## - Making a Difference –

Scientific Capacity Building & Enhancement for Sustainable Development in Developing Countries

Final Report Project Reference Number: CBA2014-13NSYCARANDANG

# CAPACITY DEVELOPMENT OF CLIMATE CHANGE COMMUNICATORS IN VULNERABLE UPLAND COMMUNITIES IN SOUTHEAST ASIA

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"Capacity Development of Climate Change Communicators in Vulnerable Upland Communities in Southeast Asia"

**Final Report submitted to APN** 

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## OVERVIEW OF PROJECT WORK AND OUTCOMES

Minimum 2pages (maximum 4 pages)

#### Non-technical summary

This capacity-building project is a regional collaboration of the member-institutions of the Southeast Asian Network for Agroforestry Education (SEANAFE) in Indonesia, Philippines, Lao PDR and Vietnam, namely: Indonesia Network for Agroforestry Education (INAFE), Philippine Agroforestry Education and Research Network (PAFERN), Lao Network for Agroforestry Education (LaoNAFE), and Vietnam Network for Agroforestry Education (VNAFE), respectively. Building from the achievements, lessons and experiences of the previous projects undertaken by the said project collaborators, SEANAFE embarked on this capacity-building project to ensure the sustainability of communicating the various issues about climate change as well as the farm-level strategies that could enhance the adaptive capacities of the vulnerable upland farming communities in Southeast Asia.

This project trained the potential local communicators of climate change, which included the agricultural technicians, and the smallholder upland farmers; organized a local climate change awareness program where the trained climate change communicators played the lead role in the overall implementation; produced easy-to9-learn and farmer-friendly information materials about climate change; and, developed a policy brief on capacity-development for climate change adaptation.

The SEANAFE Secretariat, which is based in the Philippines, provided the technical and administrative backstopping to ensure the smooth implementation of the project activities. This project was implemented from June 22, 2014 to June 22, 2015.

## *Keywords: climate change communicators, agricultural technicians, smallholder farmers, SEANAFE, adaptive capacities*

#### Objectives

The project sought to:

- 1. Provide training activities for local technicians and selected farmer-trainers on topics revolving around the science of climate change, its issues and impacts on agricultural production, health and the environment, and the appropriate climate change mitigation and adaptation practices;
- 2. Produce easy-to-learn and farmer-friendly information materials about climate change;
- 3. Organize a local climate change awareness program in the most strategic upland community in each collaborating country; and,
- 4. Develop a policy brief on capacity development for climate change adaptation in Southeast Asia.

#### Amount received and number years supported

The Grant awarded to this project was: U\$\$40,000 for Year 1:

#### **Activities undertaken**

The project collaborators organized the National Training of Local Climate Change Communicators eliciting around 20 participants in each of the three collaborating countries and agroforestry networks; organized a Local Climate Change Awareness Program where the trained climate change communicators served as the main speakers/resource persons; produced information materials about climate change – its issues, impacts and adaptation strategies, which are in the form of posters, brochures and flyers; developed a policy brief that will be used in lobbying with the local policy making bodies about enhancing the adaptive capacities of smallholder upland farmers in climate change adaptation. To ensure that the project team has a common understanding about the project methodologies and deliverables, a project collaborators meeting-workshop was likewise organized before the full project implementation. Meanwhile, to complete the drafting of the policy brief, another round of writeshop was organized towards the end of the project implementation to consolidate the project results and come up with sound policy formulations.

#### Results

This project trained about 60 farmers and agricultural technicians in the upland communities in Indonesia, Lao PDR, the Philippines and Vietnam. The training of local climate change communicators focused not only on the issues, impacts of climate change and adaptation strategies, but more importantly, on building the communication and presentation skills of the selected farmers and agricultural technicians, who would become the communicators and disseminators of various aspects of climate change in their respective areas. The National Training of Local Climate Change Communicators also served as an opportunity for the participants to draw up plans for the implementation of the Local Climate Change Awareness Program.

Three Local Climate Change Awareness programs were organized in the three collaborating countries which were all led by the concerned project collaborators and the trained local climate change communicators. These climate change awareness programs dwelt on the causes and impacts of climate change in the human society, in general, and the smallholder upland farmers in particular. In the Philippines, around 90 individuals representing the students, farmers, local government units and state colleges and universities participated in the said awareness programs. Meanwhile, 38\_ participants attended in Indonesia, 42 in Lao PDR, and 35 in Vietnam.

The project collaborators also produced information materials about climate change in the form of posters, flyers and brochures. These were distributed and used during the implementation of the local climate change awareness programs.

Finally, the project team produced a Policy Brief on Enhancing the Adaptive Capacities of Upland Communities for Climate Change Adaptation. This document will serve as the policy instrument of the four collaborating countries and agroforestry networks, in lobbying with their local and national policy makers about the mainstreaming of climate change adaptation in their local and national development programs, respectively.

#### Relevance to the APN Goals, Science Agenda and to Policy Processes

This project was geared towards the capacity development for climate change mitigation and adaptation in Southeast Asia through the development of local climate change communicators from the local communities/field. The project outputs and results are seen to pave the way for more effective policy-making processes primarily at the local level. More importantly, this project promoted the capacity-building of the local people themselves, who are directly affected by the impacts of climate change. Because they were given awareness programs about climate change, then there is a higher chance that the project initiatives in enhancing adaptive capacities for climate change adaptation will be sustained by the local communities, which include both the local policy making bodies, the state colleges and universities, and the local people/farmers. The local climate change communicators that were trained in this project will surely pass on their knowledge to their neighbors, fellow farmers and family members, thereby, ensuring sustainability of the achieved outputs.

The policy brief that was developed by the project collaborators will be a very good instrument in local policy making processes. As we all know, policy formulation, nowadays, have also become evidence or science-based. The Policy Brief contains the climate change scenario at the regional and local levels, the earlier and current initiatives in climate change adaptation, and the proposed policy measures for enhancing the adaptive capacities of upland communities for climate change adaptation. These data can be used by the policy makers as references in crafting the specific and local policies about climate change adaptation and mitigation in the countries that participated in the project.

#### Self evaluation

The project collaborators believed that they have successfully implemented the project not only based on the short-term or immediate outputs that this project has generated, but more importantly the long-term benefits that could be spurred by this project. Specifically, the project collaborators argued that they have succeeded in the project implementation on the basis of the following indicators:

- a) *Effectiveness* the project objectives that were lined up in the project have all been achieved by the project collaborators based on the planned activities and corresponding timelines;
- b) Efficiency the planned activities were carried out by the project collaborators on time, and using the project funds that were allocated to the project. The project outputs that were generated by the project did not entail additional costs. The project collaborators managed to conduct additional activities such as the writeshop for policy brief, without requiring additional costs from the funding institution;
- c) *Relevance* the project activities are all geared towards enhancing the adaptive capacities of the upland communities for climate change adaptation. This is a relevant action considering that the impacts of climate change in the agriculture sector, particularly among the smallholder upland farmers, are very much glaring. There is nothing that can be done to get away with climate change, but to adapt to its effects and impacts. Therefore, capacity development in the form of training and awareness programs is but a more relevant action;
- d) Sustainability the project initiatives revolved around capacity-building of the key players in climate change adaptation. These included the smallholder farmers who are directly affected by the impacts of climate change; the state colleges and universities who are the source of technical inputs that would address the climate change-related problems of the farmers; and, that they are also the sector that craft research and development programs on the basis of the

field-level scenario; and the local government units who have the capacity to execute local policies on climate change adaptation. Engaging these three sectors already would ensure sustainability of the project initiatives. Moreso, the project dwelt on capacity building which was geared towards enhancing the natural, social and human capitals of the upland communities.

#### Potential for further work

This project has the potential for scaling-up in other upland communities in the four collaborating countries. Generally, the agriculture in these four countries is dominated by the smallholder upland farmers, and therefore, the need to scale-up and promote this kind of capacity-building projects to the many upland communities. The lessons and experiences, as well as the relevant outputs of this project can be used by the project collaborators in the future capacity development activities.

In a broader context, the partnership that was built by this project among the local stakeholders, namely: farmers, local government units and state colleges and universities can be harnessed to sustain and scale-up the project. They can form a Local Climate Change Team, which is composed of representatives from the farmers' group, the local government units, and the state colleges and universities. This Local Climate Change Team will continue to communicate and disseminate climate change-related information to the different stakeholders in their community, and nearby communities; and, lobby with the local policy makers as regards mainstreaming climate change adaptation in their respective local development programs, and in instituting programs that would enhance the adaptive capacities of the smallholder farmers for climate change adaptation.

#### Acknowledgments

The project collaborators acknowledge the academic institutions that served as the local collaborators in the project implementation. These include the Lampung University in Indonesia; National University of Laos in Lao PDR; University of the Philippines Los Banos-Institute of Agroforestry, and the Kalinga State College in the Philippines; and, the Tay Nguyen University in Vietnam. The collaborators also recognize the active participation of the local government units and the farmers in the implementation of the national training for climate change communicators, and the local climate change awareness programs. The SEANAFE Secretariat is also acknowledged for the technical and administrative supports provided in the entire project implementation.

## TECHNICAL REPORT

Minimum 15-20 pages (excluding appendix)

#### Preface

The project on "Capacity Development of Local Climate Change Communicators in Vulnerable Upland Communities in Southeast Asia" is geared towards enhancing the adaptive capacities of the different local stakeholders in climate change adaptation, particularly in the upland communities. This work focused on the training of local climate change communicators who would serve as the local trainers and disseminators of climate change-related issues and developments among the local community members; and, the continuous awareness building among the local stakeholders about climate change issues, causes, impacts and adaptation strategies. Among the outputs of this project are the information materials on climate change, and a policy brief that would be used as an instrument in lobbying with the local policy makers.

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#### **1.0 Introduction**

This project was a collaborative undertaking among the member-institutions of the Southeast Asian Network for Agroforestry Education (SEANAFE). These included the Philippine Agroforestry Education and Research Network (PAFERN), Indonesia Network for Agroforestry Education (INAFE), Lao Network for Agroforestry Education (LaoNAFE), and Vietnam Network for Agroforestry Education (VNAFE). This project aimed to develop the capabilities of at least 15 farmer-leaders as climate change communicators in the selected upland communities in each of the four collaborating countries. This project also intended to provide training activities for local technicians and selected farmer-trainers around the science of climate change – its issues, causes and impacts on agricultural production, health and the environment, including the appropriate climate change adaptation practices; produce easy-to-learn and farmer-friendly information materials about climate change; and organize a local climate change awareness program in the most strategic upland community in each collaborating country with the local climate change communicators as the lead persons.

The project objectives were achieved by the collaborators by implementing activities such as the National Training of Local Climate Change Communicators for at least 15 farmer-leaders and agricultural technicians; Local Climate Change Awareness Program; and, the development of climate change information materials. The project collaborators also developed a policy brief that is addressed to the local policy-making bodies that will pave the way for scaling-up this capacity development initiative. The project ran for one year, with technical and administrative backstopping from the SEANAFE Secretariat.

From its concept and methodologies, this project was very much in line with the APN's goal of capacity development. In this project, the capacity-building of the local people themselves will ensure that their respective communities which are vulnerable to the impacts of climate change, would become aware about the issues, and therefore, could enhance their preparedness and adaptive capacities as well. This project was also anchored on the concept of sustainability considering that the direct partners are the local communities. The local climate change communicators that were trained in this project would surely pass on their knowledge and skills to the other people in their communities, including their family members, which also ensure sustainability.

This project likewise promoted awareness among the policy makers particularly at the local level. The Local Climate Change Awareness Program did not only draw the attention of the different stakeholders about climate change, but more importantly the policy makers at the local level. The policy brief that was produced by the project collaborators would enhance the awareness of the local policy makers, which can pave the way for the institution of local climate change adaptation programs.

Finally, this project encompassed the three pillars of sustainable development. On the environmental aspects, the training of local climate change communicators enabled them to become aware about the issues of climate change, and how humans contribute to global warming as well as becoming aware about the different climate change mitigation and adaptation strategies. These are the environmental knowledge that will be passed on or re-echoed by the local climate change communicators in their respective communities. On the socioeconomic dimensions, on the other hand, this capacity-building program created awareness among the local policy makers and the general public about climate change issues and climate change mitigation and adaptation strategies, which could pave the way for the development of environment-friendly, socially and economically-viable supportive technologies for the agriculture/farming sector.

## 2.0 Methodology

- a) **Project Collaborators' Meeting.** The project team convened a meeting on August 7-8, 2014 in Jakarta, Indonesia to level-off the project objectives, methodology,, activities, deliverables and administrative concerns. The project team formulated the criteria for selecting the participants for the national training of local climate change communicators. This set of criteria served as a guide to ensure that the project goals and objectives were met. These criteria were as follows:
  - Awareness about climate change
  - Willingness to be trained and to share the knowledge gained from the training
  - Ability to speak in front of many people
  - Farmers with proven ability to communicate as a trainer
  - Gender consideration (at least 30% of the participants should be female (in the case of Indonesia) for APN-funded participants
  - Participants' representation (40% should be technicians and 60% should represent the farmers' group
  - Technicians should be regular government employees/staff
  - Technicians and farmers should come from the same geographical area
  - The technicians should represent institutions or agencies with existing or potential climate change adaptation programs
- b) National Training of Local Climate Change Communicators. This training generally aimed to develop the capability of the local farmers and agricultural technicians as climate change communicators in their respective communities. Specifically, this training: discussed the issues on climate change with emphasis on its causes, evidences and impacts; drafted/initially developed farmer-friendly climate change information materials; and, provided the farmers and agricultural technicians with the knowledge and skills in basic communication particularly their presentation and facilitation skills. This two-day training revolved around the following methodologies:
  - <u>Lecture-discussion</u>, which dwelled on the science of climate change, with emphasis on the causes, evidences/indications, and impacts; agriculture-related climate change adaptation strategies; and basic concepts and principles of communication
  - <u>Workshop</u>, which served as an opportunity for the participants to articulate their concepts about climate change, as well as their own climate change adaptation strategies being employed in their farm. The initial output of their workshop were used as inputs in the development of production of climate change information materials
  - *Field visit,* which enabled the local farmers and agricultural technicians to visit and observe the farms that serve as demonstration areas of climate change adaptation strategies. These demonstration farms were established in the project CBA2013-10NSYVisco.
  - <u>*Planning*</u>, which provided an opportunity for the training participants to plan for the implementation of the Local Climate Change Awareness Program, where they would serve as the lead resource persons/speakers.
- c) Local Climate Change Awareness Program. After training the potential local climate change communicators, the local climate change awareness program was organized in the four collaborating countries. This activity generally aimed to create public awareness about climate change, particularly on its causes and impacts, as well as the different climate change adaptation

and mitigation strategies that are being employed/practiced by the farmers, local government units, and the academic institutions. Specifically, this awareness program served as a venue for the selected potential local climate change communicators to re-echo the learning that they have gained from the National Training of Local Climate Change Communicators; and provided an opportunity to exhibit and display the different easy-to-learn, simple and farmer-friendly information materials about climate change adaptation strategies for possible adoption by the other farmers.

- d) **Production of Climate Change Information Materials.** The participants of the national training of local climate change communicators including the project collaborators have developed and produced information materials about climate change. These were in the form of posters, flyers and brochures. These were all exhibited, displayed and distributed during the Local Climate Change Awareness Program.
- e) Development of a Policy Brief for Enhancing Adaptive Capacities of Upland Communities in the Philippines. The project collaborators held a writeshop to consolidate the project outputs and results. These project outputs, together with the outputs of the earlier initiatives of CBA2013-10NSYVisco, served as basis in drafting the Policy Brief for Enhancing the Adaptive Capacities of Upland Communities in Southeast Asia. This policy brief will serve as the instrument of the project collaborators and concerned groups/stakeholders in lobbying with their respective local policy makers towards the institution of climate change adaptation programs in their local development programs.

## 3.0 Results & Discussion

Explain your actual findings, including figures, illustrations and tables. Make comments on the results as they are presented, but save broader generalizations and conclusions for later. Discuss the importance of your findings, in light of the overall study aims. Synthesize what has (and has not) been learned about the problem and identify existing gaps. Recommend areas for further work.

#### A. NATIONAL TRAINING OF LOCAL CLIMATE CHANGE COMMUNICATORS

#### The Participants

A total of 117 upland farmers and agricultural technicians were trained as local climate change communicators (Table 1). In the Philippines, the 20 participants represented the following: the upland farmers from the upland communities of Tabuk, Calaccad, Balbalan and Rizal, Kalinga; the agricultural technicians from the local governments of Tabuk, Balbalan and Rizal, Kalinga; and, the faculty members from the Kalinga State College. Meanwhile, 30 farmers from Batu Tegi KPHL in Lampung Province were trained by the project collaborators in Indonesia.

In Vietnam, a total of 33 participants attended the training. These included the chair and vicechairpersons at the district, commune and village levels; technical staff at the district and commune level; chairpersons of the association of farmer and women at the district, commune and village level, chair of the Board of Communities Forest Management; and, key farmers from the villages of Tuy Duc District. The training was held in Tuy Duc District, Dak Nong Province in the Central Highlands of Vietnam. In Lao PDR, four representatives from four communities of Paksune, Haisaikham, Pakpang and Pakham villages of Pakading District of Bolikhamxai Province, together with 10 representatives from the cluster village group, district agriculture and forestry staff and ten from the provincial agriculture and forestry and staff served as the participants of the national training of local climate change communicators.

Collaborating countries	Participants	Total
Indonesia	30	
Lao PDR	24	117
Philippines	20	
Vietnam	33	1

#### Table 1. Number of training participants in each of the four collaborating countries

#### Potential climate change adaptation strategies

In Indonesia, the resource persons discussed the impacts of climate change to the agriculture sector. For crop production areas, among the impacts were land conversion, reduction in the area for paddy rice production due to limited water source, relocating farms from the drylands to the sloping areas, increased damage in the irrigation network, irregular schedule of planting/cropping patterns, and; increased incidence of pests and diseases. Meanwhile for horticultural crops, impacts include the uncertainty in the harvesting of fruits; and, delays and interference in post-harvest processing.

To be able to address these climate change-related issues and concerns, there have been a number of mitigation efforts that are being employed by the concerned agencies. These include setting a puddle on paddy fields; proper and efficient use of fertilizers; livestock manure management; efficiency in the use of fuel in agricultural activities; prevention of forest land conversion; and, utilization of open land for decreasing air temperature. On the other hand, climate change adaptation measures included the use of prime seeds that are resistant to drought; and, effective use of water and fertilizer. There are also efforts now of developing models that would predict the weather/climate and thus, would help in adjusting the planting schedules of the farmers.

In the forestry sector, on the other hand, the Batu Tegi Forest Management Unit (FMU) has developed forest management strategies in their region for the next 10 years. These included the: a) realization of strong and competitive community institution; b) establishment of multistakeholder cooperation and increasing community participation in forest management activities; c) revitalization of the forest and optimization of forest utilization; and, d) marketing of forest products.

In Vietnam, the training focused on the participants' experiences about the impacts of climate change in their areas. These included the water shortage, more storms and floods, change in temperature and humidity, and forest degradation. These were considered to lead toward reduced productivity and yield of crops, as well as increase in insect and disease occurrences that affect the crops and livestock. An invited resource person tackled the different adaptation and mitigation strategies for climate change impacts.

In Lao PDR, the training dwelt on sharing experiences about the causes and effects of climate change in the agricultural production of farmers in the four villages of Pakading District. Lecture-discussion that was provided by the resource speaker highlighted a number of case studies, showing the role of agroforestry in climate change mitigation and adaptation. To be able to share their learnings and experiences from the two-day training, the participants allotted one day for the development of climate change information materials, and planning for the actual implementation of the local climate change awareness program.

In the Philippines, the resource persons stressed that mitigating climate change impacts can be done by accelerating use of renewable energy sources; more efficient lighting, appliances and equipment; improving the cooking stoves; reducing the use of cars and vehicles; replacing regular light bulbs with compact fluorescent light bulbs; turning-off appliances and electrical switches when not in use; use of organic fertilizers in agricultural production; establishment of more vegetation that would sequester greenhouse gases; planting of more trees; and improving the land use to agroforestry. As Watson et al (2000) noted, agroforestry can sequester carbon by 3.10 tons per hectare per year, compared to croplands and forestland which can only sequester 0.36 and 0.31 tons of carbon per hectare per year, respectively.

The on-farm demonstration of simple yet appropriate climate change adaptation strategies were also highlighted during the training. Among those being showcased included the establishment of a water impounding system which serves as the source of water for irrigating the crops during the dry season. Water is the major problem of the upland farmers who are generally engaged in rainfed agriculture in the Philippines. To further conserve soil and water the demonstration area also shows the integration of native fruit and forest trees as hedgerows in steeper slopes. The visit to the on-farm demonstration area offers opportunities for other farmers to employ the same climate change adaptation strategies, especially that they share similar socioeconomic and biophysical conditions with the farmer-cooperator.

## Prospects and challenges in capacitating the communicators in enhancing adaptive capacities for climate change adaptation

Communicating climate change-related information was emphasized as the best strategy to be able to create or effect changes among the concerned stakeholders. In the case of Indonesia, for instance, the resource person argued that while implementing climate change mitigation and adaptation practices are necessary to be able to address the impacts of climate change, it requires change among the farmers and individuals. The change could be attitudinal/psychological and behavioural. Thus, the communicators should be able to have a grasp about the principles of change management – that change should be gradual, rather than abrupt, and needs continuous communication, information dissemination and capacity-building.

Meanwhile, in Vietnam the project collaborators believed that the training of local communicators is still a new initiative. There are advantages, therefore, of training these individuals. First, they have the knowledge about the local conditions, and practical experiences as well. Second, they can easily communicate with the other community members because they share the same symbols and languages, and therefore, they can reflect on the needs and aspirations of the communities. However, there are also challenges when training local climate change communicators. Their facilitation and communication skills are limited particularly for the first-timers, and because of their geographical location, which is mostly inaccessible to media and other means of information, they have limited access to recent information about climate change.

With these concerns, therefore, there is a need to provide communication facilities to the local climate change communicators. In addition, periodic training should be organized to further enhance their knowledge and skills.

In the Philippines, where most of the training participants are farmers, there were observed tendencies to get intimidated with their co-participants from the local government units, and the facilitators as well. This is understandable because of their limited exposure to such kind of

activities. But, through time, however, the farmers started gaining confidence as evidenced by their active participation during the discussion and presentation of their workshop outputs by themselves. Their concepts about climate change, and how climate change has created impacts on their agricultural production were all well-articulated during the lecture-discussion and presentation of their workshop outputs. This only confirmed that indeed, the farmers are the best source of on-the-ground experiences on climate change. Because they have the direct experiences and observations, there is also a higher chance for them to employ climate change adaptation strategies, especially considering that agriculture is their main source of livelihood. Consequently, the farmers would be the best channel of communicating climate change information to the other farmers within the community.

The farmers have shown their interest and willingness to share their ideas, concepts and field experiences that are related to climate change. The challenge now is to further train and build the capacities of these farmers as local climate change communicators. Support system such as providing them access to climate change information; training them to document the climate change impacts and their corresponding climate change adaptation strategies, enhancing their communication skills, and tapping them as speakers or resource persons in climate change forum and conference, are necessary to be able to sustain their interest.

#### B. LOCAL CLIMATE CHANGE AWARENESS PROGRAM

#### The Participants

Overall, the local climate change awareness programs conducted in the four collaborating countries elicited a total of 214 participants (Table 2). INAFE organized the Local Climate Change Awareness Program on January 27-28, 2015 in Datar Lebuay, Tanggamus District with a total of 40 participants. This activity was implemented in collaboration with the Forest Service of Lampung Province and Tanggamus District Forest Service. While the trained local climate change communicators helped in the facilitation and discussion, this activity was also participated by the experts on climate and meteorology of the Forest Resources Management, as among the speakers/resource persons.

In the Philippines, a total of 90 participants attended the local climate change awareness program held on April 19, 2015 in Tabuk, Kalinga. These participants represent the farmers from the upland communities, the technicians of the local government units, faculty members of the local state college, and the students. This activity was implemented in collaboration with the Kalinga Apayao State College.

In Vietnam, around 35 attended the activity The trained local climate change communicators were grouped into five to take the lead in the organization of the local climate change awareness program within the Tuy Duc District. These included the Community Forest Management Board of Bu Nor Village, Quang Tam Commune; Community Forest Management Board of Bu Koh Village, Dak R'Tih Commune; Head and Women's Association of Village Bu No; CPCs Quang Tam, Quang Truc, Dak R'Tih; and the Tuy Duc staff.

Finally, in Lao PDR, the local climate change awareness program was implemented in Paksoun Village with a total of 42 participants representing one representative each from the households in the village. The trained local climate change communicators acted as speakers and facilitators in reechoing the causes and impacts of climate change, including the different climate change adaptation strategies that could be employed by the farmers and the households.

#### Table 2. Number of participants in each of the collaborating countries.

Collaborating countries	Participants	Total
Indonesia	40	
Lao PDR	42	214
Philippines	97	214
Vietnam	35	

#### **Topics Discussed**

The local climate change awareness program centered on the issues about climate change – its causes and contributions of the human society to climate change and global warming; the impacts of climate change in the daily lives in general, and in agricultural production, in particular; as well as the different climate change adaptation strategies.

#### Relevance of the Awareness Program

From the remarks of those who have participated in the local climate change awareness program, the project collaborators have validated the relevance of organizing this kind of event. Foremost, the audience/participants were ordinary people without any technical know-how about climate change. Overall, this activity served as an eye opener to the ordinary people/public that indeed, each individual at the household level has contributions to climate change, such that even in their simple household chores such as cooking and cleaning the surroundings/backyard through burning, they already contribute to gas emissions. More importantly, the local climate change awareness programs have provided reminders to the individuals and community members, that each of them can do a simple practice or strategy to help mitigate climate change impacts.

#### C. PRODUCTION OF CLIMATE CHANGE INFORMATION MATERIALS

Communicating climate change-related information requires information materials and visual aids that would help create awareness among the stakeholders. These information materials should be simple that could be easily understood by a layman. Thus, the project collaborators in the four countries came up with their own versions of the climate change information materials that were used during the conduct of the Local Climate Change Awareness Programs. The development and production of these information materials were done in cooperation with the participants or trained local climate change communicators.

In Indonesia, for instance, the project team came up with posters (Figure 1) that highlight the causes of climate change, and how the impacts could be addressed using the climate change mitigation and adaptation strategies, and a 2015 calendar (Figure 2) that was distributed during the awareness program. The calendar was thought of as this is regularly being seen at homes, and therefore, the household members could always be reminded about climate change.



Figure 1. A poster highlighting the various issues in climate change in Indonesia



Figure 2. A 2015 calendar highlighting climate change

In the Philippines, around 10 posters about climate change were produced by the project collaborators and the potential local climate change communicators. These posters highlighted the causes and impacts of climate change (Figures 3 and 4); and the different climate change adaptation strategies that could be adopted by the concerned stakeholders. These climate change adaptation strategies are either farmer- or institution-initiated practices. The highlights of the APN-funded projects were also included in these posters (Figures 5, 6, 7 and 8). In addition, the project team reprinted the brochure about climate change and agroforestry (Figures 9 and 10). As part of the souvenir to the participants, the project team also produced bookmarks containing climate change-related information (Figures 11, 12 and 13).



Figure 3. Causes and effects of climatechange

Figure 4. A challenge to fight climate change

GLOBAL

E IT A FEW MORE YEARS AND... ONE WILL HAVE TO GO TO HELI WILL COME TO US



Figure 6. Institutional initiatives towards enhancing adaptive capacities for climate change adaptation





Figure 7. A poster highlighting the role of agroforestry in climate change mitigation and adaptation



Figure 8. A poster highlighting the simple ways of mitigating the effects of climate change



Figure 9. A poster highlighting the need for climate smart agriculture to adapt to climate change impacts



Figure 10. A five-fold brochure highlighting the role of agroforestry in climate change mitigation and adaptation

In Vietnam, the participants and collaborators have come up with three posters dwelling on climate change and its impacts (Figure 11), and mitigation and adaptation strategies (Figures 12 and 13).



#### BIẾN ĐỔI KHỈ HẬU

Figure 11. Causes and impacts of climate change

Figure 12 Climate change mitigation and adaptation strategies



# TÁC ĐỘNG CỦA BIẾN ĐỔI KHÍ HẬU ĐẾN NÔNG LÂM

Figure 13. A poster highlighting the need for climate smart agriculture to adapt to climate change impacts

Nhôm tư vấn Quân lý tài nguyên rững & mối trường – FREM, Trường Đại học Tây Nguyên

In Lao PDR, the participants of the training of local climate change communicators consolidated the results of group discussions and training materials. These were developed into leaflets and posters. The participants believed that these information materials can easily be understood by the farmers and participants of the local climate change awareness program. These materials were disseminated to the target villages, village clusters and district and provincial agriculture and forestry offices in Pakading District. These materials are shown in Figures 14 -17.





Figure 14. A poster highlighting the causes of climate change

Figure 16. A poster showcasing the role of trees in climate change adaptation



Figure 16. A poster highlighting agroforestry as a climate change adaptation strategy



Figure 17. A poster comparing two types of communities: the one which is engaged in agroforestrt, and the other which is not

#### D. DEVELOPMENT OF A POLICY BRIEF

Based on the findings of CBA2013-10SYVisco, the smallholder farmers, particularly in Indonesia, Vietnam and the Philippines, have already been observing the changing climate over the last five years. They have their own field-level evidences such as the delay in the onset of the rainy season, long dry spell, and, heavy rains and stronger and more frequent typhoons during the rainy season. They may have no weather instruments nor technical know-how on climate change and the weather system, but they were confident in these claims, primarily because their crop production is highly influenced by rainfall and temperature.

The smallholder farmers have already been experiencing the impacts of climate change in their agricultural production. In the case of the Philippines, these included the decline in the crop production brought about by the higher incidence of pests and diseases, stunted growth of crops, increase in the labor costs, and delayed fruiting and livestock mortality. In Indonesia, the delay of crop harvest, decline in the crop yield, reduced quality of the harvest, and increase in the incidence of pests and diseases were among the climate change impacts that have been observed by the farmers. Meanwhile, the upland farmers in Lao PDR have already observed the increased incidence of pests and diseases. Finally, in Vietnam, among the observed impacts are the change in the distribution, growth and seasonality of non-timber wood products; decline in crop productivity; and, increasing incidence of pests and diseases.

The climate change–related problems have been reiterated by the farmers during the National Training of Local Climate Communicators, and the Local Climate Change Awareness Programs. Recognizing the fact that there are millions of smallholder upland farmers who may have been experiencing similar scenario in their agricultural production, the project collaborators have developed a *Policy Brief Towards Enhancing the Adaptive Capacities for Climate Change Adaptation of Upland Farming Communities in Southeast Asia*. This policy brief will serve as the instrument of the project collaborators and the concerned groups and stakeholders in lobbying with the local policy makers for mainstreaming climate change adaptation in their local development programs.

The project collaborators argue that climate change is real, and that, nobody can do away with it. This phenomenon has now become part of human life, and therefore, there is nothing we can do but simply to adapt with its impacts. Because of the severity of its impacts, policy measures therefore should be in place to help enhance the adaptive capacities of the society, particularly the agriculture/farming sector. Among the policy measures that were crafted by the project collaborators are as follows:

#### For the Philippines

- a) Creation of a Local Climate Change Team comprised of the representatives from the state colleges and universities, local government units at the municipal and barangay levels, and farmer-trainers who would develop a plan for enhancing adaptive capacities of the upland farming communities in their respective areas. The team shall also be responsible in:
  - organizing local public awareness programs about climate change so that all sectors within their local community would be able to understand this worldwide phenomenon
  - pursuing research and development programs related to climate change to test for appropriate crops and cropping combination in the changing climate in their respective areas
  - establishment of demonstration farms showcasing climate change adaptation strategies
  - linking with the local policy makers to ensure that climate change adaptation measures are integrated in their development programs
  - documentation of best practices showcasing climate change adaptation
- b) Mainstreaming agroforestry in the development programs of local government units whose majority of land area is classified as upland areas. These areas are vulnerable to climate change because of the marginal conditions of the biophysical and social aspects. Agroforestry can be included as one of the development programs in the barangay and municipal levels. With this, there could be a regular funding allocation for relevant agroforestry activities that may be identified in the upland communities. These may include training programs, information drive, and establishment of on-farm demonstration areas showcasing different agroforestry technologies and systems that are appropriate to the local conditions
- c) Enhancing adaptive capacities of smallholder holders in a holistic manner such that, the human, social, financial and natural capitals are taken into consideration as follows:
  - The human capital should be developed in the form of capability-building or training programs, particularly on the appropriate/site-specific climate change adaptation strategies. As discussed above, there are smallholder farmers in other tropical countries who have been employing climate change adaptation strategies such as changing their cropping patterns, establishment of soil and water conservation measures, planting of short-duration crop varieties, among others.
  - The natural capital including the land and the farming system should be enhanced. The farms of the smallholder upland farmers are highly dependent on rainfall (being rainfed areas), and therefore, any change in the rainfall pattern would surely affect crop performance, farm productivity and farm income. They have small landholdings which are classified as public lands, and therefore, these are bound within the policies of the government. Cost-effective and environment-friendly soil and water conservation measures

should be introduced in these rainfed areas, without jeopardizing the policies that govern the cultivation of upland areas/farms within the public lands. The farmers should capitalize on the presence of forest and fruit trees on their farms. The ecological services of trees, particularly their potential in climate change mitigation and adaptation, should be well recognized by the farmers via information education campaign and capability-building programs.

 Social capital enhances the capacity of an individual to address his/her problems or concerns by way of networking and establishing good relationship and solidarity between and among the members of the community (bonding capital) and their linkages with outside organizations (bridging capital). In most cases, the local development organizations channel their technical support services to the existing people's organizations from which farmers are given the opportunity to attend trainings and seminars, avail of the planting materials, and gain access on the recent developments and information about agriculture. In most cases, there has been very little support services that are being provided by the local development organizations. This implies, therefore, the need to link the farmers to relevant organizations to enable them tap the latter's assistance in any agriculture-related problems or concerns (e.g. marketing of products, climate change, etc).

#### Indonesia

Some policies that could be arranged or developed from its derivatives and expected to regulate simultaneously to manage the forest resources in the era of climate change are as follows:

- At the province level. There have been several provincial regulations concerning natural resource management and conservation. Nanggroe Aceh Darussalam (NAD) province, for example, has got three provincial regulations, or "Qanun", on Forestry, Conservation Natural Resources and Natural Resource Management. Forestry Qanun No. 14 year 2002, at some articles and sub-articles, implicitly raises the importance of bio-natural resource conservation and protection. Also at some articles and sub-articles at both Qanun No. 21 year 2002 on Natural Resources Management and ganun no. 20 year 2002 on Natural Resources Conservation mentions similar issue. Although those three qanun do not specifically mention agroforestry and climate change, it is quite possible to generate other policies, stating forest resources management and conservation, from these three regulations. Similar to Aceh, East Nusa Tenggara has issued Provincial Regulation No.5 year 2008 on Integrated Watershed Management, in which natural resource conservation is expressed indirectly. In addition, West Nusa Tenggara has Provincial Regulation No. 4 year 2007 on Environmental Services Management, mentioning that natural resource management can be approached through a upstream-downstream scheme. It means that communities downstream have to give fair or equitable incentives to those upstream having conserved natural resources there. Besides, it is possible for other regions to develop similar regulations, including some incentives which are also given to communities conserving forest biodiversity since its role is very important to dynamic potential for carbon sequestration.
- <u>At the district level</u>. It is likely that districts can also develop local regulations concerning the relationship between agroforestry and climate change. Lampung Barat District has got District Regulation No.18 year 2004 on Natural Resource Management, where article1 sub-article1 clearly mentions the definition of natural resources and environment, natural resources. Meanwhile, a district regulation on Forest Resource Management, as informed by the local

Forestry Office, is being discussed at local House of Representatives. Providing there are some revisions to make, a clause concerning correlation between agroforestry and climate change may be added whether in an article as explanatory notes. Therefore, it will have an umbrella policy and can be enforced more effectively. Another example is Kuantan Sengigi District Head Regulation (Riau Province) No. 14 year 2006 on *Sialang* Trees Protection and Conservation its Environment in Kuantan Sengigi District, which has been developed from five village regulations in Situgal, Rambahan, Logas Tanah Darat, Lubuk Kebun and Sikijang Villages plus propriety studies made in other villages as well as private/company-management areas. Companies operating around Kuantan Sengigi District regulation concerning customary rights and Guguk village forests (*Hutan Adat Guguk*). Interestingly, this regulation was developed further into a climate change adaptation strategy as this village potentially produces 261.25 tons of carbon/ha or equal to 19 billion rupiah.

<u>At the village level</u>. According to Law No. 10/2004 concerning Indonesian Policy Hierarchy, village regulation is equal to district/provincial regulation. Assuming the local communities have realized the importance of agroforestry for reducing climate change impacts, the development of some village regulations are possibly done in the existing research locations. Some other villages have also had their own regulations such as Kebar Village (Manokwari District, Papua Province) with a regulation concerning deer hunting and keeping. Besides, in Situgal, Logas Tanah Darat, Sikijang, Rambahan and Lubuk Kebun Villages (Kuantan Sengingi District, Riau Province) there are five village regulations on the conservation of sialang-tree, favourable for wild bee-nesting. These five regulations are follow-ups to customary regulations in 5 villages, having common ground i.e. sialang-trees conservation. In addition, seven villages: Fatumnasi, Tutem, Nenas, Tune, Kuan Noel and Nunbena (Fatumnasi Sub-district, Soe District, East Nusa Tenggara Province) has issued seven village regulations concerning herding, grazing and marketing so that cattle (cows and horses) do not enter the protected forests around those seven villages.

Specifically, the following programs should be installed to ensure the sustainability of the earlier initiatives towards climate change adaptation in the agriculture and forestry sectors:

- Participatory extension and training. A model of extension involving farmers in the overall
  decision-making process from data collection and analysis, problem identification, constraint
  analysis and implementation, and monitoring and evaluation. The role of extension agents in
  this issue is to strengthen the capabilities and potentials of farmers to improve their cultivation
  in managing agro-businesses and utilizing the forests. Participatory extension approaches will be
  done by the farmers individually or in groups.
- *Community empowerment*. There should be an effort to empower all of the community with increased capacity and self-reliance of the community to be capable and to have the power to solve their own problems. CC adaptation and mitigation –based community empowerment aims to increase the capacity, productivity, capability and self-reliance of the community as the sustainable main driver and support the realization of democratic economy
- Local governments should develop program to minimize the negative impacts of climate change either through dissemination or extension through extension agents followed by structured training, or by developing policies to ensure the implementation of community capacity-building related to climate change issues in a sustainable manner.

#### Lao PDR

- Climate change has significant implications for livelihoods of rural people, who are heavily dependent on agriculture and forestry sector for food security.
- The impacts of climate change are widely recognized by the government, communities, farming households and other stakeholders such as donor communities, non-governmental organizations, private investors, etc
- Awareness raising on climate change adaptation and factors that threaten livelihoods should be provided to farming households and communities, so that they are aware of the potential impact and able to adapt their livelihoods.
- Government and researchers should engage local communities in local-level research identification and observation of climate change issues.
- Indigenous knowledge is important in identifying suitable adaptation actions.
- Regional dialogue and collaboration can provide valuable insights and exchange models for climate change adaptation.
- Climate change needs to be mainstreamed into development strategies and plans.
- Adaptation actions need to be translated into development plans at the national and local levels.

#### Vietnam

- More perennial trees are encouraged in farming systems to increase capacity of CO<sub>2</sub> absorption, land erosion prevention, windbreaks, water protection and moist keeping. Variety of species that can be resistant to pests and diseases. Structure of seasonal plants should be suitably sessional.
- Oriented-agroforestry mixed crops with the reasonable coordination of crops. Development of sustainable farming systems, focusing on environmental factors.
- Systems of suitable industrial crops such as rubber, Macadamia towards sustainably mixed
- Protection and development of forests to absorb CO<sub>2</sub>, to protect watershed forest and to conserve biodiversity need to be considered
- Forest rehabilitation and reforestation in watershed areas, along rivers and streams to protect water source.
- Enrichment of natural forest by valuably indigenous species, NTFP

The electronic file of the Policy Brief Towards Enhancing the Adaptive Capacities for Climate Change Adaptation of Upland Farming Communities in Southeast Asia is found in a separate file attached to this report.

#### 4.0 Conclusions

This capacity-building project was implemented to provide training activities for local technicians and selected farmer-trainers on topics that revolve around climate change and adaptation strategies for them to serve later on as local climate change communicators. Indeed, the two-day training programs that were organized in the four collaborating countries have indicated the willingness and potentials of the local farmers and technicians to articulate their own insights and observations about climate change, and to share their experiences as regards the impacts of climate change on their agricultural production activities and how they are able to cope and/or adapt to these climate change impacts. Further training on communication and facilitation skills are necessary to enhance and harness these potentials of the local farmers.

The second objective of this project is to produce easy-to-learn and farmer-friendly materials about climate change. These simple climate change information materials were observed to have greater impacts on ordinary people/audience, who do not have the technical backgrounds about climate change. These materials, in the form of leaflets, posters, brochures and calendars that were prepared by the trained local climate change communicators and project collaborators, have proven that the science of climate change can easily be understood and appreciated by the local people.

Third, this project aimed to organize a local climate change awareness program in the most strategic upland community in the four collaborating countries. Indeed, the planning and actual implementation of the local climate change awareness program served as an opportunity for the trained local climate change communicators to serve as the key speakers and facilitators of the event, which has, somehow enhanced their potentials and contributed to the building up of their self-confidence to speak before a big group of people/audience. This event has also somehow served as a venue to recognize that the smallholder farmers can be an effective communicators and change agents.

Finally, this project aimed to develop a policy brief on capacity development for climate change adaptation in Southeast Asia. The project collaborators believed that all the capacity-building efforts that have been undertaken would be useless if these are not sustained. Sustainability of the project initiatives is oftentimes the concern of many development workers. As such, a Policy Brief Towards Enhancing the Adaptive Capacities for Climate Change Adaptation of Upland Farming Communities in Southeast Asia, was produced by the project collaborators. This policy brief is seen as an effective instrument for lobbying with the local policy makers on the institution and mainstreaming of climate change adaptation in their local development programs. Local policy-making in the recent years has become a science-based or evidence-based. Thus, the policy brief contains technical and research-based information and data that will help the local policy makers in crafting local policies on climate change adaptation.

#### **5.0 Future Directions**

This project has the potential for scaling-up in other upland communities in the four collaborating countries. Generally, the agriculture in these four countries is dominated by the smallholder upland farmers, and therefore, the need to scale-up and promote this kind of capacity-building projects to the many upland communities. The lessons and experiences, as well as the relevant outputs of this project can be used by the project collaborators in the future capacity development activities.

In a broader context, the partnership that was built by this project among the local stakeholders, namely: farmers, local government units and state colleges and universities can be harnessed to sustain and scale-up the project. They can form a Local Climate Change Team, which is composed of representatives from the farmers' group, the local government units, and the state colleges and universities. This Local Climate Change Team will continue to communicate and disseminate climate change-related information to the different stakeholders in their community, and nearby communities; and, lobby with the local policy makers as regards mainstreaming climate change adaptation in their respective local development programs, and in instituting programs that would enhance the adaptive capacities of the smallholder farmers for climate change adaptation.

## Appendix A.

## *Design of the National Training of Local Climate Change Communicators in the Philippines March 30-31, 2015,* Golden Berries, Hotel Tabuk, Kalinga, Philippines

SCHEDULE	ΑCTIVITY	
8:00-8:30	REGISTRATION	
8:30 - 9:30	OPENING PROGRAM	
Opening Prayer	Dr. Sheila F, Malao, KASC-ITE Faculty	
National Anthem	Ms. Susan Ruth M. Awingan, KASC-ITE Faculty	
Welcome Address	Dr. Jovita E. Saguibo SUC President III, KASC	
Introduction of the Participants and Resource Persons	Dr. Emerson V. Barcellano Campus Dean, KASC-Riza	
Message from SEANAFE	Dr. Wilfredo M. Carandang SEANAFE Chair	
Message from IAF/PAFERN	For. Rowena D. Cabahug University Researcher, UPLB-IAF	
Training Overview	Ms. Leichee D. Landicho University Researcher, UPLB-IAF	
	Group Photo and Snacks	
9:30 - 10:30	Climate Change: Its Causes and Impacts (For. Jefferson Himson and Ms. Susan Ruth Awingan)	
10:30 - 10:45	Open Forum	
10:45 – 12:15	Climate Change Mitigation and Adaptation Strategies Dr. Emerson V. Barcellano	
12:15 – 1:00	LUNCH	
SCHEDULE	ΑCTIVITY	
1:00 - 2:30	Developing Communication Skills and Communication/Information Materials ( <b>Dr. Sheila F, Malao</b> )	
2:30 - 5:00	Workshop on the Development of Information Materials	
Day 2 (March 31)		
7:00 - 10:30	Field Visit to Kapannikian, Pinukpuk, Kalinga	
11:00 - 12:00	Workshop Mechanics	
12:00 - 1:00	Lunch	

SCHEDULE	ΑCTIVITY
1.00 - 2.30	Workshop/Planning for the Local Climate Change Awareness
1.00 - 2.30	Program
	(Participants)
2.20 - 2.00	Presentation of the plan for the Local Climate Change Awareness
2.30 - 3.00	Program
	(Participants)
3:00- 3:30	Closing Program
	DEPARTURE

## Appendix B.

## Design of the National Training of Local Climate Change Communicators in Indonesia December 16-17, 2014 Lampung, Indonesia

Time	Agenda	Remarks/PiC
09.00 - 09.45	Opening Ceremony	
	<ol> <li>Welcome Speech by Head of KPHL Batu Tegi (Batu Tegi Management Unit Area of Protected Forest)</li> <li>Opening speech by Head of Tanggamus Forestry Office</li> </ol>	Moderator: Dr.Pitojo Budiono
09.45-10.00	Coffee break/pagi	
	Pretest	
10.00-13.00	Sessi 1.	Moderator: Dr.Christine
	<ol> <li>Climate Change and Its Impact to Agriculture and Forestry in Lampung Province (Dr. Tumiar Katarina Manik)</li> </ol>	Wulandari
	<ol> <li>Climate Change Policy in Lampung Province (Eny Puspasari, S.Hut – Head of Community Forestry Division of Province Forestry Office)</li> </ol>	
	Discussion	
13.00-14.00	Lunch Break	
14.00-17.00 Climate Change Adaptation through Strengthening Community Marketing-Institution (Idi Bantara, S.Hut – Head or Rehabilitation Division of Watershed Management Office or BPDAS Way Seputih Way Sekampung)		Moderator: Sunarni Widyastuti
	Climate Change Adaptation Strategy in KPHL Batu Tegi (Ruchansyah, S.Hut – Head of KPHL Batu Tegi)	
	Appropriate Extention and Socialization of Climate Change Method to Community (Dr. Pitojo Budiono – Lampung University)	

	Explanation to Training Participants related to Field Visit and Development of Socialization Media of Climate Change to Community (Dr. Christine Wulandari) Discussion	
17.00 – 19.30	BREAK	
19.30-21.00	Group Excercise: Field Visit Planning and Development of Substances for Socialization Media of Climate Change	
21.00	BREAK	

## Second Day. Wednesday, 17 December 2014

07.30 – 12.30	Field Trips to HKm or CF area which managed by agroforestry and applied of adaptation strategy of climate change		
	Site 1 : Agroforestry patterns and adaptation climate change strategies	<ul><li>Eni Puspa</li><li>Christine Wulandari</li><li>KPHL Batu Tegi</li></ul>	
		<ul><li>Dr. Pitojo Budiono</li><li>Rini Pahlawanti</li><li>KPHL Batu tegi</li></ul>	
	Climate Change Adaptation		
	Coffee break		
12.30-13.30	BREAK		
13.30 – 17.00	Work Planning for Next Program on Socialization of Climate Change and presented by Group	Rini Pahlawanti	
	Discussion on Development of Socialization Media of Climate Change as a calendar and poster		
	Post test	Evaluation Team Member: 1. Dr. PitojoBudiono 2. Eny Puspa 3. Dr. Christine Wulandari	
	Closing ceremony and certificate distribution	KPHL Batu Tegi and Lampung University	
	Coffee break		
17.00	Closing		

## Appendix C.

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Design of the	National Training	of Local Clima	te Change Com	municators in Lao PDR
		,		

Schedules Contents		Person in charged			
8:00 - 8:15	Register	Organizer			
8:16 – 8:30 Introduction to the workshop content and objectives		Chairperson			
8:31 - 9:30	What is climate change?	Moderator			
9:31 – 10:31	The problems and impacts of climate change	Moderator			
10:31 - 10:45	Break				
10:45 - 12:00	Group discussion	Participants			
12:00 - 13:00	Lunch Break				
13:00 - 15:00	The roles of agroforestry to mitigate climate change	Moderator			
15:00 - 15:15	Break				
15:16-16:00	Group discussion	Participants			
16:00-16:20	Synthesis of first day training	Moderator			
	Second day				
8:00 - 10:15	Continue group discussion and materila preparation	Participants and moderators			
10:16-10:30	Break				
10:31-11:00	Group discussion (cont.)	Participants			
11:00-12:00 Group presentation		Participants			
12:00-13:00	Lunch Break				
13:00-14:00	Group presentation	Participants			
14:00-15:00 Wrap up and closing		Chairperson			

Appendix D.

## Design of the National Training of Local Climate Change Communicators in Vietnam November 27-28, 2015

Tuy Duc Distrcit, Dak Nong Province, Vietnam

SCHEDULE	ΑCTIVITY
November 27	Climate Change (Lecture-discussion)
	What is climate change
	Causes of climate change
	Indicators of climate change
	Impacts of climate change
	Impacts of Climate Change in Agriculture and Forestry
	Production Practices in Central Highlands
	(Lecture-discussion/sharing of experiences)
	Adaptation and Mitigation of Climate Impacts in the
	Agriculture and Forestry Sectors (Lecture-discussion)
	Group Exercise/Workshop on the following:
	Local indications of climate change
	• Impacts of climate change in the local agriculture and
	forestry production
	Climate change adaptation strategies of the
	agriculture and forestry sectors
November 28	Field Trip

## Appendix E.

List of participants of the National Training of Local Climate Change Communicators in the Philippines

Name	Address
1. Davidson Agulin	Barangay Balbalan, Tabuk, Kalinga
2. Polard Cosidon	LGU-Balbalan, Tabuk, Kalinga
3. Angeline Eyadaw	MAFC-Balbalan,Tabuk, Kalinga
4. Gener Dao-ay	MAFC Balbalan, Kalinga
5. John L. Gunnawa	KAMPCO Balbalan, Kalinga
6. Cesario Sagaloh	KAMPCO Balbalan, Kalinga
7. Lilia C. Sagalon	LGU-Balbalan, Kalinga
8. Susana H. Rufino	LGU-Balbalan, Kalinga
9. Arnel L. Malaggay	LGU-Balbalan, Kalinga
10. Samuel Bakiren	Barangay Calaccad, Kalinga
11. Minerva A. Bakiran	Barangay Calaccad, Kalinga
12. Arthur Dalsen	Barangay Dagupan Central, Tabuk
13. Zeus A. Bakiran	Barangay Calaccad, Kalinga
14. Rico Casaldo	Barangay Pinukpuk, Kalinga
15. Jayson Casaldo	Barangay Pinukpuk, Kalinga
16. Ruby Casaldo	Barangay Pinukpuk, Kalinga
17. Florence Mendoza	Barangay Pinukpuk, Tabuk, Kalinga
18. Ernesto Guiabao	Tabuk, Kalinga
19. Phoebe Valentine Munda	Magsaysay, Tabuk City
20. Brainer Sambat	Dagupan, Tabuk City
21. Jefferson Himson (trainor)	Tabuk City, Kalinga
22. Sheila Malao (trainor)	Tabuk City, Kalinga
23. Susan Ruth Munda-Awingan (trainor)	Tabuk City, Kalinga
24. Rowena Cabahug (facilitator)	UPLB, College, Laguna
25. Leila Landicho (facilitator)	UPLB, College, Laguna
26. Wilfredo M. Carandang (Project Leader)	UPLB, College, Laguna

## Appendix F.

List of participants of the National Training of Local Climate Change Communicators in Indonesia

Name	Address
1. Amar	Wanatani Lestair
2. Sri Saburti	Tirto Kencono
3. Husna Heti	Tirto Kencono
4. Tin Watini	Tirto Kencono
5. Siti Juwariyah	Tirto Kencono
6. Sapouri	Haradan
7. Bidu Aw	Makmur
8. Arifin	Wana Anba Lestari
9. Sagirman	BPSR
10. Daryono	BPSR
11. Muji L	ВРЗК
12. Abdul Hakim	ВРЗК
13. Tri Hastuti	ВРЗК
14. Bruri Anita	ВРЗК
15. Leoni Verta	UPTD BT
16. Wartijana	UPTD BT
17. Abdul Khopur	UPTD BT
18. Jarkasih	UPTD BT
19. Iwan	M. Lestari
20. Alamudin	Mahar Dilea
21. Cik Aman	КРН ВТ
22. Sindhu Pramudya	КРН ВТ
23. Rifgy Qomar	КРН ВТ
24. Mira Dwi N	КРН ВТ
25. Novie Dwi N	КРН ВТ
26. Agus Sudomo	КРН
27. Fahrurozi	КРН
28. A. Rodir	КРН
29. Turiyin	КРН
30. Yudi	КРН

## Appendix G.

List of participants of the National Training of Local Climate Change Communicators in Vietnam

Id	Full name	Age	Gender	Position	Institutions/Location
1	Nguyễn Hữu Huân	51	Male	Vice Chair of District	Tuy Duc DPC
				People Committee (DPC)	
2	Nguyễn Ngọc Quyền	49	Male	Head	Department of Agriculture
					& Rural Development, Tuy
					Duc District
3	Điểu Bích	24	Male	Key Farmer	Bu Nor Village - Quáng
					Tâm Commune - Tuy Đức
_					District
4	Điệu Phương	22	Male	Key Farmer	Bu Nor Village - Quang
					Tam Commune - Tuy Đức
5	ู Điẩu Nơi	E2	Malo	Vice Chair	District
5	Dieu NOI	55	IVIAIC		Management Board Bu
					Nor
6	Thi Xuân	50	Femal	Chair	Woman Accossiation of
Ũ					Bu Nor Village
7	Nguyễn Hữu Tao	34	Male	Vice Chair	Farmer Accossiation of
					Quang Tam Commune
8	Cao Thị Thùy Liên	34	Female	Chair	Head of Farmer
					Assocciation Bu Nor
					Village
9	Điểu M'Preo	60	Male	Key Farmer	Bu Nơr Village - Quảng
					Tâm - Tuy Đức
10	Điểu M'Puy	52	Male	Key Farmer	Bu Nor Village - Quáng
					Tâm - Tuy Đức
11	Nguyên Sao Mai	28	Female	Correspondent	Tuy Duc District Television
12	Đoàn Lê Anh	37	Male	Head	Department of Ethnic
12		25	Mala	Ctoff	Minority Tuy Duc District
13	Le Ngộc Binn	35	wale	Stall	& Rural Development Tuy
					Duc District
14	Mai Văn Tĩnh	39	Male	Staff	Quang Truc Commune
1		33	Whate	Stan	People Committee (CPC)
15	Lê Vũ Tí	30	Male	Staff	Đăk R'Tih Commune
					People Committee (CPC)
16	Điểu Khơi	37	Male	Key Farmer	Mê Ra Village - Quảng
					Tâm - Tuy Đức
17	Điểu M'P Rất	45	Male	Key Farmer	Mê Ra Village - xã Quảng
					Tâm - Tuy Đức
18	Thị B'Lơm	38	Female	Chair	Woman Assocciation in Bu
	_				Nor Village
19	Điếu San	37	Male	Key Farmer	Mê Ra Village - Quảng
	- 102 -				Tâm - Tuy Đức
20	Điều Sen	45	Male	Key Farmer	Bu Nor Village - Quáng
					Tâm - Tuy Đức

Id	Full name	Age	Gender	Position	Institutions/Location
21	Điểu W ớp	46	Male	Key Farmer	Bu Dâng Village - Đăk
					R'Tih, Tuy Duc
22	Điểu Ban	41	Male	Key Farmer	Bu Dâng Village - Đăk
					R'Tih, Tuy Duc
23	Điểu Dơi	44	Male	Chair	Bu Nor Village - Quảng
					Tâm - Tuy Đức
24	Điểu Lơm	59	Male	Key Farmer	Bu Nor Village - Quảng
					Tâm - Tuy Đức
25	Điểu N'Sốp	49	Male	Key Farmer	Bu Nor Village - Quảng
					Tâm - Tuy Đức
26	Đồng Văn Hân	30	Male	Key Farmer	Bon Bukoh Village - Đăk
					R'Tih, Tuy Duc
27	Đặng Văn Huyến	35	Male	Staff	Extension Department in
					Tuy Duc District
28	Điểu Bét	42	Male	Vice Chair	Board of Community
					Forest Management in
					Bon Bukoh Village
29	Điểu B'Lế	46	Male	Vice Chair	Đăk R'Tih CPC
30	Điểu Minh	35	Male	Vice Chair	Quảng Tâm CPC
31	Điểu Hùng	31	Male	Staff	Department of Resources
					& Environment, Tuy Duc
					District
32	Thị Pel	28	Female	Chair	Woman Assocciation at Bu
					Nung Village, Quảng Trực
					Commmune
33	Thị Mau	26	Female	Key Farmer	Bu Nung Village, Quảng
					Trực Coomune, Tuy Duc
					District

Appendix H.

Design of the Local Climate Change Awareness Program in the Philippines April 21, 2015 Golden Berries Hotel, Tabuk, Kalinga

#### **OPENING CEREMONIES**

8:30 - 9:00 AM

Opening Prayer National Anthem Welcome Address

**Recognition of Participants** 

Message

Participant Participant Dr. Edgar M. Naganag Director of Instruction, KASC Dr. Emerson V. Barcellano Campus Dean, KASC-Rizal Dr. Reynaldo A. Comia Chair, PAFERN and Director, IAF Dr. Jovita Saguibo President, KASC Dr. Roberto G. Visco Project Leader

Mr. Uldarico Casaldo Mr. John Gunnawa/ Mr. Davidson Agulin Ms. Florence Mendoza

**OPEN FORUM** 

**Program Overview** 

PRESENTATION AND SHARING OF EXPERIENCES

Climate Change: Its Causes and ImpactsMr. Zeus Bakiran9:00 - 10:00Ms. Phoebe Munda

#### Sharing of Farmers' Experiences on Climate Change Adaptation

10:00 - 10:15	
10:15 – 10:30	
10:30 - 10:45	
10:45 - 11:00	
11:00 - 11:15	

Lunch

11:15 - 12:00

#### LGU Initiatives in Promoting Climate Change Adaptation

1:00 – 1:15	For. Susan Rufino, LGU-Balbalan
1:15 – 1:30	Mr. George Padalla, LGU-Tabuk
1:30 – 1:45	LGU-Rizal
1:45 – 2:00	OPEN FORUM

## **KASC Initiatives and Experiences in Climate Change Mitigation and Adaptation** 2:00 – 2:30 (For. Jefferson Himson, Faculty Member-Department of Forestry)

#### Agroforestry as a Climate Change Mitigation and Adaptation Strategy 2:30 – 3:00 (Dr. Roberto G. Visco, Professor, UPLB-Institute of Renewable Natural Resources)

#### **CLOSING CEREMONIES**

Appendix I.

Design of the Local Climate Change Awareness Program in Indonesia

SCHEDULE	ACTIVITY
January 27, 2015	
9:00 10:30 AM	Opening Sessions
	Report of OC
	Speech by INAFE Representative
	Speech by Kepala Pekon (Village head)
	Speech by KKPHL Batu Tegi
10:30 - 10:45	Coffee Break
10:45 - 13:00	Session 1:
	Definition and understanding climate change
	Influences of Climate Change (Edi)
1300 - 1400	Lunch Break
1400 - 1530	Influences of climate change on forestry (Bruri)
1530 - 1545	Coffee Break
1545 - 1700	Roles of Government, Extension Education Staff and Community on Climate Change Adaptation (Astuti)
January 28, 2015	
730 - 1230	Field trips to HKm and private forest managing
1000 1000	Agroforestry
1230 - 1330	Lunch Break
1330 - 1630	General Lecture by:
	Dr. Tumiar Katarina Manik
	Dr. Christine Wulandari
1630 - 1700	Closing and Distribution of Certificates

## Appendix J.

Design of the Local Climate Change Awareness Program in Lao PDR

Schedules	Contents	Person in-charge
8:00 - 8:15	Register	Organizer
8:16 - 8:30	Introduction to the workshop content and participants	Organizer
8:31 - 9:30	The problems and impacts of climate change	Villagers
9:31 – 10:31	The measures and mitigations to climate change	Villagers
10:31 - 10:45	Break	
10:45 - 12:00	Group discussion	Participants

## Appendix K.

Design of the Local Climate Change Awareness Program in Vietnam in the Succeeding Years

Communicator Group	Contents of Communication	Time	Venue	Numbers of people involved	Target groups
Board of Community Forest Management Bu	Reducing shifting cultivation	December Every years	Village Hall	30	All Villagers
Nor Village	Choose crops , livestock have disease resistance	At the momment of replacing new crops	Village Hall	35	All Villagers
	Rehabilitation and enrichment of forests	Every Years	Village Hall	40	Forest protection groups
Board of Community Forest Management Bu	Climate change and its impacts	One/3 months	Village Hall	20	Key farmers
Koh Village	Change the crop to adapt climate change	At the beginning crop cultivation	In the field	60	Key farmers
	Reducing shifting cultivation	At the dry season	In the field	40	Farmers who are practicing shfiting cultivation
	Planting trees intercropping, crop rotation	March	In the field	30	Key farmers
	Rehabilitation, enrichment of forests and plantation	December every year	In the forests	40	Key farmers
Head and Woman Association of Village Bu Nor	Change the new plant in order to adapt to climate change	3 times/year	Village Hall	18	Key farmers of the Villages
	Reduced shifting cultivation to mitigate climate	Zt the beginning	In the forests	18	Key farmers of the Villages, key perspons

Communicator Group	Contents of Communication	Time	Venue	Numbers of people involved	Target groups
	change	dry season			of associations
Commune People Committee (CPC) group	Agroforestry control erosion , pests , water retention, wind	April	CPC Hall	30	Staffs of CPC
	No burning of forests for agriculture expansion	December	CPC Hall	30	Staffs of CPC
Staffs of DistrictRestorationofcoffeegardenwith rust resistantvarieties		Jan. Every year	Each Village	1000	Staff of CPC, Farmers
	Conversion of Cashew into grafted Macca trees	May every year	Each Village	100	Staff of CPC, Farmers
	Intergration of Macca with Coffee	May every year	Each Village	1000	Staff of CPC, Farmers
	Plan for forest allocation to communities	Jan. 2015	Bu Nơr Village	60	Bunor Villagers
	Organic fertilizer production by coffee husk	Fan. 2015	Some villages	1000	Villages, farmer gardens

## Appendix L.

Partici	pants o	f the	Local	Climate	Change	Awareness	Program	in the	Philippir	ies
i ui ticij	punts o	i uic	LOCUI	Cinnate	Change	Awareness	riogram	in the	1 minppin	103

Name	Address
1. Susano H. Rufino	LGU-Balbalan, Tabuk, Kalinga
2. Emerson V. Barcellano	KASC Rizal, Kalinga
3. Zeus A. Bakiran	Barangay Calaccad, Tabuk, Kalinga
4. Sheila Malao	KASC Bulanao, Tabuk, Kalinga
5. Herbert Imatong	KASC Bulanao, Tabuk, Kalinga
6. Christina D. Bawit	Barangay Dao-angan, Tabuk, Kalinga
7. Davidson Agulin	Barangay Balbalan, Tabuk, Kalinga
8. Rufino B. Tuddao	Barangay Buaya, Tabuk, Kalinga
9. Aldrin Dangiwan	Barangay Dao-angam, Tabuk, Kalinga
10. Mario Lamwan	Barangay Buaya, Tabuk, Kalinga
11. Jimmy Basanga;	Barangay Balbalan, Tabuk, Kalinga
12. Elmo Anniban	Barangay Balbalan, Tabuk, Kalinga
13. Felipe Buyag	Barangay Balbalan, Tabuk, Kalinga
14. Jowel A. Mauricio	KASC Rizal, Kalinga
15. Gretchen C.Tuquilar	KASC Rizal, Kalinga
16. Roche Baddongan	KASC Rizal, Kalinga
17. Gam Padalla	LGU-Tabuk, Kalinga
18. Andrea Sigat	KASC Bulanao, Tabuk, Kalinga
19. Phoebe Valentine Munda	Magsaysay, Tabuk, Kalinga
20. Augusto Nagayang	LGU-Rizal, Kalinga
21. Susan Ruth Munda-Awingan	KASC Bulanao, Tabuk, Kalinga
22. Brenda Lumines	KASC Bulanao, Tabuk, Kalinga
23. Reynaldo A. Comia	UPLB, College, Laguna
24. Ruby Casaldo	Barangay Pinukpok, Tabuk, Kalinga
25. Angelita Badobo	Barangay Pinukpok, Tabuk, Kalnga
26. Genevieve Casaldo	Barangay Pinukpok, Tabuk, Kalinga
27. Maryann Garcia	Barangay Pinukpok, Tabuk, Kalinga
28. Justine Danguiwan	Barangay Pinukpok, Tabuk, Kalinga
29. Vangue Badua	Barangay Pinukpok, Tabuk, Kalinga
30. Florence Mendoza	Barangay Pinukpok, Tabuk, Kalinga
31. Benedicto Sangdaan	Barangay Pinukpok, Tabuk, Kalinga

Name	Address
32. Roselyn F. Paelmo	UPLB, College, Laguna
33. Leila D. Landicho	UPLB, College, Laguna
34. Eileen Cosidon	KASC Rizal, Kalinga
35. Emilio Labbutan	Rizal, Kalinga
36. Ruben Ongat	Rizal, Kalinga
37. Nelda Bulawit	KASC Bulanao, Tabuk, Kalinga
38. Edzel Yatar	Bulanao, Tabuk, Kalinga
39. Visitacion Aguilar	Bulanao, Tabuk, Kalinga
40. Estrella Yadyadoc	KASC Bulanao, Tabuk, Kalinga
41. Jefferson Himson	KASC Bulanao, Tabuk, Kalinga
42. Justine Bonggawen	KASC Bulanao, Tabuk, Kalinga
43. Jasmine Dangpason	KASC Bulanao, Tabuk, Kalinga
44. Relinda Banno-oy	KASC Bulanao, Tabuk, Kalinga
45. Emelyn Wagsingan	KASC Bulanao, Tabuk, Kalinga
46. Babilyn Lawagan	KASC Bulanao, Tabuk, Kalinga
47. Jocelyn Amabborang	KASC Bulanao, Tabuk, Kalinga
48. Shirley Purisima	KASC Bulanao, Tabuk, Kalinga
49. Cadia Salwagan	KASC Bulanao, Tabuk, Kalinga
50. Nelie Zattot	KASC Bulanao, Tabuk, Kalinga
51. Mistica Fernandez	KASC Bulanao, Tabuk, Kalinga
52. Profany Ongga-as	KASC Bulanao, Tabuk, Kalinga
53. Divina Balawit	KASC Bulanao, Tabuk, Kalinga
54. Prima Bangguiyao	KASC Bulanao, Tabuk, Kalinga
55. Liza Redoloza	KASC Bulanao, Tabuk, Kalinga
56. Angelica Baracay	KASC Bulanao, Tabuk, Kalinga
57. Ramolyn Bayog	KASC Bulanao, Tabuk, Kalinga
58. Meah Meryang	KASC Bulanao, Tabuk, Kalinga
59. Loreta Abay	KASC Bulanao, Tabuk, Kalinga
60. Alvie Tandingan	KASC Bulanao, Tabuk, Kalinga
61. Mercy Grace Igadua	KASC Bulanao, Tabuk, Kalinga
62. Ethel Jovy Garcia	KASC Bulanao, Tabuk, Kalinga

Name	Address
63. Christine Lyn Espita	KASC Bulanao, Tabuk, Kalinga
64. Norlyn Balurin	KASC Bulanao, Tabuk, Kalinga
65. Larizas Bayabay	KASC Bulanao, Tabuk, Kalinga
66. Jennylyn Batawig	KASC Bulanao, Tabuk, Kalinga
67. Vanessa Dao-wan	KASC Bulanao, Tabuk, Kalinga
68. Phoebe Carimina Anggalay	KASC Bulanao, Tabuk, Kalinga
69. Shehana Sal-ao	KASC Bulanao, Tabuk, Kalinga
70. Rochelle Bongatong	KASC Bulanao, Tabuk, Kalinga
71. Julie Ann Signabon	KASC Bulanao, Tabuk, Kalinga
72. Jessica Sarena	KASC Bulanao, Tabuk, Kalinga
73. Roxanne Tabag	KASC Bulanao, Tabuk, Kalinga
74. Syra Baruzo	KASC Bulanao, Tabuk, Kalinga
75. Marilou Alngag	KASC Bulanao, Tabuk, Kalinga
76. Imelda Agbisit	KASC Bulanaom, Tabuk, Kalinga
77. Rochelle Aggal	KASC Bulanao, Tabuk, Kalinga
78. Pearl Joy Belac	KASC Bulanao, Tabuk, Kalinga
79. Kathrese Jazmine Ballesteros	KASC Bulanao, Tabuk, Kalinga
80. Renato Sacramento	KASC Bulanao, Tabuk, Kalinga
81. Precious Tanding	KASC Bulanao, Tabuk, Kalinga
82. Golden Pultz	KASC Bulanao, Tabuk, Kalinga
83. Mayflor Ortiz	KASC Bulanao, Tabuk, Kalinga
84. Phobelyn Lauretta	KASC Bulanao, Tabuk, Kalinga
85. Augusto Nagayang	LGU-Rizal, Kalinga
86. Maria Jessica Ganoh	KASC Rizal, Kalinga
87. Roseann Cuaresma	KASC Rizal, Kalinga
88. Ehrol Bayed	KASC Rizal, Kalinga
89. Meldrid Rodriguez	KASC Rizal, Kalinga
90. Christina Bawit	Barangay Balbalan, Tabuk, Kalinga
91. Jamaica Arzadon	KASC Rizal, Kalinga
92. Ariebel Macanao	KASC Bulanao, Tabuk, Kaliga
93. Jessie Rose Dimayaw	KASC Bulanao, Tabuk, Kalinga
94. Maezy Fe Gao-oy	KASC Bulanao, Tabuk, Kalinga
95. Zunkaye Ga-oy	KASC Bulanao, Tabuk, Kalinga
96. Namnama Ganousi	KASC Bulanao, Tabuk, Kalinga
97. Shelanie Dumaguing	KASC Bulanao, Tabuk, Kalinga

## Appendix M.

Participants of the Local Climate Change Awareness Program in Indonesia

Name	Address		
1. Qodri	KPHL Batu Tegi		
2. Rifky A	KPHL Batu Tegi		
3. Abdul Hakim	Pulao Panggung		
4. Eko Prasetyo	Batu Tegi		
5. Bruri Anita	Air Naningan		
6. Tri Hastuti	Pulau Panggung		
7. Tumiar Katarina Manik	Lampung University		
8. Rini Pahlawanti	Tanggamus District		
9. Sunarni Widyastuti	Tanggamus District		
10. Taryono	Tanggamus Distrct		
11. Tatang	Tanggamus District		
12. Aidi	Baty Cimman		
13. Jakarsih Udoyo	Air Naningan		
14. Koliman	Sinar Sawa		
15. Amir Hasan	Sinar Jawa		
16. Aceng Jupri	Sina Jawa		
17. Ali Imron	Batu Liman		
18. Kamarudin	Batu Liman		
19. Dodi P	Batu Liman		
20. Rahmat	Batu Liman		
21. Nuryono	Air Naningan		
22. Mimin Hadi	Batu Liman		
23. Cik Amantyo.	Air Ninangan		
24. Warji	Air Ninangan		
25. Hendri	Datar Lebsay		
26. Wandi	Datar Lebsay		
27. Endra	Datar Lebsay		
28. Sageman	Datar Lebsay		
29. Irsan	Air Ninangan		
30. Engkos	Banliman		
31. Hendar	Sinar Jarta		
32. Suprapto	Air Ninangan		
33. Agus Sudratno	Air Ninangan		
34. Priyanto	Air Ninangan		
35. Darno	DMAR Lebuas		
36. Indratno	Batu Tagi		
37. Komar	Batu Tegi		
38. Ratno	DMAR		
39. Supraptono	DMAR Lebuas		
40. Hembawan	Air Ninangan		
41. Mulyadi	Batu Tegi		

## Appendix N.

Participants of the Local Climate Change Awareness Program in Lao PDR

# ລົງທະບຽນຜູ້ເຂົ້າຮ່ວມສຳມະນາທີ່ບ້ານປາກຊຸນ, ເມືອງປາກກະດິງ, ແຂວງບໍລິຄຳໄຊ

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## Appendix O.

Participants of the Local Climate Change Awareness Program in Vietnam

Id Group	Full name	Age	Gender	Position	Institutions/Location
1	Điểu Nơi	53	Male	Vice Chair	Community Forest Management Board, Bu Nor
1	Điểu Khơi	37	Male	Key Farmer	Bu Nor Village - Quảng Tâm - Tuy Đức
1	Điểu Sen	45	Male	Key Farmer	Bu Nơr Village - Quảng Tâm - Tuy Đức
1	Điểu Lơm	59	Male	Key Farmer	Bu Nơr Village - Quảng Tâm - Tuy Đức
1	Điểu N'Sốp	49	Male	Key Farmer	Bu Nơr Village - Quảng Tâm - Tuy Đức
2	Đồng Văn Hân	30	Male	Key Farmer	Bon Bukoh Village - Đăk R'Tih, Tuy Duc
2	Điểu Bét	42	Male	Vice Chair	Board of Community Forest Management in Bon Bukoh Village
2	Điểu M'P Rất	45	Male	Key Farmer	Mê Ra Village - xã Quảng Tâm - Tuy Đức
2	Điểu W ớp	46	Male	Key Farmer	Bu Dâng Village - Đăk R'Tih, Tuy Duc
2	Điểu Ban	41	Male	Key Farmer	Bu Dâng Village - Đăk R'Tih, Tuy Duc
3	Điểu Dơi	44	Male	Chair	Bu Nơr Village - Quảng Tâm - Tuy Đức
3	Cao Thị Thùy Liên	34	Female	Chair	Head of Farmer Assocciation Bu Nor Village
3	Thị Xuân	50	Femal	Chair	Woman Accossiation of Bu Nor Village
3	Thị B'Lơm	38	Female	Chair	Woman Assocciation in Bu Nor Village
3	Điểu M'Preo	60	Male	Key Farmer	Bu Nor Village - Quảng Tâm - Tuy Đức
3	Điểu M'Puy	52	Male	Key Farmer	Bu Nơr Village - Quảng Tâm - Tuy Đức
3	Điểu Bích	24	Male	Key Farmer	Bu Nơr Village - Quảng Tâm Commune - Tuy Đức District
3	Điểu Phương	22	Male	Key Farmer	Bu Nor Village - Quảng Tâm Commune - Tuy Đức District
4	Mai Văn Tĩnh	39	Male	Staff	Quang Truc Commune People Committee (CPC)
4	Lê Vũ Tí	30	Male	Staff	Đăk R'Tih Commune People Committee (CPC)
4	Điểu San	37	Male	Key Farmer	Mê Ra Village - Quảng Tâm - Tuy Đức
4	Nguyễn Hữu Tao	34	Male	Vice Chair	Farmer Accossiation of Quang Tam Commune
4	Điểu B'Lế	46	Male	Vice Chair	Đăk R'Tih CPC
4	Điểu Minh	35	Male	Vice Chair	Quảng Tâm CPC

Id Group	Full name	Age	Gender	Position	Institutions/Location
4	Thị Pel	28	Female	Chair	Woman Assocciation at Bu Nung
					Village, Quảng Trực Commmune
4	Thị Mau	26	Female	Key Farmer	Bu Nung Villge, Quảng Trực
					Commune, Tuy Duc District
5	Nguyễn Hữu Huân	51	Male	Vice Chair of	Tuy Duc DPC
				District People	
				Committee	
				(DPC)	
5	Nguyễn Ngọc Quyền	49	Male	Head	Department of Agriculture & Rural
					Development, Tuy Duc District
5	Điểu Hùng	31	Male	Staff	Department of Resources &
					Environment, Tuy Duc District
5	Đặng Văn Huyến	35	Male	Staff	Extension Department in Tuy Duc
					District
5	Đoàn Lê Anh	37	Male	Head	Department of Ethnic Minority
					Tuy Duc District
5	Lê Ngọc Bính	35	Male	Staff	Department of Agriculture & Rural
					Development, Tuy Duc District

#### Funding sources outside the APN

A list of agencies, institutions, organisations (governmental, inter-governmental and/or nongovernmental), that provided any in-kind support and co-funding for the project and the amount(s) awarded. If possible, please provide an estimate amount.

PHILIPPINES	Institute of Agroforestry University of the Philippines Los Banos	Provided staff support as technical and administrative back-up of the project
	College of Forestry and Natural Resources, University of the Philippines Los Banos	Official time of the project leader without additional compensation from the project
	Kalinga Apayao State College	Provided technical support in the planning and coordination for the conduct of National Training of Local Climate Change Communicators; and, the Local Climate Change Awareness Program
INDONESIA	Lampung University	Official time of the project collaborator without additional compensation from the project
	Forest Management Offices at the Provincial and District Levels	Assistance in the coordination and implementation of the Local Climate Change Awareness Program
LAO PDR	National University of Laos	Official time of the project collaborator without additional compensation from the project
VIETNAM	Tay Nguyen University	Official time of the project collaborator without additional compensation from the project

#### Glossary of Terms

Include list of acronyms and abbreviations

Indonesia Network for Agroforestry Education
Lao Network for Agroforestry Education
Philippine Agroforestry Education and Research Network
Southeast Asian Network for Agroforestry Education
Vietnam Network for Agroforestry Education

<u>In the Appendix section, the report may also include:</u> Actual data or access to data used in the study Abstracts, Power Point Slides of conference/symposia/workshop presentations Conference/symposium/workshop reports

The final project report <u>must</u> follow the template outlined in this document. Use Calibri font size 12 for all the headings and font size 11 for the text.