FINAL REPORT 2018

ALiSEA
Agro-ecology Learning alliance in South East Asia

Acronym

AE	Agro ecological
ADB	the Asian Development Bank
DAFO	District Agriculture and Forestry Office
HJA	Huam Jai Asasamak Association
NPAs	Non-profit Associations
INGOs	International Non-government Organizations
SAEDA	the Sustainable Agriculture & Environment Development Association
TABI	the Agro Biodiversity Initiative
VIP	Volunteer Internship Program
VPE	Volunteer Peer Educator
VAP	Volunteer Alumni Program
U of S	University of Savannakhet
XKTC	XiengKhuang Technical College

INTRODUCTION

Huam Jai Asasamak Association (HJA) is a youth-focused non-profit organization with 3 main programs, the: Volunteer Internship Program (VIP), Volunteer Alumni Program (VAP), and Volunteer Peer Educator (VPE). The VIP places rural, ethnic minority and disadvantaged youth in a 12-month volunteer placement with International Non-government Organizations (INGOs), Non-profit Associations (NPAs), etc. The VAP supports VIP alumni ensuring they play a key role developing their rural community. The VPE is a 6-month program for Vientiane youth to expand their knowledge on volunteerism and leadership.

1.1. Background

Traditional agriculture in Laos can be divided into two main practices; lowland farming involving permanent farming communities that employ irrigation and rotational highland farming using slash-and-burn methods; the latter of which is being discouraged by the Laos government to prevent deforestation (Lehmann et al. 2003).

It has long been recognized that one of the most challenging issues with sustainable agriculture is that while food production faces environmental challenges, agricultural systems are also the largest source of anthropogenic environmental degradation (Sachs 2015). The environmental impacts of agriculture have been well documented and include land conversion and habitat loss, biodiversity loss, water quality degradation, excess water consumption, soil degradation and erosion, and human health risks. The degree of the impact is dependent on the agricultural techniques employed and it is generally accepted that organic farming has less environmental impacts than non-organic farming. It is largely accepted that the land-use change from native habitats to agriculture, even which of small scale subsistence agriculture practiced in Laos, is a primary driver in biodiversity loss and environmental degradation.

While the positive environmental benefits of organic farming are largely recognized, the production benefits of non-organic farming often outweigh the risks. For example, although the environmental and human health risks associated with the use of chemical pesticides is well known, their use remains wide-spread, particularly in developing countries where basic food security is a concern. While agricultural expansion has increased food security, aided in lifting millions of people out of poverty and allowed the East Asian region to support some of the globe's fastest developing societies; this growth has also come at a high price resulting in unprecedented soil, water and air pollution in the region (Vientiane Times 2018a). A recent study indicated overuse of pesticides in Laos is common and widespread, with 96 percent of blood tests from nearly 1000 individuals showing signs of pesticide contamination (Reshaping et al. 2018).

Recent studies have also shown that biodiversity loss can reduce crop production (Hooper et al. 2012, Liu et al. 2016). A meta-analysis of published data indicated that species loss levels of 21-40 percent reduced plant production by 5-10 percent; whereas, higher levels of loss (41–60 percent) had adverse effects matching those of acidification, elevated CO^2 levels, and nutrient pollution (Hooper et al. 2012). Liu et al. (2016) found that applying a

biodiversity management approach to organic farming consistently increased crop yields of wheat and maize up to 65 percent over eight years.

Economically disadvantaged communities in Laos are at high risk for exposure to chemical pesticides as many farmers rely on chemical pesticides for greater crop yield but lack education on the proper storage and handling of these chemicals. Furthermore, lack of access to medical care, malnutrition and chronic health conditions make economically disadvantaged communities more sensitive to toxic exposures. The World Bank has indicated that thanks to government and public awareness, the growing recognition of agricultural pollution is yielding results, and believes the region can tackle agricultural pollution through technical solutions and increased political will (Vientiane Times 2018a).

1.2. Project Description

Agroecology is defined by the Food and Agriculture Organization of the United Nations(FAO) as the "science of applying ecological concepts and principles to the design and management of sustainable food systems […emphasizing…] the interactions between plants, animals, humans and the environment […] in harmony with these interactions, applying innovative solutions that harness and conserve biodiversity" (FAO2015). Adoption of agro-ecological practices in Laos is still small scale and organization-driven in nature, with sporadic initiatives lacking synergy among actors. Adoption of agro-ecological practices in the rural farming communities is still a challenge, potentially due to the lack of institutional support and expertise of the farmers to independently initiate components of agro-ecological practices at the community-level. This project aimed to further investigate the potential barriers affecting smallholder farmers' ability to adopt agro-ecological practices and explored the role of extension-based support, natural resources allocation, the *de facto* Laos's land-tenure system and overall influence of agriculture policy.

The HJA 'Identifying Barriers in the Adoption of Agroecological Practices in Rural Laos Project' (the Project) was supported by GRET project and conducted in the provinces of Savannakhet and XiengKhuang with three main objectives:

- Identify significant barriers and constraints in adoption of agroecological practices at the community-level;
- Document potential action and intervention initiatives to facilitate delivery of agroecology practices; and,
- Provide overall strategic approach and roadmap to address adoption barriers.
- Disseminate findings and transition stories to actors and alliances involved in adoption of Agro ecological practice

2. METHODOLOGY

2.1. Project Locations

The project was conducted in two provinces, Savannakhet and XiengKhuang, representing lowland and highland environments respectively. Field visits were conducted in Phaka Village, Kaisonephomvihane District, Savannakhet Province because of easy access by the

university student due to her health status and Yorn, Mone, Vieng, Thurn, villages Pek District, XiengKhuang Province. (Figure1).

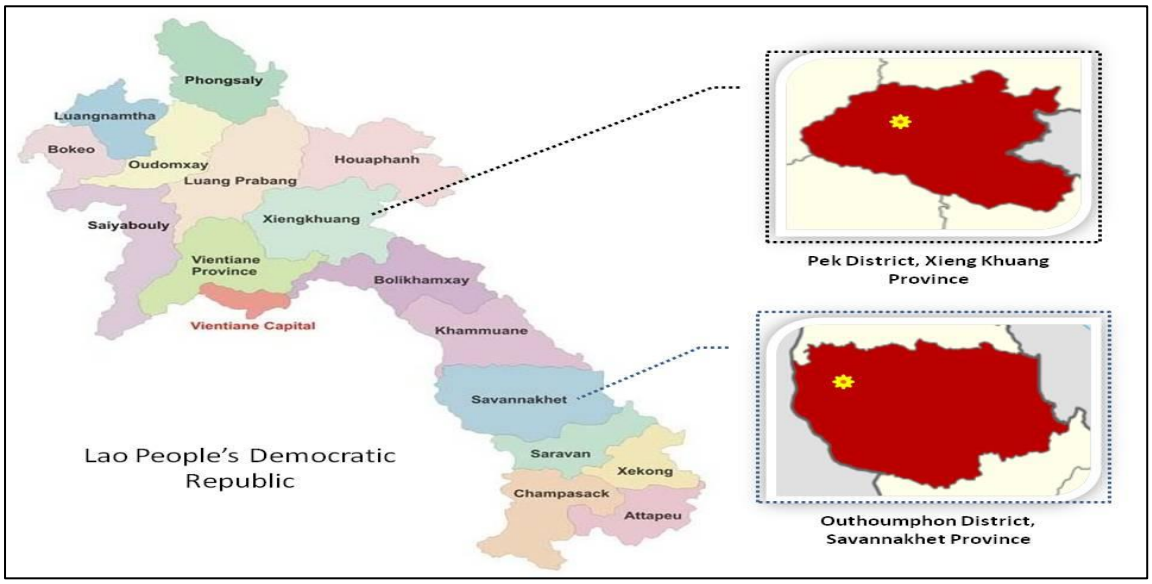


Figure 1: Project locations

2.2. Preliminary Field Visits

A preliminary field visit was conducted in Phaka Village on September 30, 2017by research students from University of Savannakhet (U of S) and XiengKhuang Technical College(XKTC) and their advisers through the HJA VIP, as well as HJA representatives Mr. Jerome Villanueva and Mr. Bounterng Sonevongxay (the research team).The research students, Ms. Orraya Citpasong, a crop science major at the U of S, and Mr. EitXaiphone, an agriculture student at XKTC, are both conducting research on barriers of adoption in agro-ecology as part of their bachelor's/diploma dissertation.

The objective of this visit was to interview farmers that practice agro-ecological farming (i.e., eco-farmers) and conventional farming (i.e., non-eco-farmers). Interviews were conducted to document constraints faced by eco-farmers in the implementation of agro-ecological farming practices and the perceived challenges of agro-ecological farming practices by non-eco-farmers.

The research team visited a community-based organic farm pioneered by 12 households in Phaka Village, Kaisonephomvihane District, Savannakhet Province.Thisagro-ecological farming initiative was supported in 2011 by the Asian Development Bank (ADB) in partnership with the District Agriculture and Forestry Office (DAFO). The community-based organic farm has been financially maintained through the sale of products at a nearby market. The farmers' also accept financial donations in return for organic farming technique demonstrations and accommodation of agriculture students' practicums. Mr. Keo, the head

of the farmers, works with the other farmers to sustain the farms operation and a percentage of the income generated contributes to farm maintenance.

The research team interviewed 29eco-farmers from the community-based organic farmand 36non-eco-farmers to gather preliminary information. Theinformation collected aided in the refinement of research methodology and a comprehensive questionnaire (i.e., questionnaire-based household survey) was developed by the research students with supervision of their advisors (refer to Appendix 1).

2.3. Questionnaire-based Household Surveys

HJA Program Coordinator, Ms. Channaly Manichanh, and Cuso International Volunteer, Mr. Francis OyatOtoo, assisted Ms. OrrayaCitpasongand Mr. EitXaiphone, Ms. Hongnapha and Anna from Alisea also joinedin the questionnaire-based household surveys in PhakaKaisonePhomvihane District, SavannakhetProvince on date30 Mar-1April 2018 with four eco-farmers and Mr. KhambangLuangxay the vice village presidentof Phaka, Mr. SomxayPhengsavanh, a teacher from SVHK University 4 non-eco-farmers. Ms. ChannalyManichanh assisted Mr. SoubanLuangaphai the teacher of vocational collage in Xiengkhuang provincein questionnaire-based household surveys Yorn, Mone, Vieng, Thurn villages, Pek District, XiengKhuang Province on DATES 4-6 June 2018 with 26 eco-farmers and32 non-eco-farmers.

Table 1: Question-based household survey summary

Village	**Date**	**Eco-farmers**			**Non-eco-farmers**		
		Total	Female	Male	Total	Female	Male
Phaka	30 Mar-1 April, 2018	3	2	1	4	3	1
Yorn, Mone, Vieng, Thurn	4-6 June,2018	26	25	1	32	29	3

The surveys were utilized to determine potential adaptation barriers to agro-ecological farming. Savannakhet Province was chosen to represent lowland landscapes and XiengKhuang was chosen to represent highland landscapes to determine if there were compound factors affecting landscape type. The potential adaptation barriers to eco-farming were then attributed to three main environmental factors:

- physical (e.g., limited availability of suitable land)
- socio-cultural (e.g., education, financial restraints, cultural practices, etc.),and
- political and institutional(e.g., government policies)

as shown in Figure 2, following the FAO Framework of Analysis (FAO 1999).

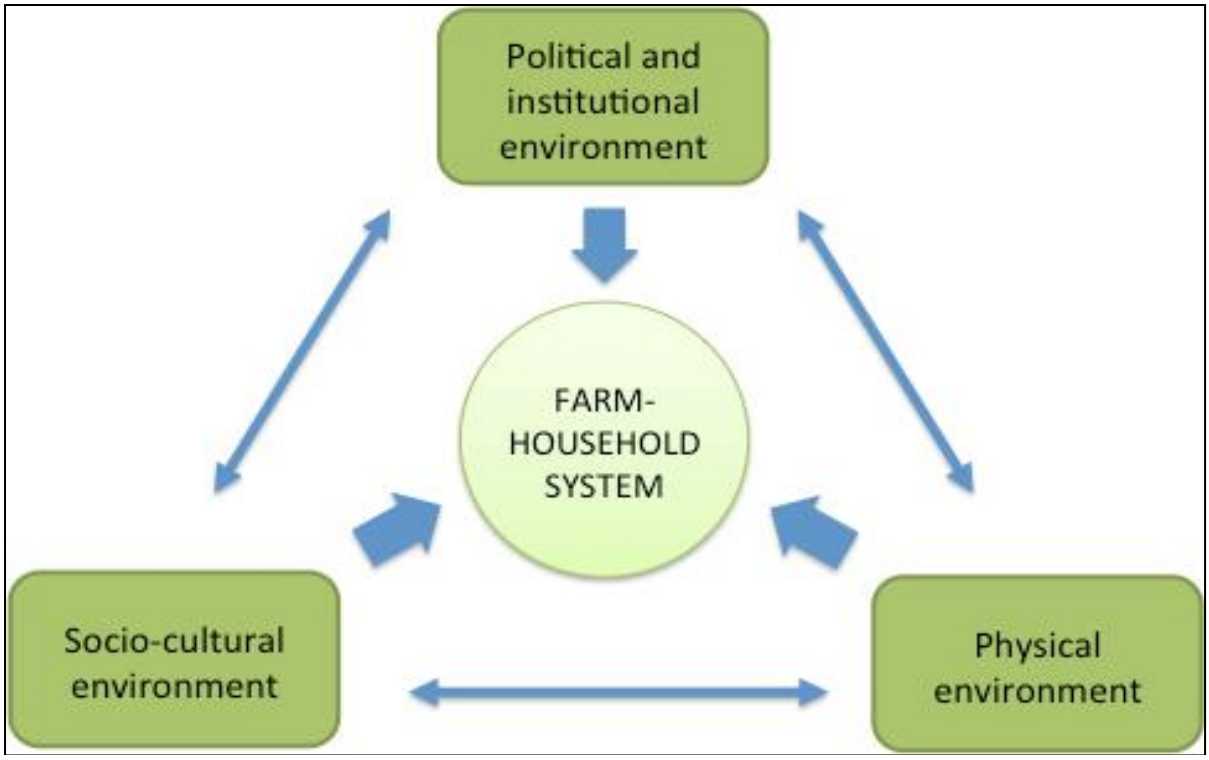


Figure 2: FAO's Framework of Analysis (FAO 1999)

3. RESULTS

3.1 Preliminary Field Visits

Information gathered from the preliminary interviews in Phaka Village is presented in Table 2. The potential adaptation barriers to eco-farming have been attributed to one or more of three environmental factors: (1) physical, (2) socio-cultural, and (3) political and institutional.

Table 2: Potential adaptation barriers to eco-farming in Phaka Village

Key points from interviews / general observation	**Environmental factor**		
	Physical	**Socio-cultural**	**Political and Institute**
The adoption of eco-farming was a result of the initiative supported by ADB in partnership with DAFO.	-	Directly linked to training availability and funding as an incentive.	Directly linked to DAFO as a driver.
Only six out of 600 farmers (one percent) in the village were participating in the	-	Directly linked to limited capital during initial Project stage to	Potentially linked to DAFO as a driver for participant

Key points from interviews / general observation	Environmental factor		
	Physical	**Socio-cultural**	**Political and Institute**
initiative. Respondent was aware of organic farming project in the village but was not able to adopt the technology due to the lack of capital.		only include a small number of farmers.	selection.
Respondent indicated inadequate land area to expand the farm as a constraint.	Directly linked to land availability.	-	Potentially linked to DAFO making land available for agricultural use.
Respondent indicated risks to adopt the newly-introduced farming practices transitioning away from the conventional practices are not practical.	Potentially linked to land availability, if there was more land the risk may be lowered.	Potentially linked to income and/or food insecurity and lack of awareness regarding the benefits of organic practices.	Potentially linked to DAFO or other government agencies as a driver to produce higher yields.
Respondent indicated continued use of agro-chemicals is due to its effectiveness and widespread availability.	-	Directly linked to perception of effectiveness of organic farming pest/weed management. Potentially linked to income and/or food insecurity and lack of awareness and/or availability of alternate options.	Potentially linked to DAFO or other government agencies as a driver to produce higher yields.
Respondent indicated that organic farming is too labor-intensive.	-	Directly linked to perception of labor involved in organic farming practices. Potentially linked to income and/or food insecurity and smaller family households.	Potentially linked to DAFO or other government agencies as a driver to produce higher yields.
The organic farm produces Effective Microorganism		Directly linked education on	Potentially linked to DAFO as a

Key points from interviews / general observation	Environmental factor		
	Physical	Socio-cultural	Political and Institute
(EM) fertilizer, practices mulching and integrated pest management.	-	organic farming techniques and availability of alternate options.	driver.

The information gathered from the preliminary interviews suggests that potential adaptation barriers to agro-ecology are primarily related to socio-cultural and political and institutional environmental factors. The physical factor of land availability was also noted as a key factor.

3.2 Questionnaire-based Household Surveys

Information gathered from the questionnaire-based household surveysin Phaka,Yorn, Mone, Vieng, Thurn villageswere from individuals aged 21-65 years with a range of highest education level of secondary school to college level. The surveyed individuals identified their household incomes per month between 300,000-10,000,000 LAK on landholdings between 0.02-1 ha from the AE business while the non-AE earns from 7,000,000 – 15,000,000LAK. Key points gathered from the questionnaire-based household survey presented in Table 3. The potential adaptation barriers to eco-farming have been attributed to one or more of three environmental factors: (1) physical, (2) socio-cultural, and (3) political and institutional.

Table 3: Potential adaptation barriers to eco-farming in villagePhaka in Savannahkhet and Yorn, Mone, Vieng, Thurn vilages in Xiengkhuang.

Key points from surveys	Environmental factor		
	Physical	Socio-cultural	Political and Institute
All AE farmers indicated that they receive regular training and provided some necessary by equipment on agro-ecology SEADA,Coffey, TABI and DAFO.	Upland	Directly linked to training, equipment, seeds availability as an incentive.	-
The adoption of eco-farming is strongly supported by INGOs and NPAs.	Upland	Directly linked to training availability and funding as an incentive.	Directly linked to institutional drivers.
Consumer demand exists for eco-farming products,	Upland	Directly linked to supply and	-

Key points from surveys	Environmental factor		
	Physical	**Socio-cultural**	**Political and Institute**
considered to be of higher quality and garnering a higher market price.		demand.	
Increased diversity of crops produced through eco-farming.	Upland	Potentially linked to supply and demand and education regarding food security, nutrition and ecological health.	-
Eco-farming initially requires financial input and intensive labor.	-	Directly linked to social capital.	Potentially linked to government incentives.
Eco-farming products are sold in comparably limited and specific market settings (e.g., two days per week).	-	Directly linked to supply and demand.	-
Access to a variety of appropriate seed products is comparably limited.	-	Directly linked to supply and demand.	-
Eco-farming products are contaminated with non-eco-farming products by traders.	-	Indirectly linked to socio-cultural norms and awareness of product specifics.	Potentially linked to government policies as a driver to regulate eco-farming practices and products.
Eco-farming products are not well understood.	-	Directly linked to public awareness of eco-farming product specifics.	Potentially linked to government policies as a driver to promote eco-farming practices and products.
Eco-farms are contaminated with agrochemicals from neighboring conventional farms.	Indirectly linked to education of carrying capacity of crop land.	Indirectly linked to education of proper agrochemical use.	Potentially linked to government policies as a driver to regulate eco-farming practices and products.
Eco-farms are susceptible to insect infestations and soil nutrient depletion.	Indirectly linked to education of	Indirectly linked to education of proper	Potentially linked to government policies as a driver

Key points from surveys	Environmental factor		
	Physical	**Socio-cultural**	**Political and Institute**
	biophysical properties of crop land.	agrochemical use.	to regulate eco-farming practices and products.
Eco-farming vegetable product yield peaks during the dry season, driving down market value; whereas labor demands of wet season rice productivity present challenges to eco-farming production when market demand is the highest.	Directly linked to biophysical limitations (i.e., water supply) of crop land.	Indirectly linked to socio-cultural norms associated with rice farming, education of value chains, and farm-unit labor availability.	Potentially linked to government incentives and policies.

The information gathered from the questionnaire-based household survey suggests that potential adaptation barriers to agro-ecology are primarily related to socio-cultural environmental factors, followed by political and institutional environmental factors. The physical factor of land availability was also noted as a key factor in some instances.

CHALLENGES IN AE PRACTICES

The information gathered from the questionnaire-based household survey suggests that potential adaptation barriers to agro-ecology are primarily related to socio-cultural environmental factors, followed by political and institutional environmental factors. Physical factors of land availability and biophysical properties (e.g., carrying capacity) were also noted as a key factor in some instances.

One common criticism of agro-ecological farming practices is the approach is knowledge intensive, making it difficult for the farmer to manage and consumer to understand (FAO and PAR 2011). These criticisms are supported by the results of this project with the socio-cultural factor of knowledge deficit as a primary barrier to agro-ecological practices. This is further supported by a study recently conducted by Lestrelinet al. (2011) that suggests an individual farmer's experience and awareness of ecological degradation, production costs, social cohesion and leadership were the key factors explaining the variations in adoption of conservation agriculture in Laos, rather than farm-level variables such as capital, labor, age and highest education level (Lestreline al. 2011).

FUTURE PERSPECTIVE OF THE AGROECOLOGY PRACTICES

Skepticism about the feasibility of widespread adoption of agro-ecological farming practices persist with two major geopolitical realities attributed to this constraining thinking, including:

- modern farming in developed countries is highly subsidized, and

- The commitment to ensure that food prices remain low and basic foodstuffs are affordable to the poorest (FAO and the Platform for Agrobiodiversity Research (PAR) 2011).

Criticisms that agro-ecological farming practices cannot meet the required levels of production for an expanding world population are common; and the approach is perceived as labor and knowledge intensive, making it difficult for the farmer to manage and consumer to understand (FAO and PAR 2011). These criticisms are partially supported by this project and other studies (Lestrelin 2011). Numerous studies, however, have demonstrated that the labor required for agro-ecological farming practices is less intensive than conventional farming and more cost effective (FAO and PAR 2011).

Increased complexity of crop associations and rotations has been deemed necessary for integrated pest management and reduced agrochemical use; however, their current market demand and distribution requires a broader transformation of the current agricultural industry (Lestrelinet al. 2011).The development of agro-ecology requires innovation and broadened thinking, with research devoted to biodiversity-rich systems that decrease labor-input as opposed to increased crop yields (FAO and PAR 2011). Conventional farming tends to overlook broader societal benefits such as human and ecological health, economic ecosystem services and improved long-term food security; as low productivity costs provide a false sense that food is inexpensive and does not account for the societal costs (FAO and PAR2011).

CONCLUSIONS AND RECOMMENDATIONS

Organization-led projects on agro-ecological practices have demonstrated to serve as a primary mechanism to promote transition from convention to agro-ecological farming in rural Laos. Future initiatives should strive to be more inclusive and involve as many farmers with the resources available. Organic demonstration farms should be made fully accessible to conventional farmers to strengthen the network between farmers and share the economic and environmental incentives of adopting agro-ecological practices.

We believe that the youth aged 18 – 25 as in provided our program and by the statistics of those 15 AE youth and 14 adult AE; 28 non-AE youth and 8 adults interviewed are key to the sustainable transition of agro-ecology in rural areas and their role in agriculture is pivotal to Laos' sustainable agricultural development. In summary, this study identified the need for increased social-cultural and governmental and institutional change, including:

- increased market access for agro-ecological farming products in both domestic and nearby countries,
- increased availability of agro-ecological farming practice education and training opportunities for Laos farmers,
- increased incentives for agro-ecological farming practices,
- Enhanced government policies, incentives and or enforcement to regulate agro-ecological farming production and products.

The distinctive difference and similarities between lowland and upland for Agro ecology practice is as reflected on the table below:

Savanhnaket (Lowland) at Kaisonephomvihan district	Xiengkhuang (Upland) at Paek district
Financial supported by ADB in partnership with DAFO.	Training and provided some necessary equipment on agro-ecology by SEADA, Coffey, TABI and DAFO.
Few farmers participating doing Eco-farming / organic	Supported by INGOs and NPAs.
Limited of land	High price because of good quality
Risks inrushes thus slow implementation move to AE	Yields good collect /draining in dry season
Diversity crops /plant	Diversity crops /plant
Bad practice continued because of availability of chemicals	Lack of knowledge about AE products?
Labor intensive	Intensive carbon at stont
Good for integrated pest mgh/time	Susceptible to insect
	Limited of mulct days
	Seed availability is limited

Cooperation between HJA, SEADA and two partnerships from Xienghkuang and Savanakhet

HJA, SEADA together with Savannahket University and Xiengkhuang vocational school had an agreement that allowed students from the two training institutions conducted the research on AE and Non-AE in lowland and upland and produced this report. With upland having a low return from AE while lowland are making good profits from AE.

Additional pictures from activities

Conducted the orientation on the questionnaire for two volunteers and a teacher in order to understand the questionnaires and how to interview

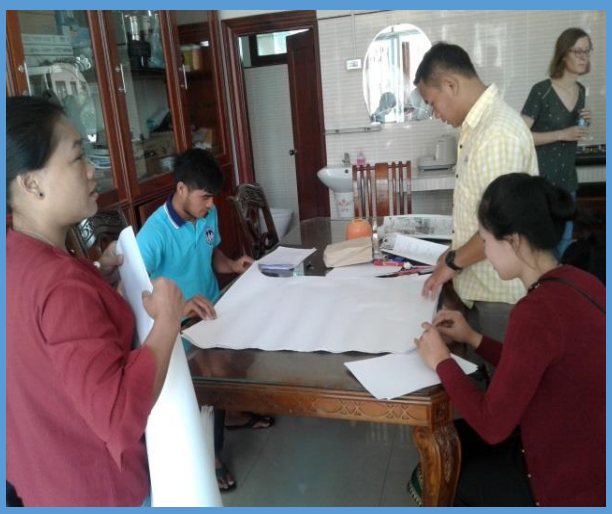
Conducted the orientation about the questionnaire forms to volunteers

Introduced the volunteer team to organic farmers at Pakha village Savannaket province

Volunteers interviewed the farmer which practice in both organic and chemical farming at Phaka village, Kaisonephomvihanh district Savannaket province

Visited organic farming and market at both places Xiengkhuang and Savanakhet

Volunteers, teacher and HJA summary all the information after interview the farmers



Presentation meeting of the Result of studying in identifies significant barriers and constraints in adoption of agroecoligical practices at upland and Low-landscape to HJA's partners from government and CSOs.

The meetings hold on 20th November 2018 at Training Center of Lao Front National Construction, Vientiane Capital Lao PDR.

The participants were 22; 1 HJA volunteer, 1 organic farmer, 1 DAFO representative of district Kaisonephomvihan and 1 teacher from University from Savannakhet. 1 volunteer, 1 DAFO representative of Pack district, 1 teacher from Thecnical-Vocationals mix school from Xiengkuang province CSOs, 1 from ARMI, 1 ACDA, 1 Oxfam, 1 GDA, 2 AliSEA, 1 LYU, 1 farmer from Thongnang organic farming, 2 HJA broad members and 5 HJA staff.

Opening the meeting by HJA board member; Madam Innakone ....., Madam Khamla Luanglath and Mr. Bounlert the deputy director of DAPO Paek Xiengkhuang province.

Volunteer from Savannaket University presented about her end accadimie year /final tested that she focused in 4 areas:

Sumary of the presentation for both Volunteers from Savannakhet and Xiengkuang

Phaka village has established an organic farming production group since January 20, 2011, under the leadership by Kaysanphomvihane district government, the District Agricultural Promotion Department, funded by the ADB, 12 families' initiative group set up the organic farmer producers, Mr. Keo Mooma was a leadership. The group builds their own organic farming regulations/ rules. The 12 farmers had the opportunity to participate in many training the technical of organic farming including learning how to make bio-extracts for production. Since 2011 up to now only 3 families still continue to do the farming on the rest stop due to lack of attention to the implementation of the rules of organic farming production, lack of labor in production and some of farmers too old to do by their own.

There are 400 insensitive organic farmers in Paek district Xiengkhuang province, within 400 farmers, there 99 farmers are actively producing and sell their produces in the organic market two day a week. All the rest are doing for self-consume. The group farming is very organizing. The organic farmers are spear to other districts of Xiengkhuang

1. **Accepted factors Advantages and disadvantages of growing organic farming for both Savannakhet and Xiengkhuang provinces.**

Advantages of accepted factors	Disadvantages or challenging
• Good effects in both producer and consumers' health • The soil is rich of the natural fertilizer • The sale (easy sales of the state-owned enterprises have been promoted and managed in strictly controlled areas). • The organic vegetable are high prices if compare to the general vegetables • Keep good environment • The use of natural resources is extremely beneficial • The vegetables not easy to spoil • Invest less, due to the farmers could produce the natural fertilizers, herbal pesticide • Produce less but get more products • No debt • Government strongly supports • Suitable for house garden	• Take a lot of time to produce/many processes • Need more labors • Lack of widely disseminated advertising of organic agriculture to the general public • There is a difficult process of production • Some species of yields still import from nearby countries • The capacity of producing of the farmers not enough for the demand of the market. • limited markets access (not worldwide market)

2. **Accepted factors Advantages and Disadvantages of General farming (Use of Chemicals) for both Savannakhet and Xiengkhuang provinces.**

Advantages	Disadvantages
• Not much labor doing the farm • Not many steps in planting • Vegetables growth fast results (instant results) • Convenient to use the chemical	• Costly of doing the general farming • Vegetable cannot keep longer • Multiple layers and complex • It affects producers and consumers • Degraded soil and diversities • Destroy the ecosystem • Increase the amount of chemicals • High investment • The products price is low • Get debt due to you have to borrow /buy chemical fertilizer • Need more space.

Experience sharing between organic farmers from Xiengkhuand, Savannakhet, Thongmang organic farming Saythany district Vientiane Capital:

Mr. Keo Mooma said: in the beginning there were 12 families, but now only 3 families left due to lacking of labor, some of them are too old to do it. The organic market is not worldwide, the middle traders mixed the organic vegetables with the general vegetables so it was make the customers confuse and do not trust anymore, but the most important is limited the market and the management.

Mr NorKham; in Thongmang organic farm shared; there were 12 members in the beginning and now there 43 members, 35 women, and there were 13 youth volunteers which they are the secondary students, but they are enthusiastic to start their own organic farm. The Thongmang organic farming group is very well managing; they have a good structure; a board member; director is general management, the deputy director is responsible for finance and marketing, the third one is a technical control, the forth is a vegetable inspector and the fifth is responsibility the cash.

Mr. Bounlerth also shared about the organic farming group at Paek district Xiengkhuang province. The organic farmers increase, due to they are well understand on climate change and as well as their health, and also the market is demand.

Hongnapha: introduction about the small grant of AliSEA to the participant.

Mr. Somxay and Souban the teachers from Savannakhet and Xiengkhuang were interested the small grant to build the demonstration organic house for learning and teaching place for their students. HJA could be their partner to support or guiding them those two schools for small grant proposal writing.

Video clip 5 minutes, of Phakha village by AliSEA which interviewed Mr. Keo Moonma about doing the organic farming, good advantage and disadvantage.

Group photo and closed the meeting .

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Reported by HJA

Annex 1

Appendix 1 - Questionnaire-based Household Surveys

4.1 ແບບຟອມສຳພາດ/Interview form

ປັດໄຈທີ່ມີຜົນຕໍ່ການຍອມຮັບໃນການປູກຜັກອິນຊີ

Factors affecting acceptance of organic farming

ແບບສອບຖາມນີ້ສ້າງຂຶ້ນເພື່ອເປັນເຄື່ອງມືນຳໃຊ້ເຂົ້າໃນການລວບລວມຂໍ້ມູນວິໄຈ ເພື່ອໃຊ້ປະກອບການສຶກສາປັດໄຈທີ່ມີຜົນຕໍ່ການຍອມຮັບໃນການປູກຜັກອິນຊີດັ່ງນັ້ນຊ່ວຍຕອບແບບຈຶ່ງຂໍຄວາມກະລຸນາໃຫ້ທ່ານ , ສອບຖາມຕາມຄວາມເປັນຈິງ ແລະ ຂໍສະແດງຄວາມຂອບໃຈຢ່າງສູງມາຍັງທ່ານທີ່ເສຍສະຫຼະເວລາຕອບແບບສອບຖາມໃນຄັ້ງນີ້ດ້ວຍ.

This questionnaire was created as a tool for collecting research data to know the factors that affect the acceptability of organic vegetable products. We kindly request you to respond to the questionnaire to the best of your ability. Thank you for your response.

I. ຂໍ້ມູນທົ່ວໄປຂອງຜູ້ຕອບແບບສອບຖາມ/General information on respondents

ໝາຍເຫດ :ກະລຸນາໃຊ້ເຄື່ອງໝາຍ ✓ໃສ່ໃນວົງເລັບໜ້າຄຳຕອບທີ່ທ່ານເຫັນວ່າກົງກັບຄວາມຄິດຂອງທ່ານ( ) ຫຼາຍທີ່ສຸດ

Note: Please use the ✓ bracket ( ) on the answer you find most relevant to your thoughts.

a. ເພດSex

ຊາຍ( )Male ຍິງ ( )female

b. ອາຍຸ Age

( )20 ປີລົງມາ/ below 20years old ( )21-30ປີ/Years old

( )31-40 ປີ Years old ( )41-50 ປີ/ Years old

( )51-60 ປີ/Years old ຫຼາຍກວ່າ ( )60 ປີMore than 60

c. ອາຊີບCareer

ພະນັກງານລັດ ( )Government employee ກຳມະກອນ ( ) employee

ພະນັກງານເອກະຊົນ ( )self employed ຄ້າຂາຍ ( )Trader

ນັກສຶກສາ-ນັກຮຽນ ( ) Students ຊາວກະສິກອນ ( )Farmer

ອື່ນໆ ( )Other.....

d. ລາຍໄດ້ຕໍ່ເດືອນ/Income per month

( )Below 1,0ກີບລົງມາ 00,000/ 1,000,00 ( )1-2,000,000 ກີບ

( )200,000,1-3,000,000 ກີບ ( ) 3,00000,1-4 000,000,ກີບ

( )4000,00,1-5,000,000 ກີບ ( )ຫຼາຍກວ່າ/ More than5,000,000 ກີບ

e. ລະດັບການສຶກສາ /Education Level

ປະຖົມ ( )Primary ມັດທະຍົມຕົ້ນ ( )Secondary
ມັດທະຍົມປາຍ ( )/ High School ຊັ້ນສູງ ( )Diploma

ປະລິນຍາຕີ ( )Bachelor's degree
ສູງກວ່າປະລິນຍາຕີ ( )Post graduate degree

f. ສະຖານະພາບຄອບຄົວMarital status

ໂສດ ( ) Single ແຕ່ງງານ ( )Married ( )ໝ້າຍຢ່າຮ້າງ/Widowed / Divorced

II. Difficulty in implementing practiceການຈັດຕັ້ງປະຕິບັດມີຄວາມຫຍຸ້ງຍາກ

a. How many years did you grow crops on your farmland?ເຮົາໄດ້ປູກພືດ ຫຼື ເຮັດກະສິກຳໃນດິນຕອນນີ້ໄດ້ຈັກປີແລ້ວ ?

b. Which type of crop did you use to grow on your farmland?ເຮົາໄດ້ປູກພືດໍະນິດໃດແດ່

c. What method of farming did you apply before AE?ແຕ່ກອນທ່ານໄດ້ນຳໃຊ້ວິທີການປູກຝັງແບບໃດກອ່ນທີ່ຈະມາເຮັດກະສິກຳນິເວດ

d. Have you ever attended AE training? Is it easy to practice it?ທ່ານເຄີ່ຍໄດ້ເຂົ້າຮ່ວມຝຶກອົບຮົມກ່ຽວກັບການກະສິກຳນິເວດບໍ່

e. How did you feel about AE practices? If compared to traditional old method, which one is easy to apply?ທ່ານມີຄວາມຮູ້ສຶກ ຫຼື ຄິດວ່າແນວໃດຕໍ່ການເຮັດກະສິກຳນິເວດ ຖ້າທຽບໃສ່ວິທີດັ້ງເດີ່ມ ແລະ ແບບໃດງ່າຍກວ່າ

f. Your view on AE practiceມຸມມອງ ຫຼື ຄວາມຄິດເຫັນຂອງທ່ານຕໍ່ການຈັດຕັ້ງປະຕິບັດກະສິກຳນິເວດຄືແນວໃດ

III. Economic benefitsຜົນປະໂຫຍດທາງເສດຖະກິດ

a. How much did you use to earn from your farmland before AE? ແຕ່ກ່ອນທ່ານໄດ້ລາຍຮັບຫລາຍປານໃດກ່ອນທີ່ຈະມາເຮັດກະສິກຳນິເວດ

b. How much do you earn per month from your farmland after using AE method?ຫຼັງຈາກໄດ້ມາເຮັດກະສິກຳນິເວດນີ້ທ່ານມີລາຍຮັບສະເລ່ຍເດືອນໜຶ່ງເທົ່າໃດ

c. Is it costly to practice AE?ເຮັດກະສິກຳນິເວດນີ້ມີຄ່າໃຊ້ຈ່າຍຫລາຍບໍ່

IV. ຂໍ້ມູນການຜະລິດProduction information

<u>ໝາຍເຫດ:</u> ກະລຸນາໃຊ້ເຄື່ອງໝາຍ ✓ໃສ່ໃນວົງເລັບ ( )ໜ້າຄຳຕອບທີ່ທ່ານເຫັນວ່າກົງກັບຄວາມຄິດຂອງທ່ານຫຼາຍທີ່ສຸດ

Note: Please use the ✓ bracket ( ) on the answer you find most relevant to your thoughts.

a. ເນື້ອທີ່ນາໃນການຜະລິດ/ Size of farmlandເຮັກຕາ...../ha

ທ່ານມີປະສົບການໃນການປູກຜັກຈັກປີ?/How many years did you grow crops on your farmland?

b. ແຮງງານມີຈັກຄົນ/How many workers do you employ on your farmland?.....ຄົນ/

1. ຊະນິດຜັກທີ່ປູກ/ what vegetable species do you grow?.....

2. ແຫ່ງຈຳໜ່າຍຜັກ?/Where do you sell/market your products?.....

ຕະຫຼາດສົດ( ) / Do you sell fresh products in the market?

ມີຄົນມາຮັບຊື້ຈາກສວນ( )/ How many customer buy your products from the garden?

ສົ່ງຂາຍຕາມຮ້ານຕ່າງໆ( )/ Do you sell to specific Shop or store?

ອື່ນໆ( ) /

ປັດໄຈທີ່ມີຜົນຕໍ່ການຍອມຮັບ Factors affecting acceptance	ລະດັບການຍອມຮັບ Acceptance levels				
	5	4	3	2	1
1. ມີການສະໜັບສະໜູນຈາກລັດຖະບານ No support from the government					
2. ຕົ້ນທຶນໃນການຜະລິດຕ່ຳLow cost of production					
3. ຄົນນິຍົມບໍລິໂພກຫຼາຍ Many people like to consume					
4. ລາຄາສູງ .5High price					
5. ອື່ນໆ/Other.....					

other.....

.....

3. ລາຍຮັບຈາກການຂາຍຜົກສະເລ່ຍໃນແຕ່ລະປີເທົ່າໃດ/ what is your average annual sales of products?
4. ຮູບແບບການຜະລິດກະສິກຳ/Farming practices

ກະສິກຳໃຊ້ສານເຄມີ( )/Do you use agriculture chemicals?

ກະສິກຳອິນຊີ( ) /Do you practice Organic farming?

ອື່ນໆ( )/ Other.....

III. ປັດໄຈທີ່ມີຜົນຕໍ່ການຍອມຮັບໃນການປູກຜົກອິນຊີ

Factors affecting acceptance in organic farm products

ໝາຍເຫດ: ກະລຸນາໃຊ້ເຄື່ອງໝາຍ ✓ໃສ່ໃນຫ້ອງຫວ່າງ 5)= ຍອມຮັບຫຼາຍທີ່ສຸດ 4 ,= ຍອມຮັບຫຼາຍ 3 ,= ຍອມຮັບປານກາງ 2 ,= ຍອມຮັບນ້ອຍ ແລະ 1= ຍອມຮັບນ້ອຍທີ່ສຸດ(

Note: Please mark ✓ empty box (5 = Agree, 4 = fairly agree, 3 = neutral, 2 = disagree and 1 = Does not agree)

- ❖ ບັນຫາ ແລະ ອຸປະສັກໃນການຜະລິດຜົກອິນຊີ

Problems and obstacles in the production of organic vegetables

ໝາຍເຫດ: ກະລຸນາໃຊ້ເຄື່ອງໝາຍ ✓ໃສ່ໃນຫ້ອງຫວ່າງNote: Please use ✓the blank box

ຫົວຂໍ້ຄວາມຄິດເຫັນOpinion topics	ລະດັບແຮງຈູງໃຈIncentive level			
	ຫຼາຍ	ປານກາງ	ໜ້ອຍ	ບໍ່ມີ
1. ການບົວລະບັດຮັກສາຍາກ .1Difficulty in taking care of the crops				
2. ພະຍາດ ແລະ ແມງໄມ້ລະບາດ .2Affected by diseases and insects				
3. ບັນຫາອື່ນໆOther issues.....				

Name of interviewer ຊື່ຜູ້ສຳພາດ: ……..ວັນທີ່ Date:……