short timeframe. This time frame prevented the researcher from revisiting the project at its final stage in December 2013. Additional insights would have arisen if such a visit had been possible.

#### *Brief outline of the chapters*

This thesis consists of six chapters. Following this Introduction, Chapter two elaborates on the theoretical framework pertaining to the problem and which serves as a foundation for analysis of the collected data. Chapter three contains the research methodology. Research findings are presented in chapter four. Chapter five critically discusses the research findings. The last chapter of the thesis provides conclusions and recommendations.



## **Chapter 2: The theoretical framework**

### **2.1 Participatory communication and research - main traditions**

Development communication has attracted much attention from theorists concerned about developing countries since the early twentieth century after World War II. For a long time, the linear diffusion model of innovation held sway. However, from the 1970s there emerged the concept of participation as a reaction/response to the negative impacts resulting from top-down development approaches (Servaes, 1999; Waisbord, 2001).

The participatory theories have advanced with the works of many scholars. The initial concepts of Paulo Freire to engage people in communication process (Melkote & Steeves, 2001) and of Jurgen Habermas in active listening (Jacobson & Kolluri, 1999) were elaborated into a number of concepts, such as “pseudo versus genuine” participation; participation as “a means” or “an end”; or concepts from the “institutional perspective” and the “social movement perspective” (see Tufte & Mefalopulos, 2009; White, 1994).

The participatory conception views development from the perspective of an involvement process for change, recognizing “both social and material advancement”, and enhances “equality and freedom” for the majority of people (Rogers, 1976, p. 225). It places importance on local people’s ownership of the development goals (Sparks, 2007) and equal position in the negotiation for their long-term change (Melkote & Steeves, 2001).

Theories of development communication should be defined. However, an agreed definition is elusive in the literature. Waisbord (2001) groups existing definitions into two broad sets. One set centres on information in the communication process, involving media tools to motivate and enhance the participation of people, at the grassroots of development activities. In the other set, people are seen as the core of a communication process, with local people being empowered to own their development agenda.

This latter ‘people-centred’ concept is also reflected in the definition by Hellin et al. (2008, p.81) of participatory agricultural research, which they describe as “a systematic dialogue between farmers and scientists to solve problems related to agriculture, and ultimately to increase the impact of agricultural research”. In this approach farmers have become increasingly involved in, and have demonstrated their key roles in enhancing research outcomes and impacts (Hellin, Bellon, Badstue, Dixon, & La Rovere, 2008).

However, participation may be perceived differently in the views of different stakeholders in the dialogue. This is also the case for Vietnam.

For poor farmers, although interaction with researchers could be an incentive for them to participate, they tend to prioritise “tangible profits” for immediate income (Van de Fliert, 2010). A common practice of being paid for lunch, transportation, or compensation for time to attend meetings makes the incentives for true participation of farmers difficult to determine in Vietnam.

For many scientists, research with participation of farmers is viewed as defective, non-scientific and unsuitable (Cornwall & Jewkes, 1995). Scientists often act in a superior manner as “teachers” to farmers (Chambers, 2005). This often creates an unequal relationship between farmers and scientists.

At research institutions, ‘participation’ may be used as a ‘magic word’ to attract financial support for research proposals. When a proposal is approved, the supervisor of that research group may rely on more junior staff who work on the field to carry out the research, and active participation may fail to occur (Van de Fliert, 2010).

Certain types of research are not suited to farmer participation. For example, it would be more practical to have farmers’ involvement in field experiments rather than the research activities related to laboratory work. Johnson et al. (2004); Lilja and Dixon (2008); and van Asten et al. (2009) cited by (A. Neef & Neubert, 2011) indicate that participatory methods are mainly applied in certain stages of agricultural research, where innovations aim at adoption of some specific user groups.

In short, the participatory communication in agricultural research for development involves dialogue between farmers and scientists willing to collaborate in the research, where farmers are increasingly empowered to own the research outcomes and actively adapt and use the new technology or idea to make change in their community. However, the level of participation depends heavily on key stakeholders involved. Additionally, the nature of research may also affect the participation. The levels and dimensions of participation are now discussed.

## 2.2 Typologies and dimensions of participation

Types of participation captured by analysts provide a guide for application as well as for reflection and evaluation of participation in the development practices. According to A. Neef and Neubert (2011), most of the participatory research typologies originated from Arnstein's (1969) participation ladder, which describes the eight levels of citizen participation. The lowest of the eight levels is manipulation (no participation from citizen), and the highest level is the citizen control (the highest degree of citizen participation) (Arnstein, 1969). Similarly, Pretty's (1995) typology scaled from the lowest level of manipulative and passive participation to the highest level of interactive and self-mobilization, emphasizing the active involvement and ownership of local stakeholders in development projects and programs.

In terms of participatory agricultural research, although there have been different participation typologies developed (Ashby, 1996; Biggs, 1989; Lambrou, 2001; Lilja & Ashby, 1999) for a number of contexts, they hold a common point, a combination of the core value of participation theory in empowerment (of local stakeholders) and stages of technology research in planning, implementation and evaluation. Lilja and Ashby's (1999) typology addresses the question "Who makes decisions at what stage of the research process" (Johnson, Lilja, & Ashby, 2003, pp. 3-4) with the five participation levels as below:

(1) *Conventional* (no farmer participation): scientists make the decisions alone without organized communication with farmers.

(2) *Consultative* (functional participation): scientists make the decisions alone, but with organized communication with farmers. Scientists know about farmers' opinions, preferences, and priorities through organized one-way communication with them. Scientists may or may not let this information affect their decisions. Decisions are not made with farmers nor delegated to them.

(3) *Collaborative* (empowering participation): decision-making authority is shared between farmers and scientists, and involves organized communication among them. Scientists and farmers know about one another's opinions, preferences, and priorities through organized two-way communication. The decisions are made jointly; neither

scientists nor farmers make them on their own. No party has a right to revoke the shared decision.

(4) *Collegial* (empowering participation): farmers make the decisions collectively in a group process or through individual farmers who are involved in organized communication with scientists. Farmers know about scientists' opinions, preferences, proposals, and priorities through organized one-way communication. Farmers may or may not let this information affect their decision.

(5) *Farmer experimentation* (no researcher participation): farmers make the decisions individually or in a group without organized communication with scientists.

In a more recent work, A. Neef and Neubert (2011) pointed out the shortcomings of these linear typologies for not reflecting the diversity and dynamics of agricultural research projects. They suggested a new framework for reflection and decision making in participatory agricultural research, after testing and applying it in the collaborative research projects in Vietnam and Thailand under the Uplands Program funded by German Research Foundation, the National Research Council of Thailand, and the Vietnamese Ministry of Science and Technology.

Aiming at optimizing the use of participatory approaches in agricultural research, the framework allows a deep and specific focus on interaction between key stakeholders (farmers and scientists) (A. Neef & Neubert, 2011). The six recommended dimensions of the framework are: I) project type, II) research approach, III) researcher's characteristics, IV) interaction between researchers and other stakeholders, V) stakeholders' characteristics, and VI) stakeholders' benefits as shown in Figure 1.

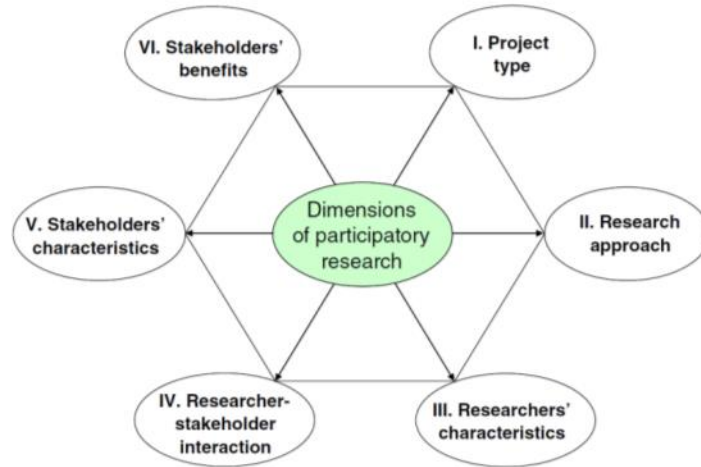


Figure 1: Six dimensions of participation in research. Source: (A. Neef & Neubert, 2011, p. 5)

### 2.3 Analytical framework for this study

In the current study, these six dimensions of A. Neef and Neubert (2011) are used as an analytical framework to examine the participation of key stakeholders in the case study project. In the analysis, the first two dimensions are combined and the key stakeholders were defined as farmers (or farmer-researchers) and scientists (or scientist-researchers). In order to distinguish farmer-researchers and other farmers, the latter are referred to as ‘ordinary farmers’. Details of the six dimensions adopted from A. Neef and Neubert (2011, pp. 183-190) are explained below:

#### **Project type and research approach**

The level of participation of farmers may depend on research type, objectives, potential users and beneficiaries, risks and institutional setting of the research. Farmers have more opportunities to participate in the activities related to field experiments than laboratory research or than research with high risks of disease spread.

Research approaches, including methodology, epistemology, planning and protocol, which may widen or narrow pathways for absorbing local knowledge and including participation of farmers. Systematic rather than mono-disciplinary; constructivistic rather than positivistic views would allow more participation. A flexible research plan is

considered more suited to this type of study as it enables better integration of farmers and other key stakeholders' feedback into the research cycles.

### **Scientists' characteristics**

This dimension refers to scientists' experience, attitude, and capability with participation, as well as their view on other key stakeholders, including farmers, local leaders and so on.

### **Interaction between scientists and farmers**

This dimension refers to the level of participation of the key stakeholders, regarding: who controls and makes decisions; who contributes to the generation of knowledge; and what type, frequency and intensity of interaction as well as incentives are for participation.

### **Farmers' characteristics**

This is similar to 'scientists' characteristics', but now relating to participation experience, attitude and capability of farmers. Farmers' perception of project and of scientists is also examined.

### **Benefits of farmers and scientists**

The perceived benefits, including innovations, improvement in practices, knowledge and awareness, improvement in skills, empowerment and improvement of livelihoods are considered for each group.

The reasons for using these dimensions as an analytical framework are:

- They provide a multi-dimensional picture, picking up the dynamics and principles of both participation and research in agricultural research projects (A. Neef & Neubert, 2011);
- They have been tested with agricultural research projects in the Highlands regions of Vietnam (A. Neef & Neubert, 2011), which is one of the focal geographic areas for ACIAR currently (ACIAR, 2013b);
- The framework has been successfully applied in two other research programs in Africa (BIORA Africa, Future Okavango) funded by the German Government (Neef, 2013). All of these programs were funded by ODA (as in the current study); and
- The framework has been well received by academic peers (Neef, 2013; Neubert, 2013).

## **Chapter 3: Methodology**

Chapter 3 elaborates on the methodology used to find answer for the research questions. The nature of the case study is described. Data sources and methods of collection are presented.

### **3.1 Description of the case study**

The case selected for this study was an on-going research project funded by ACIAR in the north-western highlands of Vietnam (see figure 2 in appendix 1), titled “Improved market engagement for sustainable upland production systems in the north-western highlands of Vietnam” (code: AGB/2008/002), or simply referred to as the North West Project (NWP). Participatory research and communication methods had been applied in this project (ACIAR, 2012b). It was a trans disciplinary research project, examining better farming practices and improved market engagement for smallholder producers of maize-based and temperate-fruit-based farming systems in Son La and Lai Chau provinces. The field experiments were located in five sites where a number of different ethnic groups resided: Thai, Hmong, Dao and Kinh people, each with its own language and culture (see table 1 in appendix 1). The Vietnamese and Australian scientists involved were from different institutions with different backgrounds, including soil quality, plant protection, agribusiness and communication sciences. The research was conducted during the final year of the project, which was planned to conclude by December 2013. The final year project activities mainly focused on a pilot rollout to a larger group of local farmers through demonstration of improved practices and farmer field schools. Key stakeholders of the project included scientists and farmers, who were directly involved in the research process. The positions and relationships of the project stakeholders are discussed in appendix 2.

Given the time limitation, empirical research focused only on one project site, which was located at Pieng Sang village, Phieng Luong commune, Moc Chau district, Son La province. The study looked at the communication process of the key stakeholders at this site, particularly communication (and the effects of this communication process) between farmers, and the farmers’ interaction with scientist-researchers, extension officers and with ordinary farmers in the village.

## 3.2 Data collection methods

### 3.2.1 Review of project document and reports

The project documents of the NWP, including more than 1000 pages of the project proposal and annual reports from 2010 to 2013, were reviewed to explore the communication intention, processes and results as documented by the project team. The findings from this part of the research mostly provided answers for RQ1, and RQ2:

RQ1: “To what extent and by what means have participatory approaches been applied in an agricultural research project currently funded by ACIAR in Vietnam? And

RQ2: “What effect have participatory approaches had on the research practices of Vietnamese farmers and scientists within the project?”

### 3.2.2 Photovoice

The *photovoice* methodology applied in this study was participatory, using photos to generate first-hand information from the targeted farmers. The photovoice aimed to address the same questions as in RQ1 and RQ2, but from the farmers’ perspective. The method was chosen for the following reasons: 1) it is suitable for “vulnerable and less literate group” [Liamputtong, 2007, cited by (Lennie & Tacchi, 2013, p. 136)]; 2) the method can be useful to generate a dialogue and obtain knowledge from the targeted group (Wang & Burris, 1997), and the photovoice approach was successfully applied to study the oyster industry in the Eyre Peninsula, South Australia (Pierce & Robinson, 2013) and to access an ACIAR project in Vietnam (Pierce, 2012).

The photovoice was conducted with all six participating farmers in Pieng Sang village, who had been involved directly in the NWP’s experiments on maize and fruit based systems. Given that the farmers had taken a large number of photos during the project life, these photos were used instead of asking the farmer-researchers to take new photos. The author reviewed more than 1,500 photos taken by the farmers, field scientists and project coordinators from the field experiments, workshops, and meetings to select 150 photos as input for the photovoice albums. The photo selection was based on activities of the farmers, which were mentioned in the project document; on interviews with project



staff; and on the research questions. Priority was given to the photos taken in Pieng Sang village, showing the faces and describing the activities of the targeted farmers.

The Pieng Sang village is about 25 km South of Moc Chau town and is home to 121 households, mostly from the Dao ethnic group. Main crops of the villagers are maize, plum, canna, and tea, although the area and income of each crop vary for each household.

Out of the six participants, four worked on plum experiments, one worked on both maize and plum based systems. The last one works on maize experiment, but only for about a year in the first half of the project. Three of them previously or are currently holding village leading positions and one was the team leader of the plum group under the NWP research. All speak Vietnamese fluently.

Table 2: Demographic data of farmer-researchers:

Farmers	Age	Gender	Ethnicity	Education	Designation	Main crops (by income)	Research areas
f1	58	Male	Dao	5/12	Farmer	Tea, maize, canna	Maize
f2	47	Male	Dao	9/12	Village leader	Maize, tea, canna, plum	Plum
f3	43	Male	Dao	5/12	Team leader (of plum farmers under NWP)	Maize, plum, canna, tea	Plum
f4	44	Male	Dao	5/12	Farmer	Maize, plum, tea, canna	Plum
f5	53	Male	Dao	9/12	Village deputy leader	Maize, tea, canna, plum	Plum
f6	53	Male	Dao	9/12	Former village leader	Maize, plum, canna, tea	Maize & plum

*Note: Main crops order is arranged according to income receive by farmers. The first listed is the best income crop for the household.*

Each of the six participants received the same set of 150 colour printed photos and a 30-page album to produce their own photovoice album. On each page, there was a space for a photo and its caption, and five statement sentences to prompt the participants about topics of the selected photo, including: farmer's activities under the project; farmers' communication to carry out the assigned research; farmer's contribution to the project; and farmer's practices before and after the project. A sample of a completed photovoice album is in appendix 3.

After explaining about the research purpose and getting agreement from all participants, the investigator left the village for three days and then returned to collect the photovoice albums. This process was not a simple one, but involved a long conversation, exploring the activities of each farmer under the project and information around the photos he selected. The investigator stayed overnight in a Dao family, who were relatives of a farmer-researcher in the village, which helped find out how the information from the project was communicated to ordinary farmers in the community.

### 3.2.3 Semi-structured interviews

The *semi-structured interview* was employed to obtain empirical information from two sub-groups: 1) field scientists, the extension officer, as well as the project facilitator, who assisted with translation, development of communication materials and organisation of field visits; and 2) managers of the partner research institutes and project coordinator. Unlike the farmers, members of these groups had adequate language skills and social experience to express their opinions in depth.

A total of 17 participants who had been working with, or at least visiting experiments and had a relationship with the farmer-researchers in Pieng Sang village were invited to participate in interviews. Among them were 11 from group 1 (see previous paragraph), including nine field researchers (for soil and crop management and value chain experiments), one project translator and assistant, and one extension officer. The extension officer and translator were also acting as field researchers in this case because they were involved in the research process. The six interviewees of the group 2 were at managerial positions of the partner research institutes and/or senior scientists, who supervised field scientists at Pieng Sang village and coordinated the collaborative research activities. The list of interviewees is in appendix 4.

Two interview guides were tailored to suit each of these groups, integrating 23 sub-questions related to RQ1, RQ2, RQ3, and RQ4. The investigator conducted the interviews through face-to-face meetings, except for two cases, which had to be done by email. Questions were revised after the first interview. A sample of the interview guides is in appendix 5.

Findings were relevant to the four research questions; however, the emphasis of group 2's members (who have higher position in the research institutes and spend less time on the

field compared to the field scientists) was on the RQ3 and RQ4:

RQ3: “What importance do project partners give to the participatory approach applied in ACIAR projects?” and

RQ4: “What effects have the participatory approaches applied had on the research planning and management practices of the partner institutions?”

### **3.3 Data analysis**

Data for analysis was captured from the project documents, photovoice albums with farmers, interviews and discussion with the targeted groups of the project team, as well as field notes and observation made by the author. The collected data was processed and analysed, from the perspective of the six dimensions referred to in Chapter 2. Findings from the document review, photovoice and interview were then compared.

All interview records were transcribed and coded according to the sub-topics. For example, under the farmers’ characteristics, the sub-topics were: (1) Farmers are very active and open to share their opinions about the research (what do and don't work on the farms); (2) Farmers like hard-working researchers and appreciate the presence of researchers in the village; (3) Fruit farmers showed interest in maize and attended meetings with maize farmers; (4) Farmers feel more comfortable to share their opinion at their living places (e.g. in their field or kitchen); (5) Farmers are not active in picking up new technologies because of their knowledge and language limitation; (6) Fruit farmers think fruit fly control difficult and need helps from researchers; (7) Mulching needs much labour and has problem in mice; (8) Farmers viewed components as separate projects.

The analysis was done manually with the assistance of Microsoft Word and Microsoft Excel. Photos and narratives were used to illustrate the data where appropriate.

For the data collected in Vietnamese language, only the parts used for illustration of this report were translated into English.

## **Chapter 4: Research findings**

This chapter presents findings from the review of the NWP documents, photovoice, and interviews. The findings were arranged in the order of Neef and Neubert's (2011) six dimensions.

### **4.1 Review of the project documents**

The documents under review were the project proposal and annual reports from 2010 to 2013. Findings of the review are as below:

#### **Project type and research approach**

This adaptive research project aimed to produce improved technologies for land and crop management, and value chain models to bring sustainable benefits for small farmers, working on maize and temperate fruit based systems in Son La and Lai Chau provinces. Potential users of the research outcomes were smallholder farmers living in the North-western region. However, as in any research, scientist researchers also benefited from the research findings.

The project was funded by ACIAR and involved a number of different research institutions from both Vietnam and Australia. The project location was within the prioritized region of the Vietnamese Government and ACIAR program in Vietnam. The annual reports mentioned that the project was supported by almost all local governments, except one village in Lai Chau province.

Holistic, systematic approaches were clearly seen in the project documents. The methods used emphasised a combination of research on soil and crops; and production and value chains. Except for a part of soil research activities that occurred in a laboratory, most of the data were generated from on-farm experiments on farmers' fields, and the overall research plan was developed with the input of farmers. The four-year project period consisted of four continuous learning cycles. Although the first cycle was merely diagnostic, where the researchers intended to learn what the conditions and concerns from farmers' perspective were (the Project proposal), the Participatory Needs and Opportunity Analysis (PNOA) served as a basis for further research planning and farmers were really heard (Annual report 2010). The research plan was flexibly adjusted every year at the

“Reflection and Planning” workshops, where related researchers and farmers actively discussed issues, and farmers’ feedback was acknowledged and responded to. E.g. “Site selection has been done with negotiation between farmers and scientists” (Annual report 2010) or “Feedback from communities had a major influence on the design of experiments in 2012” (Annual report 2012).

There were a number of communication mechanisms set up for obtaining farmers’ feedback and for discussing among researchers. They were interviews, workshops, focus group discussion, action learning cycles with participatory technology development trials and demonstration in farmers’ fields. Farmer-researchers were actively involved in the farming scenarios analysis series run in 2012, where farmers expressed their understanding on the reality, feasibility of the research results. Participatory Monitoring and Evaluation (PM&E) was a regular activity, which used all components to get feedback from key stakeholders involved in the project. Focus groups discussions and annual “Reflection and Planning” workshops were used for information sharing, progress evaluating and research designing among researchers (Annual report 2011, 2012, and 2013).

### **Scientists’ characteristics**

Some of the scientist researchers/managers had experience in working with participatory approaches before joining the project, such as some UQ and PPRI staff. Many others had worked with communities before. During the project, scientists’ interest and capacity in communicating with farmers was assessed (Annual report 2010). There was evidence that scientists increasingly listened to farmers and responded to their feedback (Annual report 2012).

Scientists considered farmers as research partners and committed to problem solving through analysing the needs from farmers and responding to their feedback. From initially not fully understanding farmers rationale in not attempting to correct soil erosion, scientists subsequently became aware that farmers had higher shorter-term priorities and concerns about economic profits from their fields. One of the important follow-up activities of the project was economic analysis. Following this, feedback from farmers also contributed strongly to the forming of the research plan. In the maize-based team: experiments were designed based on farmers’ current practices and added external inputs

rather than using purely top-down scientific recommendations. Additionally, based on farmers needs, PPRI carried out a pest control workshop for farmers, despite the activity not being included in the PPRI's annual plan (Annual report 2012).

### **Farmer and scientist interaction**

The annual reports between 2010 and 2013 indicated that farmers and scientists were actively involved in the research process, including diagnostic study, scenario analysis, technical experiments on farms, study tours, and PM&E.

Frequency of interaction within the fruit-based group was higher than the maize-based group as the presence at experimental site (e.g. Pieng Sang village) of scientists occurred more frequently (Annual report 2012).

The control of the research and decision making shifted focus from year to year. In the first year, the project team was optimistic about the project ownership by the local farmers. The report mentioned that "From the negotiation process, farmers took ownership of the overall experiments in their fields, which provides a solid foundation for further collaboration and development of scaling up" (Annual report 2010). Additionally, the same report pointed out that the support from local government was very important and "In all cases, political consideration seem to have influenced the final decision". From the second year onward, there were two different levels of participation and ownership for maize-based and fruit-based systems.

For maize-based: Farmers contributed to the generation of innovations as their feedback increasingly became a determinant of field experiment protocols and conclusion.

For fruit-base: Although the Annual report of 2013 emphasised the effectiveness of PM&E and mentioned that farmers actively participated and even attracted the attention of ordinary farmers, there was not any evidence about specific feedback from farmers/consumers that affected the design of the following learning cycles.

### **Farmers' characteristics**

There were no data about farmers experience with previous projects, or how scientists were viewed by farmers. However, their active involvement indicated that they supported the research, although there was no clear evidence about their particular incentives for

participation in the reports. In some places, language gaps and farmers' low education and the habit of relying on government's assistance were considered barriers for farmers' interaction in the research (Annual report 2010 and 2013).

### **Farmers' benefits**

#### *Innovation/improved technical packages:*

For maize-based system: There were some potential technical packages, including: improved models of maize-maize, pumpkin-maize, maize-soybean, and maize-legumes systems; and mulching and mini terracing practices on steep slopes (Annual report 2013).

For fruit-based system: introduced orchard management package for plum, which increased productivity (three times higher than farmers practice) and reduced impacts on the environment by reducing chemical spray for the orchard; newly established peach orchard in Giang Ma; and improved post harvest practices for plum farmers in Ban On (Annual report 2013).

#### *Improved knowledge and awareness:*

Farmers understood the effectiveness of the mulching method, but expressed concern about pest damage as a reason for low support for this practice (Annual report 2013). They also understood soil erosion was a long-term issue and that what they were doing would affect the next generation. Almost all farmers, who were asked under the scenario analysis, wanted to change practices in 10-15 years for soil preservation.

#### *Empowerment and social capital*

An empowerment effect was noted on individuals in some project sites through the diagnostic study (Annual report 2010), and active involvement as farmer-researchers (Annual report 2011). Farmers became important influencers for research design (Annual report 2012), had good relationships with other key stakeholders and the farmers' activities in the research attracted interests from the ordinary farmers in communities (Annual report 2013).

### **Scientists' benefits**



Scientists benefited from training workshops on value chain research skills, soil and crop research methodologies, scenario analysis and PM&E (Annual report 2011). Their improved research skills was noted, such as significant improvement in the ability of young staff to facilitate participatory research, develop and implement research protocols, and collect, manage and analyse data (Annual report 2012) or “Improved capacity of staff and local officers in approaching/working with ethnic minority farmers”; “Changed approach of scientists and extension officers toward implementing agricultural projects, based on needs of farmers and market opportunities” (Annual report 2013, p23).

## 4.2 The photovoice study

The same set of 150 pictures was handed to the six farmers, and some of these were selected by most of the farmers. Captions for those photos were often under the same topic but with slightly different narratives. Farmers tended to choose the photos where their own faces were shown. Farmers’ quotes are coded from f1 to f6 for farmers number 1 to farmer number 6 (see table 2, p.22).

### Project type and research approach

A large number of photos shown that experiments were designed on farmers land and there were opportunities for farmers to provide feedback. Some farmers indicated that they took photos and used them to tell others about the research activities.

	
<p>Meeting in the village house. We were instructed to develop annual plan. We gave our opinions (f6). We met in the village house to carry out annual plan. PPRI presented a plan. I followed instructions of the team leader and scientists. I did provide opinions in the meetings (f2).</p>	<p>Scientists arranged experiment plots, my family planted maize, peanut and soybean. There was a control plot, other plots followed instruction of the scientists (f6).</p>





I usually took photo of the research activities carried out by farmers and sent to researchers for reporting. I did it any time we were working in the farms (f6).

I sometimes took photos of plum progress in my orchard (f2)

### Scientists' characteristics



Previous experiences with participation by the scientists were not determined. However, the ways of interaction taken by scientists, such as having meetings around a fire, sharing a lunch with farmers or even staying with farmers demonstrated a great level of commitment and respect to local customs. Scientists' listening and responding to farmers was presented and confirmed in the photos.

<p>Scientist came and asked me about the growth of maize. I said that intercropped maize was bigger, higher and cobs were also bigger (f1).</p>	<p>I am discussing with scientists about planting and mulching practices. In the first year, rodents ate maize because we did mulching right after sowing. In the second year, I decided to do differently, waiting for maize to grow before mulching. Mr Oleg agreed with me that maize grew better (f6).</p>



	
<p>I am suggesting sowing three plants of pumpkin, as a triangle in a hole. Scientists agreed this is good (f6).</p>	<p>Sometimes I had opinions in the meetings around fire (f4).</p>

### Farmer and scientist interaction

The involvement of farmers in the research process, interaction's type, frequency and intensity were frequently revealed. Farmers contributed their knowledge. Some captions showed that the control of research and centre of decision-making position rested with scientists. There was no evidence on how input materials (investment resources and payment) for the research were arranged.

	
<p>Mr Nam asked us not to burn the field after harvesting, keep residue as fertilizer for the next crop (1).</p>	<p>Mulching keeps warmth, holds fertilizer but difficult to find materials around. We sometimes need to go far and it is labour consuming. I gave feedback to scientists, but kept doing all steps as instructed to see the effectiveness of the practice (f5).</p>



	
<p>Twice every year Mr Oleg and Madam Sen visited and discussed with us. Mr Chien, the group leader actively organized the meetings (f6).</p>	<p>Once a year we met with scientists about results, outstanding issues and were consulted for planning for the following year (f5).</p>



<p>We returned from the field, sitting around the fire and talked about plum trees, discussing about the changes that we observed (f2).</p> <p>We discussed with scientists about plum management. It is easier to give opinions when sitting in the kitchen rather than in the meeting hall, where there are many people and have to speak correctly (f3).</p> <p>Mr Chi instructed us how to prune plum trees. After cutting we talked about our working day (f4).</p> <p>Returning from orchard, we sit down to talk about our day with the scientist. We all talked about what we understood then combined into steps for plum orchard management. Mr Chi asked to know how much we learnt and what he should keep showing/training to us (f5).</p> <p>Returning from orchard, we discussed about practices. I usually encourage other farmers to support the project (f6).</p>
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### Farmers' characteristics

Farmers appreciated field scientists' activities and seemed to have a close relationship with them. Project coordinators were also mentioned through different photos and captions. "Farmers are busy" was not mentioned much directly, but concerns about labour may be interpreted as time and money constraints for farmers' participation. They

understood the advantages of the introduced practices, had positive comments about them, and knew how to use these practices. However, time, labour and availability of other inputs, including money, appropriate chemical and mulching materials made farmers think twice when they wanted to do mulching for maize, pruning and to use good pest control chemicals for plum.

Farmers became close to the field scientists and appreciated their visits, which showed in different photos and captions:

	
<p>Mr Hai going with five of us to spray fly bait for plums (f2). In the project I often communicated with Mr Hai about pest control. He stayed here to instruct us (f4). Mr Hai showed us how to spray for plums with the whole-hearted and understandable ways. Without him and if he did not stay with us, we did not know how to do (f6). He was here continuously to carry out the plum management with us (f5).</p>	<p>Mr Chi and Hai having lunch with our group every time after we finished the field activities. We chitchatted to understand more about one another (f3). We talked about experiments to see whether they were effective or not (f4). PPRI's scientists came and provided techniques for plum management (f2). Having lunch with Mr Chi and Hai while exchanging ideas about progress of the project (f6). Every time Mr Chi came, we had lunch together and discussed about what have been done during the day (f5).</p>





	
<p>Mr Phuong came about once a month to visit the trial, instructed for maize planting, intercropping and weeding. His was enthusiastic and his way was easy for us to understand (f6).</p>	<p>“I discussed with Mr Nam every one or two months. When it was closer to harvesting time, we met every 15 days then met other farmers to discuss experiment results” (f1).</p>



Every year Mr Oleg came two-three times to meet with our group. Scientists Chi or Hai chaired the meeting. We discussed what have been done and kept working on the outstanding tasks (f3). We discussed the results with Mr Oleg and Madam Sen (f4).



Constraints to adopt introduced techniques were seen in labour allocation, time, money and availability of other input materials:

	
<p>Maize with mulching provided higher productivity. Although this practice is good, it takes lots of labour. I am busy and cannot do (f1).</p>	<p>I will do mulching for plum, but not for maize because I don't have enough labour and mulching materials (f6).</p>
	
<p>Pruning is good for plum, making trees younger, but I am busy so only can cut the remaining trees of my orchard in the next few years (f3).</p>	<p>Mulching is a bit difficult for me because there are not enough materials around and not enough labour to do it (f5).</p>





I will perhaps do spraying but won't use the same chemical as provided by the scientists. I am afraid it will not be the correct one as instructed by the scientist because I could not learn much about it. I will use regular chemicals only (f5).

After project, I will keep spraying for plums, but I don't have the fly bait, so I will use only the chemicals that available in Moc Chau (f6).



## Farmers' benefits

The farmers who were involved in the projects understood the improved practices, knew how to apply them, and started to think about what things do and don't work for their farms.



For maize farmers, the practices they were thinking of using were zero tillage and intercropping. They did not want to apply mulching on maize for lacking of mulching materials and labour.

	
<p>On sloping land I will not plough any more, only clear the field, spray herbicide and sow maize (f1).</p>	<p>In the maize field, I will rotate and intercrop with pumpkin and rice bean, and use residue as fertilizer (f6).</p>

Plum farmers saw the benefits of pruning, using fertilizers, and mulching and said they were planning to use them:

	
<p>After the project, I will prune other trees in my orchard (f2). I am busy so I will do pruning after few years (f3). After the project, we will do pruning for our family's trees and for neighbours' who need it (f6).</p>	<p>I will cut 20 trees every year until the whole orchard is done (f4). I will prune my orchard in the upcoming years. Pruning is good. However, I only can do for my orchard, but not for others in the village (f5).</p>



	
<p>Fertilizer must be applied to harvest plum (f5). I will use 300kg of NPK per year for plum. I will cover fertilizer after applying to avoid washing away or damaging by chucks (f4).</p>	<p>After the project, I will apply fertilizer as instructed (f6).</p>

	
<p>I will do mulching for plum (f6).</p>	<p>After the project, I will spray for plum (f5 &amp; f6).</p>

### 4.3 The semi-structured interview

Perspectives of the scientists, who participated in the interviews, are presented in the below findings. Respondents' opinions are coded from r1 to r17 (for researcher number 1 to researcher number 17) as presented in the list of interviewees (see appendix 4).

#### **Project type and research approach**

The respondents thought that participatory approach was necessary for this project because it ensured practice change (r2), expansion (r3, r5), and sustainability (r5, r9, & r10) and touched the difficult issue of sloping land preservation. The latter was not the first priority of the targeted farmers.

The project received support from local government. The support was for enlarging the area of fruit orchards, and expanding the intensification models under maize-based system in Lai Chau province. There was a comment that the Son La authority also supported the outcomes of the projects, but it was not clear on which system or treatment. Most of the respondents agreed that when a project has done something that local government was interested in, it would be easy to receive support for expansion and make a real change. Some respondents emphasised that it did not matter how much farmers love the project, if the provincial government and MARD were opposed to it, this would be a major obstacle. Some also suggested that the local governments should provide policy to encourage farmers to apply improved practices for soil preservation; otherwise farmers would always want to pursue economic profits rather than prevent land-degradation.

All junior scientists expressed that the communication tools available in the project such as Scenario Analysis and PM&E allowed them to interact with farmers more easily and much deeper compared to other projects that they involved. Almost all scientists emphasised the effectiveness of the diagnostic study, using PNOA in the project. Some respondents mentioned about the website <taybacxanh.net> , which was developed for online documents and for researchers to exchange information. However, not many of them used the website. Instead, they preferred emails, phone calls and group discussions. The reflection and planning workshops with small groups were preferred to the plenary ones. Half of the senior scientists commented that, the annual plenary planning

workshops need a stronger coordination to have an active collaboration among components (r3, r5, r6).

The collaboration was evaluated as “good” or “above average”, especially by individuals and within small groups, e.g. among scientists of one institute, or among scientists, farmers, extension officers under a respective discipline. Almost all respondents thought that project members had a high willingness to cooperate and developed very good relationships after working for the project. There was prompt feedback from the project management team for questions from the field teams. However, the cooperation between the research institutes was not very close and even made some farmers confused and they thought that each of the components was a separate project (r8, r14). In particular, the value chain group had been mentioned as the most isolated component (r3, r6, r14). Some mentioned reasons for the perceived outcome were: the funding mechanism, which allowed each partner institute to receive financial support directly from UQ and thereby reduced collaboration (r3, r6); technical coordination capability, which was not very good in facilitating a shared action plan (r6); and high mutation of staff in some groups (r16).

### **Scientists’ characteristics**

About one third of the scientist respondents claimed to have used participatory approaches previously. The other two thirds admitted that this was the first time they had applied participatory research methods, although they had worked with adaptive research before, involving farmers and extension officers. However, in most of those cases, farmers and extension officers did not join until the last stage of research and did not implement all parts of the research process as they did in this project.

Scientists considered participation as a useful channel to understand farmers’ needs, which helped them to select suitable technologies and design appropriate experiments. The approach was especially effective as it was applied among ethnic minority groups, who were considered less active in learning new technology compared to the Kinh people (r9) and because one of the objectives were for long-term benefits from soil preservation, which was harder for farmers to see than short-term benefits (r3).

Although some respondents thought that the participatory approach was the most important aspect, the others agreed that a participatory approach was good, but not enough to succeed in agricultural research. Those who considered the participatory

approach to be the most important aspect explained that, it was essential to maximize participation of farmers at the diagnostic study stage, so that scientists could learn about reality of farmers, their true problems, and adjust the research agenda. Those who did not think the participatory approach the most important aspect, indicated some other elements, such as human resources, technology, and financial availability as well as support of the local government to the project.

Improvement in scientists' attitude and the way of working with farmers was noted by respondents. At the beginning stage, some of the scientists were interested only in yield (r1, r10), or did not feel comfortable to ask questions, showing a "learning" or "listening" attitude to farmers (r1, r2, r10). However, their skills of working with farmers improved significantly during the project, which allowed the participation of farmers and led to an appropriate selection of improved practices, harmonizing the economic priority and soil preservation purposes. Nonetheless, the level of openness and ability to equally communicate with farmers varied, depending on individuals.

### **Farmer and scientist interaction**

There were two tendencies in the interactions between scientists and farmers:

For the fruit group, participatory communication was applied to understand farmers' needs, which helped scientists select an appropriate package of technology and attempt to transfer it to farmers. However, during the research process, the scientists devoted much time, even three to four months, living with farmers and working with them on experiments. Farmers received "hands-on" training on orchard management techniques, such as pruning, mulching, applying fertilizer, and using pest control methods for fruit trees. Describing the way of working with farmers by the fruit group, a researcher said: *"In the situation of Vietnam, when scientists kept suggesting but farmers were not able to respond – it is very difficult! Sometimes new things need top-down. Technology should use top-down approach. And farmers' needs/requirements should be obtained by bottom-up approach. We should not use bottom-up all the time. Technical intervention to plum trees needs top-down. Top-down is not always bad, likewise, bottom-up is not always good"* (r4).

For the maize-based group, farmers were actively involved in the whole process of research, from diagnostic study to find out farmers needs to design, implement and assess

the experiments. Farmers' feedback was incorporated into the new research plans. *"Feedback from experiments was a basis to evaluate whether they were successful or not and to develop new plans for the following research"* (r10). *"The project was adjusted as per farmers' opinions and was much different from year 1 to year 4"* (r17).

Among a number of tools to communicate with farmers, scientists highly appreciated the Participatory Monitoring and Evaluation (PM&E) system. Almost all respondents agreed that PM&E was a useful platform for scientists to have insights about farmers' reality, and also for farmers to communicate with scientists. However, about 40% of respondents thought PM&E was time consuming and some suggested that PM&E meetings should be scheduled together with experimental activities and frequent meetings should be more flexible.

In many cases, there were equal conversations between farmers and scientists, and decisions were made when both sides agreed (r8, r9, r13). Depending on topics, farmers often decided what trees or what varieties should be used in the next research (r10), and scientists decided on the research protocols (r3).

About 35% of respondents were concerned about genuine incentives for farmers participation in the research. They agreed that there were two main reasons. The first one was the benefits they received from financial assistance for experiment input costs provided by the project. The second and much stronger reason was the real profits they hoped to receive from the fields by applying new technology.

### **Farmers' characteristics**

Majority (about three quarter) of respondents agreed that most of the farmers actively participated in the research. Although the level of interest and involvement varied, depending on which ethnic group they belonged to (e.g. Thai and Kinh people were often more active than Dao and H'Mong), their skills in working with scientists improved. Farmers were very open to talk about what did and did not work in the project. The meetings on maize research often attracted attention of the fruit farmers and even ordinary farmers in the villages.

More than half of respondents expressed that farmers liked hard-working scientists and highly appreciated those who spend time on the field experiments. Some respondents

indicated that although some scientists were quite top-down in their orientation, farmers still liked them and felt comfortable to work with them, provided that these scientists showed their commitment and gained farmers' trust.

However, there were also some reasons, which reduced farmers' interest in the research projects. The first reason came from farmers' side, including limitation in their language ability and knowledge. The second common reason was from complicated or troublesome practices, including pest control methods for fruit trees, rodent control on maize farms, and high labour cost in the mulching technique.

### **Farmers' benefits**

The views on farmers' benefits were different between two groups. The senior scientists expressed their concerns that farmers did not receive much from the project because the project duration was too short for them to commence introduction of the new and complicated techniques, such as pest control for plums and peaches: *"Benefit for them is a question. For nice and red plum, you need to really do fruit fly control. Without PPRI, they will not continue doing that. Too complex, can't remember. Book keeping: with PPRI there they do, without PPRI: they don't. I don't think they will continue with fruit fly control. When project stop they will stop"* (r1). In the maize-based system, although farmers were introduced to simpler techniques, these improved practices were not strong enough to address the land-degradation issue if farmers kept cultivating on a steep slope: *"data collected showed that with the methods they have tried, it cannot solve the problem of erosion in Vietnam. I think the slope they are cultivating is too much for maize production"* (r2).

Unlike the senior scientists, the field scientists were quite positive that capacity building for farmers had good results, especially in enhancing awareness toward conservation agriculture:

*"At first, farmers did not understand, but now they do not burn grass any more. There was a change in their awareness, step by step"* (r17).

*"Farmers, who participated in the project activities understood very well the negative effects of traditional practices for maize and became aware the importance of practices toward conservation agriculture"* (r12).

Nonetheless, all scientists were confident that farmers would apply pruning and use fertilizer for fruit trees; apply intensification, intercropping and zero tillage for the maize-based system.

### **Scientists' benefits**

Most of the respondents highly appreciated the participatory approach, particularly the PM&E used in the project. For senior scientists/managers, they found that the approach was useful for learning about farmers' reality: *"If we don't have the participatory things? We would know much less. The things I see are more beneficial for us than for farmers. We understand farmers' reality, then can suggest technology more appropriately"* (r1).

For young scientists, they learnt a new way of working with farmers and wanted to apply the approach in their future research. Capacity building opportunity was very high, especially for scientists and students from TBU, and a number of local officers from extension or plant protection services, who were involved as scientists in the project. Many of them commented that the project provided an opportunity for strengthening and widening their network, which was also very useful for their future work.

*"Capacity building model is good in the project and I want to apply it into my work in the future"* (r5).

*"I learnt how to develop research plans and appreciated the capacity building activities here"* (r12).

*"I learnt how to do participatory research"* (r7, r8, r9, r10). *"I want to learn more about PM&E, it is really useful"* (r16).

## Chapter 5: Discussion

This chapter discusses further points related to participation practices in the project; benefits to local officers and ordinary farmers; and possibility of applying a participatory approach in the future research. The discussion is illustrated by evidence from primary and secondary data as well as the author's observation, aiming at clearer answers to the research questions, which is presented in the next chapter.

### 5.1 Farmer and scientist interaction – ways of looking

*The findings* (chapter 4) showed that, the levels of interaction between the farmers and researchers under the two cropping systems were different.

In the maize-based system, farmers and scientists negotiated and farmers' opinions were reflected in the research plans. For instance, farmers suggested how to sow pumpkin (f6), recommended practices for rodent control and application of fertilizer (r12). This was agreed by scientists and implemented in the experiments. In many cases, the results were not totally satisfactory from the scientific point of view, but they were accepted and applied because they were manageable to implement for farmers and closer to farmers' suggestions (r3).

In the fruit-based system, some scientists were sent to live with farmers to implement the field experiments. Farmers' needs were identified through their participation at the beginning stage of the project, which informed the research design and selection of technology. However, farmers' feedback at the later stage could not be integrated in annual research plans, because they often only provided simple responses about whether they understood the techniques and whether they were able to practice or not. A scientist from the fruit group confirmed that they used bottom-up approach to understand farmers' needs, and applied top-down approach to transfer orchard management practices to farmers (see 4.3).

#### *Theorists' views*

By applying Lilja and Ashby's (1999) typology, the participation practices within the maize group were very close to level 3 - (*collaborative or empowering participation*) communication process. In most of the cases, researchers made the final decision based



on two-way communication, harmonized between the scientific priorities and farmers' preferences.

For the fruit group, the *collaborative (or empowering participation)* communication process occurred only when farmers discussed their problems with scientists via the diagnostic study. In the technology transfer process, farmers had little participation, which could be categorized at level 2 (*consultative or functional participation*) of Lilja and Ashy's (1999) typology.

By applying Neef and Neubert's (2011) dimensions, the two above cases can be explained differently. For the maize group, because farmers have experience in crop management, their suggestions could be closer to the scientific solutions. Therefore, both farmers and scientists could contribute to generating innovation through a field research process. For the fruit group, farmers had planted plum for a long time but they often left the orchard without any management interventions until harvest. Therefore, they had very little idea about orchard management. In this case, farmers were *willing* to participate, but not able to do so because they did not have enough knowledge to contribute. The scientists had no other choice than to select their idea of the best solution available and implement it. Additionally, the author observed that fruit farmers seemed to be very comfortable working with "teaching" scientists because they were close by and because scientists could provide useful knowledge.

### ***Practitioners' views***

Explaining about the participation in the maize and fruit based experiments, two Vietnamese senior scientists, who directly supervised the above cases, came to the same conclusion that the participatory approach should be applied flexibly and have some modifications to suit the local or "Vietnamese" situation as they expressed it. The case of the fruit group, in which field scientists were sent to live with farmers, was referred to as "the Vietnamese model of participation". More examples of the Vietnamese approach of participation were given by one of the scientists: "*Participation has already been occurred in Vietnam for a long time. But in a number of different formats, such as 'three-*

*together extension officers*<sup>1</sup> or *‘in-village teachers’*<sup>2</sup>, the problem is that nobody theorizes it” (r3).

Additionally, the scientists asserted that participation was very important to a project like this where the research aimed at practice change for specific groups of farmers (r2, r5, r8). However, they also valued some other aspects.

### ***Participation is good, but not enough***

According to the scientists, they saw the participatory approach as among the most influencing factor for the success of the project. The other important elements were people, and local support. People were the actors of the participation process, and participatory approach could not be applied if scientists and farmers were not open-minded, even though they were willing to participate (r1, r4).

In terms of support from local government, most of the scientists realised that without this support, their research outcomes would not be expanded. However, there must be a two-way interaction between project and local government. On one hand, it would be ideal if the research addressed the problems of the district or province, which have existed but could not be solved by the local people. For example, Lai Chau authority quickly supported the expansion of the peach area in the province, because this was coincidental with their priority, and, without the project, it could not be done. On the other hand, positive outcomes from the project can attract attention of the local authority. Some scientists commented that the practices for the maize-based system offered choices for better protection of the environment as well as economic benefits for maize farmers. This should be very good for Son La province, where maize was an important cash crop. However, adequate interest was not given to the project (r3, r16) by the local government and the local government would become more supportive if the experimental area had been designed in a larger area and involved more farmers (r3).

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<sup>1&2</sup> Extension officers and teachers who move in and live with villagers, and implement their tasks together with villagers.

## 5.2 Benefits of the project stakeholders

Apart from capacity building for the researchers (including farmers and scientists) as well as the improved practices discussed in chapter 4, interviewees also expressed their interest in benefits for local communities, including ordinary farmers and local officers when the project concludes.

Although *some plant protection and extension officers* from communes and districts were considered as researchers here, they will return to their routine work when the project finishes. Respondents thought that these local officers benefited from good training of the project. Among them, some already applied the participatory approaches and became key trainers for the local communities (r4, r17).

The scientists were also concerned about benefits for *ordinary farmers* at the project sites. Although some respondents indicated that a number of ordinary farmers were interested in the project by attending project meetings and sharing opinions (r8, r9, r10), the others had doubts about the communication between farmer-researchers and ordinary farmers:

*“We attempt at beginning of the project for wider groups of farmers and have the farmer-researchers communicated with their neighbours; and their neighbours show interest, we can get them to come to participate in evaluation, and they replicate in their own field – that never happen”* (r1).

*“There were not responses from the other (ordinary) farmers and the possibility of expansion is limited”* (r12).

*“There has not been an evaluation on the effect of the project to community in applying the improved techniques. They have not been multiplied so far”*. (r13).

This concern led to some reflection on pilot roll-out channels, though it was not a focus of this study and a full evaluation of the roll-out activities for the project could be done only at the end of 2013. In fact, the project had selected the extension service as a channel for pilot roll-out, trained a number of extension officers, and organised FFS (ACIAR, 2012d). This was good because extension service had a network extended to every commune in Vietnam. However, in some locations, women’s union and farmers’ union

were also used as a primary channel for agricultural extension according to their relative effectiveness (see ACIAR, 2012a; ADDA, 2012).

In Pieng Sang village, all farmer-researchers were male, and joined the research on a voluntary basis. However, by spending a night in the village, the author found that women were active here and the women's union in the village was dynamic and coherent. The union members received support for shared labour, low-interest loan, shared information and enjoyed sightseeing tours together. Although the level of activeness of women's union varied from one to another location, in a village like Pieng Sang, it was noteworthy.

### **5.3 Participatory research in Vietnam: prospects**

Regarding possibilities of applying participatory approach in future research, most of the junior scientists expressed that they would apply it when there was an opportunity, especially using PM&E and Scenario Analysis, but were not confident about how it worked. The senior scientists, on one hand, support participation in agricultural research, on the other hand, doubt about its success in the system of Vietnam.

The senior scientists' concern was that, the participatory approach would be more difficult to apply in Vietnamese projects compared with implementation in foreign-funded projects. The reasons provided were institutional and people aspects. They strongly believed that the financial management mechanism of Vietnam was the most difficult barrier because it did not allow time and budget for diagnostic study. Technology end-users' needs were always quickly examined by the scoping team before getting approval rather than being done as an official activity with a thorough study after approval of the project (r6). Participatory planning required flexibility, while Vietnamese projects were fixed and there was very little room to adjust the planned budget and activities (r6).

Another strong view emphasised the people aspect. The respondent expressed no confidence in the way people work in the Vietnamese system, *"either they are project implementers or approvers, their willingness and readiness for using this approach are low"* (r4).

However, another opinion suggested that Vietnamese projects should try to incorporate the participatory methods from the designing phase of the research projects. They would be approved and could be done, provided that the related activities should not cost too much time and money (r3).

## Chapter 6: Conclusion and recommendations

This chapter presents conclusion and recommendations derived from the research. The conclusion is shown in a question-and-answer format, following each of the research questions. The recommendations are for those, who design, approve and implement a participatory agricultural project in Vietnam, especially in the regions where ethnic minority people reside. The final conclusion is specifically for ACIAR and MARD as the two key players in the collaborative agricultural research program between Australia and Vietnam.

### 6.1 The research questions

***RQ1: To what extent and by what means have participatory approaches been applied in an agricultural research project currently funded by ACIAR in Vietnam?***

This study found that the common participatory communication tools applied to facilitate participation in the research were: farmers' photo stories, PNOA, scenario analysis, PM&E, and group discussions. While the first four tools created effective platforms for communicating with farmers, the group discussions were used more among researchers for exchanging information, reviewing research progress, and planning for the new research cycles. Researchers were more comfortable in small groups, where they could contribute better. However, they might need a stronger synchronisation in a big group, especially when meetings were involved a large number of stakeholders from different organisations.

At the institutional level, the participation of Research Partner Institutes was about equal. The willingness for participation and communication from member institutions was high. However, the researchers expected a higher outcome from the collaboration among institutions than was actually achieved.

In the communication with farmers, the interaction frequency varied depending on the crop system. Fruit farmers were able to communicate with field researchers easily and as much as they liked because researchers stayed in the village quite often and continuously for about three or four months per time. For maize farmers, the group meetings were about fortnightly or monthly depending on the field activities. In other words, fruit researchers spent more time than maize researchers on the field experiments.

Farmers' needs and regular feedback were important inputs for planning of research cycles. Feedback from maize farmers was used to design annual plans and influenced innovations. Feedback from fruit farmers was used to adjust the training agenda for farmers, but not for development of technical packages.

The decision making power of the maize farmers was stronger than fruit farmers in the dialogues with researchers to develop research plans. In most of the cases, the researchers made the final decision.

***RQ2: What effect have participatory approaches had on the practices of Vietnamese farmers and researchers within the project?***

For scientists, their understanding of farmers, participatory research skills and network have been strengthened significantly. Most of the scientists changed their way of working with farmers and wanted to apply participatory approach in their future research, especially for understanding farmers' reality and for selecting an appropriate technology. Scientists were observed challenging the top-down only approach and acting in a more equal relationship with farmers and other stakeholders (extension workers). A common comment from junior scientists was: "We have learnt how to work with farmers from different ethnic groups. Understanding their culture and needs made our work easier and more effective" (r13).

For those farmers involved directly in the research process, awareness regarding the importance of conservation agriculture has been improved. They understood the pros and cons of the techniques introduced by the project, and became more open to express their opinions. They confirmed the intention to apply some of the improved practices, including pruning and fertilizer application for fruit trees; apply zero tillage and intensification for maize-based system.

For the ordinary farmers at the project sites, there is a package of improved practices available and accessible. However, whether they will use them or not depends on success of the pilot rollout activities, for which it is too early to have a clear conclusion.

For local extension officers and plant protection staff, who participated in the research, all of them were exposed to the training with participatory communication skills and participatory research approaches. Some already applied the approaches in their daily

work. The local officers in Lai Chau province became active users of these approaches (r4). The extension officer from Phieng Luong commune believed that the project results were better by applying the participatory approaches. He started to tailor his training programs to suite farmers better, and apply participatory communication techniques, such as ice-breaking and open interaction with farmers before and around his classes (r17).

***RQ3: What importance do Vietnamese project partners give to the participatory approach applied in the project?***

The participatory approach is considered important, but it is not enough to guarantee success in agricultural research (see chapter 5). It is extremely important at the diagnostic study stage, because it allows scientists to learn farmers' reality and real problems, so that an appropriate research agenda can be suggested. However, apart from the participatory approach, support of the local government and availability of necessary resources, including human, technology, and finance are considered influencing factors of the research outcomes.

***RQ4: What effects have the participatory approaches applied had on the research planning and management practices of the partner institutions?***

The junior scientists involved in this project understand the participatory principles and are willing to apply participatory tools such as Scenario Analysis and PM&E in their future research. However, given their junior role, they may have limited capacity to influence future project design as well as to influence their research colleagues.

For senior scientists, they are willing and able to integrate participatory elements in some foreign funded research, especially under a (co)supervision arrangement. A small number of senior scientists may try to incorporate some adapted formats of participatory research for diagnostic study of Vietnamese funded research.

In short, the participatory approaches from the project have, and can continue to influence research practices of the Vietnamese scientists. However, this will be restricted to individuals in the absence of stronger institutional intervention from higher levels within the research planning bureaucracy.



## 6.2 Recommendations

***Preparedness of all members in a research team is required before conducting a participatory (agricultural) research.*** Despite the advantages of the participatory approaches, their application requires flexibility and adaptability because the level and type of participation must be adjusted in different locations, and with different cultures. This is particularly important for ethnic minority groups, who have a low awareness of research processes and technical knowledge and are quite isolated from other societies.

In the case, when farmers are not ready to participate because they do not know much and want to be told what to do, it would be more effective to have the research led by scientists. The level of farmers' participation may be adjusted when their knowledge and relationships with researchers are improved.

Training is essential for researchers and extension officers to improve their awareness and skills to work with farmers, and to apply the participatory tools flexibly and effectively. Farmers also need to learn how to participate and express their opinions openly, so that their feedback would benefit the research results and enhance their ownership of the technology. Training would increase the understanding of the team members on a specific research framework, approach plan and background data.

***Project designers should describe a strategic pathway that is flexible enough to accommodate farmers' feedback throughout all adaptive research cycles.*** Although conformity to policy and procedures for project approval is necessary, a research proposal, which is able to embrace participatory approaches, will help to ensure adoption of the research outcomes. A clear explanation of the intended participatory principles and approach is important.

***The project team should explore possible cooperation of other civil organisations such as Women's Union and Farmers' Union for a pilot rollout phase.*** Although they are not highly capable in networking and communicating good practices at all locations, these organisations may offer another channel for knowledge transfer rather than only the Government extension service. These groups already conduct participatory training activities and have important links to a range of farmers.

### 6.3 Final conclusions

Although participatory approaches are not effective for all types of research and/or all stages of an agricultural research project, they would be beneficial for adaptive research projects and are recommended for the collaborative agricultural research program between Australian and Vietnamese Governments, such as the one that ACIAR is providing funding for.

For ACIAR as a funding organisation, more flexible budget and review mechanisms would support the project team better and maximize benefits of the participatory approaches, as greater participation will mean less certainty of activities, particularly in the latter years of a project. A reasonable budget allocation may be needed for participatory diagnostic study and training activities. A thorough description of the principles and approach from the project team may be required for consideration and approval.

Local support would be achieved more easily if the application of participatory approaches could be discussed and supported at a higher level, for instance, between ACIAR managers and their counterparts at MARD. The initiatives could come from either side. However, it would be more practical for ACIAR to be proactive as a donor for the program.

For MARD as an implementing partner of the collaborative research, suitable policy to encourage farmers' participation in adaptive research is necessary. This could be done through more focus on training on communication and collaboration skills for researchers, extension officers to work effectively with farmers. It is important to improve skills for researchers and extension officers in listening and responding to farmers' needs.

The application of participatory approaches could also benefit Vietnamese projects, if there would be more flexible and simpler procedures for approval of research proposal and/or project variation, so that the research cycles can integrate farmers' feedback. Vietnamese project designers should incorporate the participatory methods from the early stage of the project activities. The level of integration needs to be done together with a thorough consideration of important resources such as human capacity, time and finance.

For any agricultural researchers, the participatory methods, including PNOA, Scenario Analysis, and PM&E are useful tools, which effectively facilitate the communication process between farmers and researchers in generating innovations. Particularly, PNOA or Scenario Analysis are beneficial for understanding farmers' problems, needs, preferences as well as available local knowledge. This information would serve as inputs for designing of appropriate research activities. After the diagnostic study, PM&E is highly valuable to facilitate farmers-and-researchers systematic dialogue in research cycles and to optimise local ownership of the technology to be transferred. Apart from being equipped with participatory methods, scientists need to be able to gain trust from local participants before implementing tasks in the community. Spending time living in the village is recommended for research scientists.

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## Appendix 1: Map of the project sites and ethnic groups of the farmers

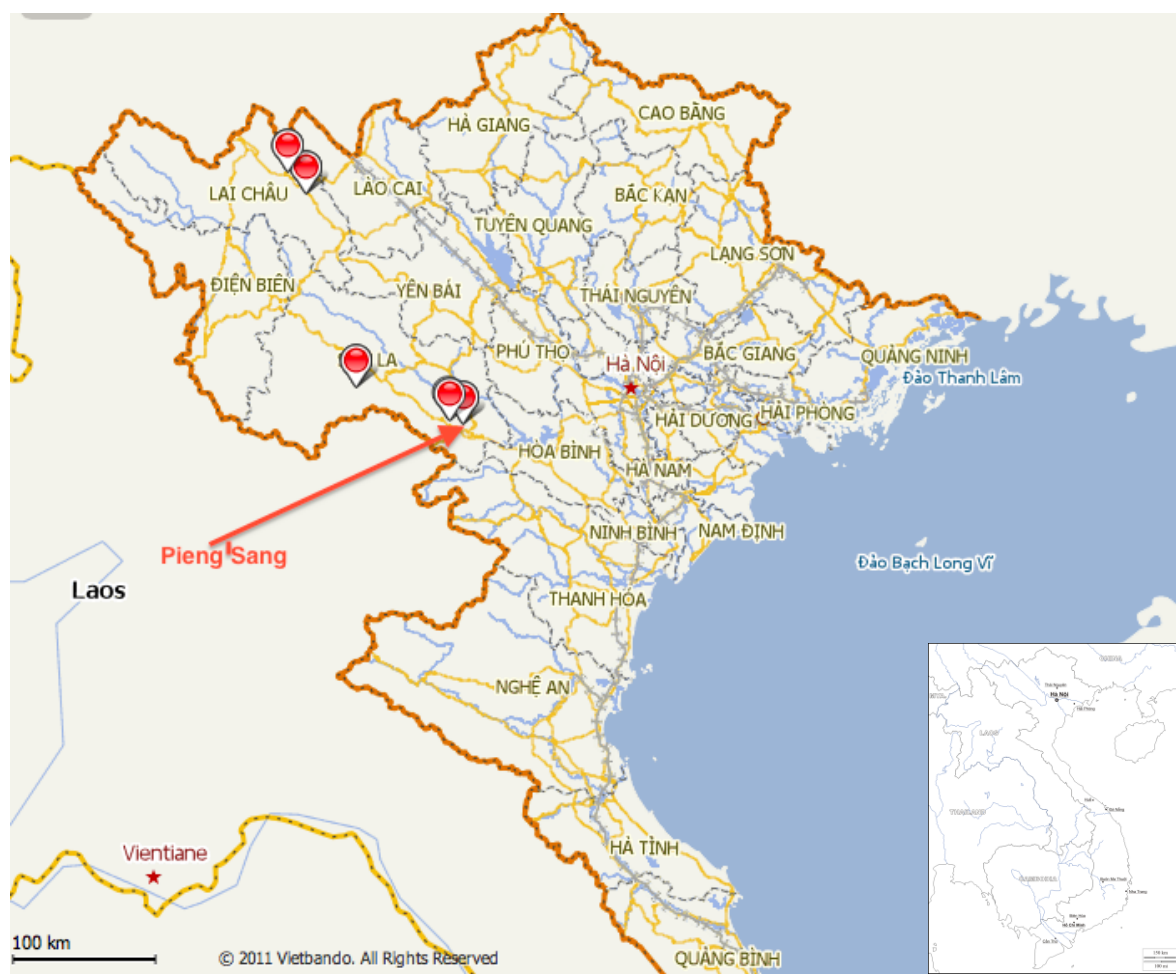


Figure 2: Map of the project sites.

Source: <http://maps.vietbando.com>; and <http://d-maps.com> (for the outline map)

Table 1: Ethnic groups of the farmers at the project sites

Site location (From the lowest position to the highest positions on the above map)	Major ethnic group
1. Pieng Sang village, Phieng Luong commune, Son La province	Dao
2. La Nga village, Muong Sang commune, Son La province	Thai
3. Na Ha village, Na Ot commune, Son La province	Thai
4. Hung Phong village, Ban Bo commune, Lai Chau province	Kinh
5. Giang Ma village, Giang Ma commune, Lai Chau province	H'Mong



## Appendix 2: NWP's Stakeholder Analysis

There are different stakeholder groups involving in the project (ACIAR, 2012b). They are:

- 1) *Farmer-researchers* are those involved directly to research activities of the farming practices and value chain interventions for maize based and temperate fruit systems. They are the core group who are able to compare the research activities with their daily practices and communicate with scientists about their feedback. They are also the ones who most directly benefit from project outcomes.
- 2) *Field scientists* are those from a number of research organisations, who implement the research activities in collaboration with farmer-researchers. They provide technical and scientific input in order to design interventions/models responding to farmers' needs.
- 3) *Commune and district extension officers* who are involved in the project: They are from the community and are the potential influencers/communicators between the project group and local authorities. The project's outcomes will not only likely improve their personal capacities but also complement their work plan and at higher level to potentially influence the extension focus of the district or province.
- 4) *Project coordinator(s)*: are those who work with different research groups and ensure the communication among groups toward overall objectives. They are especially important for this project as it involves multiple research partners and disciplines.
- 5) *Other local farmers* or 'ordinary farmers' who live in the same village where the project is implemented, have similar crop patterns compared to farmer-researchers, but are not involved in project activities. They may potentially learn from the farmer-researchers and be influenced by the research outcomes.
- 6) *The other stakeholder groups are*: local leaders at commune, district and provincial levels; project donor (ACIAR); managers of research partner organisations; other donors which fund for similar projects in the regions; Ministry of Agriculture and Rural Development of Vietnam. To some extent, they are all influenced to /and by the project.

### **Appendix 3: Sample of a completed photovoice album**

(In Vietnamese)

Trường Đại học Queensland  
Khoa Báo chí và Truyền thông

***Câu chuyện hình ảnh***  
***Nông dân làm nghiên cứu ở Việt Nam***

Tháng 8 năm 2013

Mã số người tham gia: .....<sup>6</sup>.....

## Chỉ dẫn

Cảm ơn Ông/Bà đã nhận lời thực hiện câu chuyện hình ảnh về nông dân tham gia nghiên cứu nông nghiệp.

Cùng với cuốn sổ này là một bộ ảnh chụp tại bản Piềng Sàng trong mấy năm qua, liên quan đến dự án nghiên cứu Ngô và Mận mà Ông/Bà cũng là thành viên.

Ông/Bà hãy lựa chọn 30 trong số các bức ảnh trên và dùng chúng để kể về việc nghiên cứu của mình trong dự án Ngô và Mận trong thời gian qua.

Cuốn sổ đi kèm có 30 trang tương đương với 30 ảnh được chọn. Mỗi ảnh dán vào chỗ trống ở một trang.

Mỗi trang có 6 câu hỏi gợi ý cho các chủ đề gần nhất với bức ảnh mà Ông/Bà lựa chọn. Sau khi chọn ảnh và chủ đề phù hợp, đề nghị Ông/Bà viết chú thích ở bên dưới, giải thích tại sao Ông/Bà lựa chọn bức ảnh này.

Tôi rất biết ơn nếu Ông/Bà dành 1 tiếng đồng hồ để chia sẻ câu chuyện hình ảnh này với tôi sau khi hoàn thành. Thời gian gặp mặt do Ông/Bà thu xếp trong một vài ngày tới.

Đây là một hoạt động tự nguyện và Ông/Bà có thể dừng tham gia bất cứ lúc nào. Tuy nhiên công sức và thời gian Ông/Bà đóng góp là vô cùng quan trọng cho nghiên cứu của chúng tôi.

Một lần nữa xin chân thành cảm ơn Ông/Bà!

*Nguyễn Thị Thanh An*

*Học viên chương trình Thạc sỹ về Truyền thông cho Phát triển*

*Trường Đại học Queensland*

Ảnh số 1...

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Cán bộ dự án đang hướng dẫn anh em cắt tỉa cây mận, để cây trở lại, thưa hơn, quả to hơn, nhiều hơn. Trước quả xo, sau 1 thế thì cắt tỉa, đến thế 10 dưới thì cắt lại như cây xoài.



Ảnh số 2.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Chúng tôi lấy tàn dư thực vật đi từ gốc cho vào  
đống ủ phân đất

Ảnh số 3.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tôi muốn xem qua ảnh, làm ruộng đi bán phân NPK,  
đạm, kali lúc các trà xong.



Ảnh số 4.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

☒ Công việc tôi thường làm trong dự án.

☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)

☐ (Những) đóng góp của tôi cho dự án.

☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.

☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

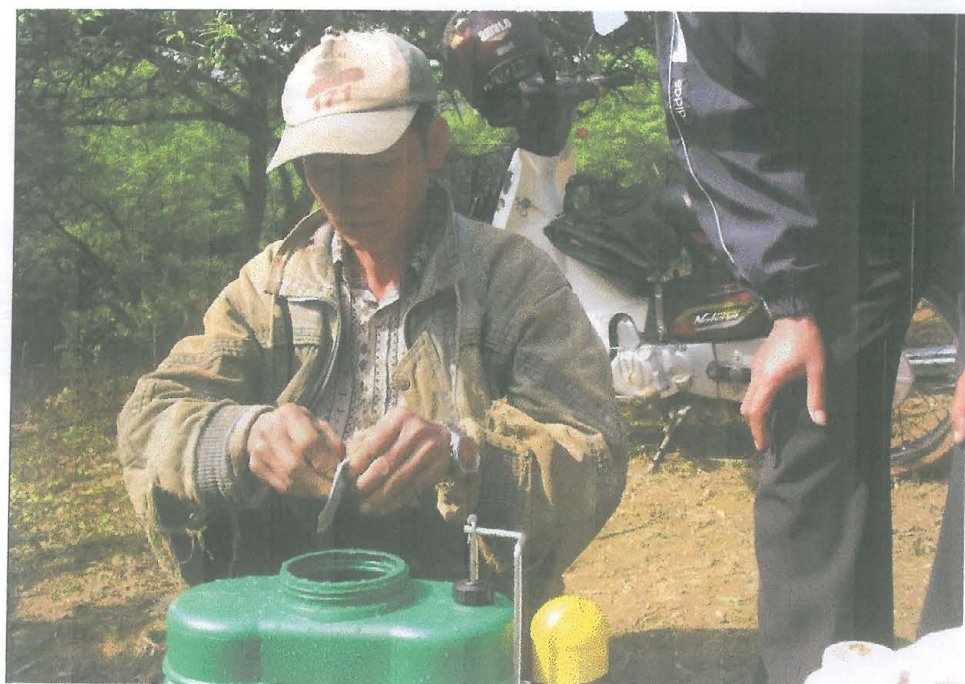
Mặt cần để rẫy cỏ gỏi cho sạch cho thoải mái ăn  
hết phần



Ảnh số 5

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tôi đang pha thuốc trừ sâu cho mận theo hướng dẫn của chủ dự án.  
Rồi ghi vào sổ các pha.  
Trong 1 thố - 2 thố thuốc khi thuốc cần phun đem lên mận mỗi thố 1 lần.

Ảnh số ..6..

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Phụ nữ ở vùng núi cao đã bị dẫn phân bón dư thừa  
Cải thiện môi trường phân bón thay 1m<sup>2</sup>



Ảnh số 7.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Môi trường thay đổi trong hợp tác 1 lần.  
tạo ra ngày/1 lần mở ra đến 40 con  
1 cây. Môi trường dự án treo 1 cây

Ảnh số 8.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Món thu được từ thiên nhiên tại vườn. Khi có kết quả, quả mận to, đẹp hơn, ăn ngon hơn, ít chua hơn.



Ảnh số ....9.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Cb DA lấy đất tro rừng rợ của tôi và làm thí nghiệm

Ảnh số .....10

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Rất dễ dàng chia ô thí nghiệm, nơi gạ đing  
trồng cây ngô là lâu, dân hơg làm thí nghiệm.  
Trồng đi cò 1 ô đit ching, và các ô khác thit  
hệ chit hệ dain của cán bộ DA



Ảnh số .....<sup>11</sup>

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Lần có cho cây g. ngi. tr. x. n. t. t. và  
l. .

Ảnh số ...12

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Bí là cây trồng xen hoặc <sup>tổn</sup> 1 trên ruộng ngô.



Ảnh số 13

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☒ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

ảnh May có vẻ che phủ trên sườn núi để giữ

Ảnh số 14.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☒ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Đi làm về dự từ ngôi nhà họp trao đổi về kỹ thuật. Tôi thường vẫn đi ăn uống dự án.



Ảnh số .....15

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

C.B. Hải là người hướng dẫn chủ đề phân thu  
tôi nên cho mình. Tên tôi và đề tài. K. C.  
Hải và ở trung tâm thì chủ đề tôi ko biết làm.

Ảnh số 16.

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Chị Phương Khương 1 thợ xới 1 lần từ thăm  
điền thử nghiệm, hướng dẫn các thợ cấy ngô và  
cây lúa cấy xen. Tôi từ đó biết cấy  
thực ra và làm cỏ.



Ảnh số ..... 17

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Đi làm rẫy xong, chị tôi cùng anh em đi ăn cơm ở nhà  
và ông Hải. Vừa ăn vừa trao đổi về tiến độ của  
dự án.

Ảnh số ...18

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

PCT xã và K Nợ xã thi đua xây dựng HTHT  
điền thí nghiệm, dự viên anh em, Ông Hải KN  
có nhận xét về KT Nợ và HTHT.

Anh em đến cắt cỏ và vườn năng cho ở PCT xã.



Ảnh số .....19

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Một năm trước 2 lần ông cán bộ dự án là Oleg,  
Bà Sến, Hoàng đến thăm và trao đổi với anh em.  
Đ. Chính hỗ trợ từ màn chủ dự từ chức hợp.

Ảnh số 20

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☒ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tôi đang trao đổi với các bị đả về K.T. trồng và che phủ. Năm đầu tiên xong phải luôn là bị che phủ. Năm thứ 2 thì bị nghỉ ra là bị che phủ rồi mới che phủ. Ở Oleg có nhà, thì thế là Ngõ lên đến hơn,



Ảnh số ..... 21

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☒ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tôi đang trao đổi về các trợ bí, mỗi giờ 3  
cây, thời điểm, ở kiếng. Các bí, DA' đóng ý rợ  
trợ thời là đẹp.

Ảnh số 22

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Hội thảo ở nhà H. B. Bên dự án từ trước và  
bước đầu chủ trì lập KH năm.  
Chủ trì có phát biểu ý kiến.  
PA cho dự án và thu hồi BTVV để làm việc.



Ảnh số ..... 23

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách cạnh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☐ Cách cạnh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tôi dự họp ở Phú Thọ để lấy kế hoạch năm cho  
ĐA

Ảnh số 24

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

☐ Công việc tôi thường làm trong dự án.

☒ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)

☒ (Những) đóng góp của tôi cho dự án.

☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.

☐ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tôi thường chụp ảnh các hoạt động của anh em  
trợ tôi để làm báo cáo gửi cho dự án.  
Mỗi khi đi làm tôi lại chụp



Ảnh số ..... 25

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☒ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Sau dự án chị tôi vẫn tiếp tục trồng cây cho gia đình, tôi hy vọng có như vậy tôi vẫn làm cho

Ảnh số 26

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☒ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Sau đó, tôi vẫn phun thuốc cho mận, nhúng & có thuốc trừ sâu, nên tôi chỉ dùng thuốc thuốc mua ở Mò chèn.



Ảnh số 27

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☒ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Sau dự án tôi vẫn bón phân theo kỹ thuật  
đã học được

Ảnh số ..... 28

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☒ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tôi vẫn chưa phải cho mình, Ngọt ở che  
điều này là đủ nhận thấy và ở đây tài của  
thực vật.



Ảnh số ..... 29

Chủ đề ảnh (đánh dấu vào ô có nội dung gần nhất với một trong các chủ đề sau)

- ☐ Công việc tôi thường làm trong dự án.
- ☐ Hoạt động trao đổi thông tin để thực hiện nghiên cứu của tôi (Với ai? Nội dung gì? Bằng cách nào?)
- ☐ (Những) đóng góp của tôi cho dự án.
- ☐ Cách canh tác (làm vườn, làm nương) của tôi trước khi tham gia dự án.
- ☒ Cách canh tác của tôi sau khi dự án kết thúc.



Lý do tôi lựa chọn tấm ảnh này:

Tiền lương hết thì sẽ tự xen bít và đào  
rào nhẹ để làm phân.

## **Thông tin dự án nghiên cứu**

(bản dành cho nông dân)

1. **Tên dự án:** Tính phù hợp của truyền thông có sự tham gia trong các dự án nghiên cứu nông nghiệp tại Việt Nam: một trường hợp cụ thể.
2. **Nghiên cứu sinh:** Nguyễn Thị Thanh An  
Mobile phone: 0906247068 hoặc email: an.nguyen24@gmail.com.
3. **Mục tiêu của nghiên cứu:** thông qua tập trung vào dự án ‘Cải thiện liên kết thị trường cho các hệ thống nông sản vùng cao bền vững tại Tây Bắc Việt Nam’ (AGB/2008/002) là một trường hợp cụ thể, nghiên cứu này nhằm tìm hiểu những yếu tố quan trọng trong truyền thông có sự tham gia có thể ảnh hưởng tới và phù hợp với các dự án nghiên cứu nông nghiệp để phát triển do ACIAR tài trợ tại Việt Nam. Các mục tiêu cụ thể gồm có:
  - Tổng hợp về hoạt động truyền thông có sự tham gia đã được áp dụng trong các dự án nghiên cứu nông nghiệp do ACIAR hỗ trợ tại Việt Nam;
  - Phân tích các ảnh hưởng của cách tiếp cận “có sự tham gia” đối với hoạt động nghiên cứu của người nông dân và các nhà nghiên cứu trong các dự án của ACIAR;
  - Đánh giá ảnh hưởng của phương pháp tiếp cận “có sự tham gia” đối với các cơ quan đối tác tham gia dự án phía Việt Nam; và
  - Đưa ra khuyến nghị về việc áp dụng các cơ chế truyền thông có sự tham gia trong các dự án tương lai do ACIAR tài trợ tại Việt Nam, cũng trong như các cơ quan Việt Nam là đối tác nghiên cứu của ACIAR.

#### **4. Tham gia vào nghiên cứu này**

Trân trọng kính mời quý vị tham gia dự án nghiên cứu về truyền thông cho phát triển như trình bày ở trên. Việc tham gia nghiên cứu của quý vị là hoàn toàn tự nguyện. Quý vị có toàn quyền từ chối trả lời bất cứ câu hỏi nào hoặc rút khỏi nghiên cứu này bất cứ lúc nào.

Câu chuyện hình ảnh được sử dụng để ghi lại các cách thức trao đổi thông tin và tác động của nó tới hoạt động trồng cây và/hoặc nghiên cứu. Các nông dân tham gia tạo một album ảnh dựa trên 6 câu hỏi được liệt kê trước, sau đó viết chú thích cho mỗi bức ảnh và đánh dấu vào câu hỏi phù hợp nhất.

Nghiên cứu này sẽ được giải thích cặn kẽ bằng tiếng Việt. Nếu quý vị đồng ý tham gia, tôi sẽ cung cấp một bộ ảnh và một cuốn sổ để thực hiện album ảnh. Hy vọng rằng quý vị sẽ hoàn thành album ảnh trong vòng vài ngày tới. Tôi sẽ quay lại để nghe câu chuyện của quý vị thông qua album ảnh này.

Quý vị có thể tin tưởng rằng thông tin riêng tư và cá nhân của quý vị sẽ được bảo vệ trong nghiên cứu này. Thông tin cá nhân của quý vị sẽ không xuất hiện trong bất kỳ kết quả nghiên cứu nào, trừ phi quý vị đồng ý. Quý vị sẽ được gọi chung là “nông dân”. Kết quả nghiên cứu sẽ được chia sẻ và thông tin trở lại để quý vị có thể sử dụng theo ý muốn của mình. Trong đó thông tin các nhân sẽ được bảo vệ vì không gắn liền với tên riêng hay công việc làm ăn của quý vị.

#### **5. Chi tiết liên hệ về Thông tin cho người tham gia và Đạo đức nghiên cứu**

Dự án này tuân thủ các nguyên tắc về kiểm duyệt đạo đức nghiên cứu của Trường Đại học Queensland. Quý vị có thể thảo luận việc tham gia vào nghiên cứu này với tôi theo số điện thoại di động: 0906247068 hoặc email: an.nguyen24@gmail.com. Ngoài ra, nếu muốn trao đổi với cán bộ không tham gia nghiên cứu này của Trường, quý vị có thể liên hệ với người phụ trách Đạo đức nghiên cứu theo số: +61733653924.

## Appendix 4: List of interviewees

(For the semi-structured interviews)

Researchers' Code	Organisation	Gender	Groups	Research Areas
r1	UQ	Male	Senior scientist	Communication/ Coordination
r2	UQ	Male	Senior scientist	Soil science
r3	NOMAFSI	Female	Senior scientist	Maize based system
r4	PPRI	Female	Senior scientist	Fruit based system
r5	TBU	Male	Senior scientist	Maize based system
r6	CASRAD	Male	Senior scientist	Agribusiness
r7	PPRI	Male	Junior scientist	Fruit based system
r8	TBU	Male	Junior scientist	Maize based system
r9	PPRI	Male	Junior scientist	Maize based system
r10	NOMAFSI	Male	Junior scientist	Maize based system
r11	PPRI	Female	Junior scientist	Fruit based system
r12	NOMAFSI	Male	Junior scientist	Maize based system
r13	TBU	Male	Junior scientist	Maize based system
r14	CASRAD	Male	Junior scientist	Agribusiness
r15	TBU	Male	Junior scientist	Agribusiness
r16	UQ	Female	Junior scientist	Coordination
r17	Phieng Luong Commune	Male	Junior scientist	Maize and fruit based experiments in Pieng Sang village

## Appendix 5: A sample of the interview guide

### SEMI-STRUCTURED INTERVIEW GUIDE

(For researchers)

Date (and time) of interview..... at .....

#### Information of interviewee

Name..... Phone number.....

Email:.....

#### Introducing the interview

Research Information sheet (explain and hand over)

Estimating time (40-50 minutes)

Consent form (sign when meet and agree)

Some warm-up questions.....

#### Major questions

- 1) Anh/chị hãy mô tả vắn tắt hoạt động mình thường phải làm nhất trong dự án.

*Brief description of your regular activities under the project*

- 2) Để làm tốt nhiệm vụ của mình trong dự án, anh/chị thường làm việc và trao đổi thông tin với những ai?

*Who do you often contact and exchange information with in order to do your research?*

- 3) Bao lâu trao đổi một lần? Bằng hình thức nào? (gặp mặt/điện thoại/email/họp nhóm/hội thảo/ qua trang web của dự án...) và để làm gì?

*How often do you meet them and what for?*

- 4) Những thuận lợi và khó khăn khi anh/chị làm việc với nông dân và với khuyến nông cơ sở?

*What good and bad about did you face when working with farmers and extension officers?*

- 5) Việc chia sẻ thông tin giữa các cán bộ nghiên cứu trong nhóm của anh/chị và các đối tác khác trong dự án như thế nào? Giữa các cán bộ cùng cơ quan (cùng làm dự án), với cán bộ ở viện/trường khác, với người phụ trách dự án của mình từ cơ quan ở VN, và với người phụ trách ở Úc?

*What about communication among researchers in your group? And among partner research institutes?*

- 6) Anh/chị tâm đắc nhất với (những) đóng góp nào của mình trong quá trình thực hiện dự án?

*What contribution from you to the project that you like most?*

- 7) Nông dân thường có thể đóng góp ý kiến ở những đâu? Dịp nào?

*When and where farmers can provide feedback?*

- 8) Những đóng góp nào của nông dân là có ý nghĩa nhất cho hoạt động và kết quả của dự án?

*What feedback from farmers are most significant for the project?*

- 9) Bản thân nông dân tham gia dự án có thay đổi gì trong cách trao đổi thông tin? Kỹ thuật canh tác? Hay lên kế hoạch mùa vụ của gia đình?

*What changes do you see from farmers in their ways of communication? Farming practices? Or farm planning for their family?*

- 10) Anh/chị làm gì khi nhận được phản hồi từ nông dân?

*What did you do when you receive feedback from farmers?*

- 11) Cán bộ khuyến nông tham gia dự án có thể đóng góp ý kiến ở những đâu? Dịp nào? Với những ai?

*Where and when did extension officers provide feedback?*

12) Những đóng góp nào của khuyến nông là đáng kể nhất cho hoạt động và kết quả của dự án?

*What are extension officers' contribution to the project?*

13) Sau 3-4 năm tham gia dự án, bản thân cán bộ khuyến nông có thay đổi gì trong việc hợp tác với các đối tác trong dự án? Kiến thức về kỹ thuật canh tác? Hay thay đổi gì khác? Hãy cho ví dụ cụ thể nếu có.

*What changes did you see in extension officers ways of working? Technical knowledge? Or other changes. Provide examples.*

14) Những điểm chính mà dự án làm được và chưa làm được cho đến thời điểm này là gì?

*Main outcomes and constraints of the project so far?*

15) Cách lập kế hoạch nghiên cứu của dự án này như thế nào? Có khác với các dự án khác mà anh/chị biết không?

*How did you develop research plan in this project? Is it different from other projects you have done?*

16) Anh/chị có nghĩ rằng cách thức trao đổi thông tin có sự tham gia trong dự án có ảnh hưởng đến kết quả của dự án không? Tại sao?

*Do you think participatory communication affect the project outcomes? Why?or Why not?*

17) Ngoài ra còn có những yếu tố gì khác làm nên thành công/hạn chế của dự án?

*What are the important aspects that can influence the project outcomes?*

18) Nếu so với các yếu tố vừa kể trên thì cơ chế trao đổi thông tin có sự tham gia quan trọng thứ mấy?

*Among those important aspects where do you place participatory communication/participation?*

19) Có gì từ dự án này là hữu ích cho bản thân anh/chị không?

*What benefits did you receive from this project (for yourself)?*

20) Những kết quả nào từ dự án (ví dụ như mô hình kỹ thuật/ cách lập kế hoạch nghiên cứu/ cách thức trao đổi thông tin/mô hình tăng cường năng lực...) mà anh/chị muốn áp dụng nếu anh/chị làm một dự án khác trong tương lai?

*What you have learnt from this project that you want to apply in the future project? (e.g. technology/research planning/ communication model/ capacity building model etc.)*

21) Nếu anh/chị áp dụng cách trao đổi thông tin có sự tham gia của tất cả các bên trong công việc nghiên cứu ở cơ quan (trong một dự án khác do Việt Nam tài trợ) thì anh/chị sẽ nhận được sự ủng hộ của ai? Vì sao?

*If you apply the participatory approaches at your research institute (or in another project funded by the Vietnamese Government), who will support you? Why?*

22) Nếu anh/chị áp dụng mô hình trên thì anh/chị sẽ bị ai phản đối? Vì sao?

*Or who will not support you? And why?*

23) Anh/chị có nhận xét gì khác về phương thức trao đổi thông tin và truyền thông trong dự án này không?

*Other comments on the communication of this project?*

24) Xin trân trọng cảm ơn!/ *Thank you!*