

Proceedings

Training Modules Design Workshop

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Contents

Acknowledgements			
Execu	tive Summary	iv	
1	Background and Meeting Objectives		
2	Meeting Proceedings		
2.1	Bangladesh		
2.2	Cambodia		
2.3	Lao PDR		
2.4	Mongolia		
2.5	Nepal		
2.6	Lecture on introduction to training course development framework	and	
	training objectives and identification of training contents		
2.7	Lecture on agriculture technology for climate change adaptation		
2.8	Lecture on modularization of training contents/training methods a	and	
	resources plan		
2.9	Country presentations and feedback		
2.10	Wrap up		
2.11	Concluding remarks		
3	Appendices		
	Appendix 1: Meeting Agenda		
	Appendix 2: List of Attended Participants		
	Appendix 3: Meeting Photos		

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Executive Summary

Introduction

During August 10th to 12th, 2011 APAN organized a Training Module Design Workshop at the Asian Institute of Technology. There were sixteen (16) participants who represented five national partners participated in this workshop. These includes Cambodia, Lao PDR, Mongolia, Bangladesh and Nepal The workshop was a continuous event after the second training needs assessment (TNA) meeting held in March 2011. The objectives of this workshop were to review training module development concepts, techniques and framework to enable participants to prepare training modules as well as to provide feedbacks and suggestions on the modules that participants developed. It also aimed to familiarize the participants with training modules design process so that they will be able to take lead in preparation of training programmes in their own country in the future.

In summary, activities that participants had to do and share during this workshop included:

- Presentation of methodology used to carry out the TNA exercises;
- o Presentation and discussion on institutional arrangement and policy set up in the country;
- o Presentation and exchange information on national scenario of TNA results;
- Sharing experiences and thoughts on ideal scenario for implementation of training modules in terms of knowledge, skills and practices; and
- Setting priorities for the content and challenges in designing the modules.

It was found out from the previous workshops that all the national partners were capable to conduct systematic and result-oriented TNA which can be used as raw materials for training module design. However, in term of readiness of national partners and stakeholders in implementing training programmes on CCA, there were concerns from each country as follows:

- Partners from Bangladesh addressed the lack of proper infrastructure and training facilities
 that will support technical training programmes related to climate change and adaptation. It
 also needs to assure readiness of trainers and training materials. The partners shared their
 concern on strengthening coordination amongst government organizations as well as
 financial resources for implementation of CCA.
- In view of the partners from Cambodia, the TNA revealed that training materials and technical data were in much needed. Existing training modules were mainly focused on adaptation techniques, vulnerability assessment and cost-benefit analysis among others, while very less focuses on agricultural aspects in adaptation. It was recommended that funding should be provided to the particular training programmes.
- From Lao PDR, the concerns were related to available subject contents which are not properly
 linked to climate change adaptation. The partners raised the issues of poor readiness of
 training facilities at the provincial and district levels. It was suggested that the sub-national
 offices should be funded to set up modernized training centers. In addition, in the training
 modules basic knowledge and skills on agro-meteorology, integrated cropping system, agroirrigation and climate change adaptation should be included.
- According to the survey of the partners from Mongolia, the concerns were mostly on lack of
 integrated policies and training plans on climate change and adaptation amongst concerned
 government agencies. Also the issue of insufficient funding to start CCA training programmes,
 it could not be relied only on government funds. In terms of human resource capacity and
 readiness, it was addressed that basic knowledge on computer, IT skills and basic English are
 needed to enhance training capacity. It was suggested that training modules need more

focuses on CCA, training of trainers, poverty reduction strategies and the role of private sector in agriculture. Like other partners, the concern on poor – readiness of training facilities was raised as well.

Partners from Nepal pointed that the challenges ahead were training a large number of
extension workers with limited knowledge and preparing training materials for different
target groups. Although the training facilities are in place, the teaching aids and training
materials related to CCA have not been properly updated. Using of audio-visual equipment is
jeopardized by long hours of load shedding so investment on appropriate facilities should be
thought of. Given that the hills and mountains are more prone to the CC impacts, the need
for training facilities and demonstration sites in these areas is very essential.

The actual module development preparation phase has started in the second TNA meeting in March 2011. In that meeting, the consultant on training and development conducted intensive training sessions on basic knowledge in training and development. In this workshop the overview sessions on module design and organizations of training contents were conducted to make sure that all national partners were provided with same background of knowledge and working procedures.

In addition, during the workshop two lectures were conducted to give broader perspectives to the participants on agriculture technology for climate change adaptation and on methods and techniques for training module design. These two sessions were used as supplementary elements that helped the participants considering more aspects while designing the modules.

The workshop highlighted three key elements of module design, and these elements are very practical that national partners can apply immediately after they return back to their countries. The three elements are: enabling objectives, selection of appropriate training contents and using appropriate delivery methods. The participants had spent two-third of the workshop period to draft two training modules namely In-service Training Modules and Induction Training Modules. These two modules were used as an exercise to familiarize participants with module design templates.

There were three types of subject areas that were proposed for future training in CCA:

- Training related to policies and strategies in CCA and its application in agricultural sector;
- Training related to specific subjects in agriculture such as livestock management, appropriate farming technology, etc;
- Technical training related to climate change adaptation and management.

It was expected that after the workshop the national partners could develop six modules for inservice training and six modules for induction training. At the same time, the national partners also needed to propose their implementation plan for piloting these modules in their own country. The workshop ended with the guidelines for national partners on how to prepare the country project reports which include both TNA results and training modules developed.

1. BACKGROUND AND MEETING OBJECTIVES

Climate change has been projected to have critical impacts on socio-economic development and poverty reduction globally and in the Asia-Pacific region. The Asia-Pacific region, which accounts for two-thirds of the world's poor living on less than \$1 a day depending on primary sectors such as agriculture, is one of the most vulnerable regions to climate change. Thus, effective implementation of adaptation and capacity building actions is the key to reducing vulnerability of the Asia-Pacific

countries to climate change.

Since 2008, United Nations Environment Programme (UNEP) in partnership with key UN agencies and international organizations has been facilitating the development of a Global Adaptation Network (GAN) which composes of four Regional Networks in developing regions: Africa, Asia-Pacific, West Asia, and Latin America and the Caribbean. The Asia Pacific Adaptation Network (APAN) was launched in Bangkok as a part of the GAN by Prime Minister of Thailand in October 2009 and began its implementation in March 2010. The APAN's Regional Hub is co-hosted by AIT-UNEP RRC.AP and IGES and currently located in AIT-UNEP RRC.AP, Bangkok, Thailand.

APAN aims to help countries in the region to build climate resilience of vulnerable human systems, ecosystems and economies through the mobilization and sharing of knowledge and technologies to support adaptation capacity building, policy-setting, planning and practices. One of its objectives is to build the capacity of key stakeholders such as trainers, policymakers and development practitioners in the Asia-Pacific region in order to mainstream climate change adaptation principles and practices into developmental planning and programming in targeted countries, including Bangladesh, Cambodia, Lao PDR, Mongolia and Nepal.

For this capacity building objective, the project entitled "Scientific capacity development of trainers and policy-makers for climate change adaptation planning in the Asia and Pacific" has been approved by the Asia-Pacific Network for Global Change Research (APN) for funding starting November 2010. The main objectives of this project are to:

- Undertake appraisal of training needs (training needs assessment, TNA) in terms of knowledge and skill areas for effective adaptation; and
- Design training modules for imparting knowledge and skills for effective adaptation.

In order to meet the first objective, APAN has organized two Training Needs Assessment Meetings in Asian Institute of Technology, Bangkok with the participation of partners from five countries above. The 1st TNA meeting was organized on January 31, 2011 to introduce the partners to APAN and its capacity building agenda; reach a consensus on the modalities for implementing APN project on training modules development; obtain preliminary information and discussion on national systems for capacity building; and agree to cooperate to develop national strategies for capacity building (long-term). The 2nd TNA meeting was held on March 11, 2011 to review the process of conducting TNA in five countries by the national partners; discuss on the advantages, constraints, challenges and other issues practically faced by the national partners in conducting TNA; find out the solutions to overcome and the ways forward to continue detailed TNA.

Based on the results of TNA, this workshop, therefore, was organized to meet the 2nd objective of the project - to design training modules for imparting knowledge and skills for effective adaptation. For this purpose, the major activities of the workshop included:

- Country presentations on the TNA results and findings,
- Lectures on training course development framework, training objectives and identification of training contents, modularization of training contents and training methods, etc.
- Group exercises on identification of training contents, contents organization and selection of training methods, training course design, etc.
- Group presentations after exercises and followed by discussion/feedback.

The understanding of the knowledge of the participants on climate change adaptation with focus on

agriculture was bolstered by an additional lecture on "Agriculture Technology for Climate Change Adaptation". By the end of the workshop, the participants were expected to come up with a training module designed by all the five country team members for adaptation in agriculture sector. The effectiveness of this module would be judged through the feedback on the pilot training programs to be conducted in the respective countries in the coming year. The feedbacks from the staff employed by the agriculture sector would be then used for further improvisation of the training module thus developed and used.

For these purposes, the national partners of the project were requested to prepare a presentation on TNA in their country. The focus of presentation include: (i) methodology used to carry out the TNA exercise (ii) institutional arrangement and policy set up in the country; (iii) TNA results; (iv) ideal scenario for implementation of training modules in terms of knowledge, skills and practices; and (v) priorities for the content and challenges in designing the module. The meeting primarily focused on imparting the theoretical knowledge on designing the training module supplemented with practical experience the same through group exercises.

2. MEETING PROCEEDINGS

DAY 1: August 10, 2011

On behalf of the organizers, Dr. Mozaharul Alam, from UNEP ROAP, welcomed all participants to the workshop. He thanked all participants for their hard work on TNA since January and gave an introduction to the objectives of the meeting. Dr. Le Huong, APAN, introduced some new participants and briefed the participants on the agenda of the meeting for the coming three days. This was followed by presentations from the participating countries. Each country presented their findings from the TNA exercise. Each presentation was followed by discussion sessions led by Dr. Prabhakar and Dr. Le Huong.

2.1 Bangladesh

Presentation of Bangladesh team:

On behalf of Bangladesh TNA team, Dr. Ali, Associate Professor, Department of Agriculture Extension & Information System, Sher-e-Bangla Agricultural University, explained about the methodology adopted for TNA exercise and the tools used for the same. He gave an introduction to DAE, which is a core organization under the Ministry of Agriculture for technology transfer to the end users, and its organizational profile. The presentation also focused on the vulnerable areas to natural disaster and impacts of climate change. During the training needs assessment exercise, the existing training programs, institutions involved, training infrastructure, trainers and trainees and the training contents were all evaluated at national, district, upazilla and blocks level. From this evaluation, they were able to identify the gaps and challenges that lie ahead for conducting such training course in future at all the four levels mentioned above. Lack of proper infrastructure and facilities, trained human resource, metereological instruments, organizational fundings and coordination among national and local organizations were identified as the challenges that lie ahead in imparting an effective training for adaptation in agriculture sector.

Discussions:

In the existing modules, contents are rich in terms of Disaster Risk Reduction (DDR), thus
please make clear whether climate change adaptation (CCA) is there in the current training
programmes or not.

- What have you found from existing training programs?
- Who did you use the outputs of workshop in the TNA?
- What is the current level of understanding of climate change among survey respondents?
- Ideal scenario: How did you arrive at this ideal scenario?
- What is the difference between priorities of subjects and ideal scenario.
- Institutional facilities needed: Should be limited to implementation of the module.
- How did you choose the adaptation measures? From research findings?

2.2 Cambodia

Presentation of Cambodia team:

On behalf of Cambodia team, Dr. Kang, Dean of Faculty of Agricultural Technology and Management, Royal University of Agriculture, presented the methodology the team adopted for assessing the training needs in Cambodia for agriculture sector in adaptation. Initially, the information on training modules, materials and documents were collected through desk review which was followed by semi-structured interviews. She also discussed about the policy set up at national and sub-national level on the human resource development. The evaluation results showed that the existing training programs were conducted on climate change and agriculture and that the climate change department (CCD) does not have any training program on agriculture while Provincial Agriculture Departments did not have any training program on climate and climate change. Although funds are allocated at each level they are not sufficient. The assessment revealed that training materials and technical data were the facilities that were much needed. The content requirements were mainly concerned with adaptation techniques, vulnerability assessment and cost-benefit analysis among others. Also the challenges in the implementation were identified as module implementation from funding point of view, participation and cooperation among the concerned institutions.

Discussions:

- What was missing from the existing training programs?
- Do you have sufficient trainers to train on subjects identified?
- Or do you have enough human resource to deliver the training modules? The presentation did not mention about the need in terms of human resource for training (need for trainers/experts).
- Have you identified the target groups for knowledge and skill development area? It is very important for developing modules.
- The sustainability of training depends on the availability of fund and donor, among others.

2.3 Lao PDR

Presentation of Lao team:

On behalf of Lao team, Dr. Sacklokham, Vice-Dean of Faculty of Agriculture, National University of Lao, presented the tools and methodology used for the TNA. The Lao team had National University of Laos, National Agricultural and Forestry Extension Service and Master Trainers,

Provincial and District trainers as the participants in the survey. He explained the institutional set up of the country and how the Lao extension approach and training line were arranged. As stipulated in the 5 years plan (2011-2015) of the Ministry of Agriculture and Forestry, it plans to develop human resource through in-country trainings for 1800 staff and overseas training for 3500 in different areas of agriculture and forestry relevant to climate change adaptation. The results from the TNA revealed that almost all training programs had no module and they were only related to technical subjects with no link to climate change adaptation. The training facilities were inadequate, more so at the provincial and district levels, hence requiring proper training centers with IT systems, curriculum and materials. The team identified that the modules need to address knowledge, skills and practices on impact of climate change, possibilities to adapt and research on the techniques. In addition, the training modules also need to provide basic knowledge and skills on agro-metereology, integrated cropping system and agro-irrigation among others. Basic knowledge on adaptation among the trainers and trainees, the availability of adaptation technologies and fund for testing the prepared module were some of the barriers identified.

Discussions:

Major comments included:

- How many training programs conducted both by public and private sector in service and induction training?
- The evaluation shows that trainings at the central level are good due to better facilities but at the provincial level they are bad due to the lack of facilities. The facilities are poor as there are no LCDs or OHPs.
- Most of the trainers are on the job training and no induction training.
- Are there sufficient trainers for imparting training on adaptation or they are only general training?: The trainings are for general purpose only.
- How did you arrive at the ideal scenario?
- What kind of research information is available for CCA in agriculture techniques in your country?
- Why erosion control when you said drought is an important disaster in your country?
- Please refer to the NAPA and identify skill and knowledge areas.

2.4 Mongolia

Presentation of Mongolia team:

Mrs. Burmaa Badral, Director-General, Department of Information and Monitoring, Ministry of Food, Agriculture, Food and Light Industry presented the TNA results of Mongolia. The participants in the TNA were the governors of sub-provinces and provincial authorities, extension managers, agriculture experts and field workers and herders, farmers and small private enterprise owners and the local level. She informed that the public polices to reduce the negative impacts of the climate change and specific measures to adapt to the changes has been announced in the "National Implementation Plan on Climate Change" in 2010, by the Mongolian parliament. The TNA process revealed that most of the training programs conducted had some elements of CCA and were mainly catered to the herders and small cooperatives, however, any training solely focusing of this aspect were very few. According to the survey, although the departments and/or organizations had human

resource development plans and policies of which trainings form an inherent component, the funds allocated were not sufficient. Besides some basic knowledge on computer, IT skills and basic English, there was a need for good training facilities with equipments like projectors, sound systems, and internet connection. While the content of the training module needs to be focused around CCA, ToT, additional income generation for herder families and the role of private sector in agriculture, the challenges that lie ahead are mostly related with funds, good incentives to the qualified trainers, adequate training infrastructure and facilities and the willingness among the targeted trainees to be a part of the training programmes.

Discussions

• The knowledge and skill areas are missing, please refer to the NAPA and identify knowledge and skill areas.

2.5 Nepal

Presentation of Nepal team:

On behalf of the Nepal team, Mr. Shyam Prasad Paudyal, Program Director, Director of Livestock Services Training and Extension, Department of Livestock Services, Ministry of Agriculture and Cooperatives presented the TNA methodology and results. Besides conducting desk review and using the survey questionnaire availed by APAN to interview the training center chiefs, trainers, policy level officials, SMS and DADOs, field technicians, the team also used other tools like focused group discussions with officers attending training, regional level review workshops and interaction programs and on the spot observation of the training facilities. He informed that the "Civil Service Employee's Training Policy" had mandatory provisions for training and capacity development of the human resources through various types of basic trainings as well as subject specific trainings. The evaluation results informed that although the training facilities are in place, the teaching aids and training materials related to CCA are weak and training activities are jeopardized by long hours of load shedding. Given that the hills and mountains are more prone to the CC impacts, the need for training facilities and demonstration sites in these areas is deemed essential. The knowledge on climate change among the policy level officers and senior officers is poor and the case is even worse for the field level technicians and extension workers who have very poor knowledge in agriculture and virtually no understanding of climate change concept. An ideal scenario would be basic knowledge on the concept of CC, its effects/impacts on agriculture sector and its adaptation/ mitigation measures. Mr. Paudyal asserted that special knowledge and skill are required on vulnerability assessment, community adaptation measures, forecasting, techniques/technologies for adaptation and conservation agriculture for which some of the key institutional requirements, knowledge and skill areas were also identified. The challenges ahead were training large number of extension workers with very limited knowledge and preparing training materials for different target groups. The team suggested that there is a need for two prong strategies to realize wider and quicker impacts on CCA.

2.6 Lecture on introduction to training course development framework and training objectives and identification of training contents

Mr. Voravate, Senior Program Specialist, AIT Extension delivered lecture on training course development framework and training objectives and identification of training contents. The lecture provided a clear understanding of the types and nature of objectives for both the trainees and the trainers and guided on the step-wise process of filling in the template for writing the objective.

Discussion:

- Use of a single term "module" only rather than programs, curriculum, modules, etc. to avoid confusion.
- Some discussions were carried on the induction training and in-service training. For instance, in case of Lao PDR, since there is no induction training, one induction training module should be developed together with integrating CCA into the existing training programs. These should be put in the policy suggestions.

The lecture was followed by a group exercise on identification of training contents and designing modules in a standardized framework. Voravate instructed the participants on the group exercise which will continue for another two days. Throughout the two-day exercise, the participants were required to design two modules: (i) the induction module and (ii) the in-service module. But before doing this, a clear definition of the induction training program and its scope needs to be clarified. It was agreed that the induction training will be provided for newly recruited officials with their new responsibilities while in-service training will be given to those who have been working but need to be updated in their knowledge and skills.

The first session of exercise was to identify the **purpose** of training module, to **whom** (target groups), **why**, and **titles** of two training modules. Five country groups have worked under the facilitation of Mr. Voravate and then presented their group exercise results as follows:

- For Lao PDR, the induction training will be primarily targeted for the district officers to familiarize them with basic knowledge on CC while an in-service training will be given to the provincial agricultural staff to improve their specialized knowledge on rich production technology. This technology was chosen as it is one of the priorities in their NAPA and is also a finding from the TNA survey.
- For Bangladesh, CCA should be added in the job description for newly recruited staff for the induction training.
- In case of Cambodia, it was agreed that the induction trainings will be targeted to cadre of newly recruited staff at national level who do not have an understanding of the concept of CC and CCA in agriculture sector. While in-service trainings should be targeted for the extension workers at the district and commune levels to enhance their capacity on the knowledge and skills related to "CC adaptation technology on rice production".
- For Mongolia, the induction trainings will be given to the provincial extension officers in order
 to increase their awareness on CCA and enhance effective communication using simple
 language regarding CCA while the in-service training will be given on basic crop production
 technology.
- Finally, in case of Nepal, the capability of the subject matter specialist (SMS) and technical workers will be developed through induction training on CC impacts on farming whereas the district agricultural officers will be given in-service trainings on CC.

DAY 2: August 11, 2011

2.7 Lecture on agriculture technology for climate change adaptation

Dr. Abha Mishra, a senior research specialist and an affiliated faculty at the Agricultural Systems Engineering field of study at the Asian Institute of Technology, delivered lecture on "Agricultural technology for climate change adaptation. She focused her lecture on the projected climate change impacts on agriculture in specific countries of the Asia pacific region and provided information on the

CCA technologies that are being advocated and researched. She explained that the major identified impacts on the agriculture sector would be on agricultural crops, water availability, livestock and aquaculture and pest and diseases for which adaptation technologies are both being researched and developed. The technologies have been developed for adaptation to drier conditions, for soil, water and nutrient management, for delivering ecosystem services, to support farmers gain access to new adaptation practice for early warning systems and climate forecast and last but not the least, for better links between local, national and regional institutions. She emphasized that the identified technologies should be able to reduce vulnerability to CC impact and ultimately contribute to sustainable development. The adaptation strategies should consider improving monitoring, implement sustainable agricultural practices, seek active participation of stakeholders at all levels for natural resources management and use strategies for efficient conservation of water.

2.8 Lecture on modularization of training contents/training methods and resources plan

Mr. Voravate Chonlasin, Senior Program Specialist of AIT Extension, Asian Institute of Technology gave input session on modularization of training contents as part of training module design workshop. This session was the continuity of training and development session conducted in the second TNA meeting in March 2011. The main objectives of the session were to guide the participants on techniques used for selecting training contents and approaches that could be used for organization of contents in the training modules. The session addressed that selection of training contents has to be according to training objectives as well as expectation on works that the trainees have to perform after the training. It is also very important to consider training contents that suit with education background and work experiences of the trainees. The trainees or training participants will pay attention and willingness to learn will increase if the contents of training help them to solve problems they face in the field or in work place. Likewise, most of trainees in this project are adult learners, therefore, training delivery approaches should be participatory and exploratory which depend on how contents are organized and will be delivered. For instance, the contents may present complex situation which will allow participants to analyze and identify solution. At the end, the contents present simplified but concrete theories and concept that would allow participants to remember easily. Mr. Voravate also highlighted that training delivery methods are very important to achieve the effectiveness of learning. Long input session (more than 20-25 minutes) was not recommended because trainers never know what the trainees have in mind or want to take away from training session. Participatory approach will allow trainers to know and to respond to specific aspects that trainees really want to know for solving their problems.

Discussion

Bangladesh:

- Training objective has two levels. One is overall objectives which indicate outputs after completion of the training program. The other is enabling objectives that the trainers expect trainees to achieve in term of Knowledge and Skill after completion of each training activity/session.
- The training contents that related to rules, regulations and policies are not necessarily delivered
 in the classroom sessions. Reading assignments can be given to target staff in the organization or
 can be developed as manual or guideline.

Lao:

• Change of attitude of trainees is very difficult to measure, therefore, it is recommended to

measure behavioral changes of target trainees. For example, trainers can observe the new way of transplanting rice of farmers. The point is that trainers should allow and give time to trainees to test new knowledge and skill and let them find out whether they can apply in real life situation or not.

Mongolia:

- Mini-input session is a term used for training session that resource person will lecture only 15
 minutes to review concepts or theories. The mini-input session is normally followed by
 discussion or brainstorming sessions.
- It is very important to ask ourselves as trainers or training designers that "what we expect our trainees to perform after the training" so that we can delivery meaningful contents to them. In many cases their mandatory duties have already specified the tasks they need to perform. It is then possible to review job description of the trainees.

DAY 3: August 12, 2011

2.9 Country presentations and feedback

On Day 3, the countries presented the training modules prepared during the group exercise on precious days. Mr. Voravate, Dr. Prabhakar and Dr. Le Huong gave their comments and feedbacks on the designed training modules. Some key feedbacks and queries made are given hereunder:

Discussions:

Bangladesh:

- More contents on Disaster Risk Reduction (DRR), so need to remove some parts and make it
 more on focused on CCA. There should be a conceptual clarity between CC (global warming) and
 disaster because CC does not lead to disasters.
- Lot of contents and some are not interrelated, for eg. meteorology is combined with public awareness.
- Use of words in English should be carefully assessed. For eg. the use of terms "discrimination" or "difference" in gender are for different purposes.
- Modules are good in terms of training, but in terms of subject matters or specific contents, they
 are still weak.
- The draft modules need to be linked with the perfect scenarios in the TNA reports.
- When making training objectives, there should be a logistical flow starting from knowledge and then skill. One objective should be achieved by one subject content.
- The local level modules should be more skill-oriented.
- Regarding the duration of training, the draft module should be split into smaller sub-modules.

Nepal:

- The training contents need to be grouped into two clusters.
- For induction training, the contents have to fit very much with the TNA, the technologies related to CCA should be included in the modules.

Induction training sounds more policy oriented than functional nature of these officers.

Cambodia:

- For in-service training, the target groups should be changed to fit with the project objectives. The CCA component has to be incorporated into the existing training programs and a new/separate module need not be developed.
- The induction training should be targeted to extension workers.
- Although brainstorming is a strong technique,, it should be used too much in a training program.
- The methodology seems to be repeated in several sessions so need to be revised. Also contents are very general like pest management, animal production etc. which need to be more focused.

Mongolia:

- Too many objectives, some are skill training. It is better to have one objective + several contents or one module + several sub-modules.
- The relation of the subjects to CC (mechanization) needs to be justified.
- Why meterological data collection is focused? Is it national priority/part of some kind of national program?
- → Response: Data collection is a part of the job description for provincial extension managers.

Lao:

- Since it was mentioned that there are no induction training in Lao PDR, is the strategy developed?
- The responsible agencies for implementing these modules need to be mentioned.

2.10 Wrap up

Firstly, for administrative purpose, Dr. Le Huong guided the country team leaders on how to submit the country report (content, format, timeframe) and financial documents (invoice, receipts, financial report/break-down, etc.). She also discussed and suggested the countries to develop a clear work plan for the implementation or piloting period of the training modules developed. Secondly, in order to help the country teams improve their draft training modules and revise the final country reports, Dr. Prabhakar wrapped up the meeting with some important points for the teams to consider for revision. Details are given hereunder:

Bangladesh:

- Report: (i) Include data from surveys, (ii) Make sure that there is clear connection between subjects chosen and responses from the respondents, and with the subject in the modules, (iii) Discuss responses and identify training needs by level of officers who were interviewed.
- Module (in-service): (i) Make sure that the general contents like livestock, etc. are about climate change related specific information, (ii) Best management practices may be dealt in other training programs, but in this module, it is necessary to consider how specific it is to CCA.

Cambodia:

Report: (i) Identify training needs by class of officers rather than PDA, GDA department-wise.

However, it is okay if trainings in the country are carried by department wise and not by level of officers. Please refer to Nepal report if needed, (ii) Include job descriptions of officers interviewed (same to all countries).

• Module: Enabling objective: to enhance the capacity: Qualify it either knowledge and skill, etc. (Make them 'SMART').

Lao:

- Report: (i) Include data from surveys, (ii) Refer to NAPA for finalizing the 'ideal scenario' and identify training needs by comparing ideal scenario with the job description and survey responses, (iii) Training needs are to be identified for each class of staff who have been interviewed, (iv) Review other training modules on climate change available in the country (As Cambodian team members referred that there are training programs on climate change). See if they are administered to agriculture personnel or not (even if the module is a general one but if agriculture officers have attended). This module can be used to identify other subject matter content.
- Modules: (i) Make sure there is sufficient link with TNA, (ii) For short duration varieties module: Mention clearly the reason behind choosing this subject in the introduction section, (iii) For induction training, provide appropriate context in the implementation modalities section on how this module can be implemented, what are assumptions made about 'induction training program' that doesn't exist yet.

Nepal:

- Report: (i) Include data from surveys, (ii) Organize such a way that the order of ideal scenario, prioritization of training gaps, and training needs is intuitive to the reader.
- Module: Make sure that assumptions made for induction training are clearly indicated in the introduction and implementation modalities.

Mongolia:

- Report: (i) Refer to NAPA and other published literature for finalizing the 'ideal scenario' and
 identify training needs by comparing ideal scenario with the job description and survey
 responses, (ii) Training needs are to be identified for each class of staff who have been
 interviewed and link to the module developed for them.
- Modules: (i) Make sure there is sufficient link with TNA, (ii) For meteorology module, mention clearly the reason behind choosing this subject in the introduction section, and see that it has sufficient link with the training needs identified and the ideal scenario, (iii) Rephrase submodules to a standard terminology 'capsules'.

In short, Dr. Prabhakar listed out the common suggestions for all five country teams for them to revise the training modules and develop final country report. These include:

For the final country report:

- Refer to NAPA of the country and make sure that the priorities listed under agriculture and allied sectors are included in the 'Ideal Scenario' that the team has developed.
- Refer to other literature (scientific or otherwise) for identifying technologies and practices/policies suggested for the country.

- Provide references or sources wherever the country team referred /brought content from in the report (e.g. review of policy and institutional systems, review of modules).
- Organize the content according to the outline provided.
- Include job description of officers who have been interviewed.
- Mention about factual situation of the response given by respondents: e.g. when they say there
 is no training, please look for evidence that there is no training and discuss why they may have
 said doesn't exist (awareness gap).
- Include policy suggestions section in the country report (Part I) to overcome various issues that the team found from TNA (for e.g. lack of infrastructure, critical mass of trainers etc). Refer to specific policies in the country on how they can support overcoming these limitations.

For the training modules:

- Insert the table into the format supplied and shown on the screen.
- Each team needs to develop 6 modules in total which include:
 - 2 classes (induction and in-service)
 - 3 levels (entry, middle level, and senior policy level)
- Mention clearly which module is for to what specific officers (e.g. Provincial agricultural officer, not level I or entry level)
- Course Content: Review for identifying appropriate course content suiting to different levels of officers, talk to different experts if needed.
- Revisit the training methods and be practical about it.
- Make sure that there is connectivity in the flow of contents in each module.

2.11 Closing remarks

Dr. Mozaharul Alam, Regional Climate Change Coordinator of UNEP-ROAP, delivered the concluding remarks. He thanked the entire team of APAN for successfully organizing the workshop. He also thanked the country participants for their hard work and perseverance in developing a product which will be useful not only for them but also for other countries across Asia and the Pacific that are working towards building capacity in the adaptation sector.

He reminded the countries that being the first initiative in terms of TNA, the product will be internally shared through internet, therefore the countries should try to make the output at its best. He assured the participants that the resource materials for pilot program will be identified soon. He also informed that some of the participants from this meeting will also be invited for the pilot training which will be organized on October 25-26, 2011 back to back with the Adaptation Forum 2011 in Bangkok.

At the end, he once again thanked all the colleagues, organizer and donors for funding the APN and APAN projects.

3. APPENDICES

Appendix 1: Meeting Agenda

Wednesday - August 10, 2011				
8:30-9:00	Registration			
9:00-9:15	Welcome remarks			
	Dr. Mozaharul Alam, Regional Climate Change Coordinator, United Nations Environment Program (UNEP) - Asia and the Pacific, Thailand			
9:15-10:45	Country presentation on results/findings of TNA (20 min./presentation and 10 min./discussion)			
	Bangladesh, Cambodia and Lao PDR			
	Facilitators:			
	Dr. SVRK Prabhakar, Senior Policy Researcher, IGES			
	Dr. Le Thi Thu Huong, Climate Change Adaptation Specialist, IGES Regional Center – APAN			
10:45-11:00	Tea break			
11:00-12:00	Country presentation on results/findings of TNA (continue)			
	Mongolia and Nepal			
	Facilitators:			
	Dr. SVRK Prabhakar, Senior Policy Researcher, IGES			
	Dr. Le Thi Thu Huong, Climate Change Adaptation Specialist, IGES Regional Center – APAN			
12:00-13:00	Lunch break (at AITCC)			
13:00-14:00	Lectures:			
	Introduction to training course development framework.			
	Training objectives and identification of training contents			
	Mr. Voravate, Training Expert, AIT Extension			
14:00-16:00	Group exercise: Identification of training contents			
	(Tea break at 15:00)			
16:00-17:30	Presentation and feedback (15-20 min./group)			
Thursday - August	11, 2011			
9:00-10:00	Agriculture technology for climate change adaptation (and Q&A)			
	Dr. Abha Mishra, Senior Research Specialist and Affiliated Faculty, Asian Institute of Technology			
10:00-10:30	Modularization of training contents/training methods and resources plan			
	Mr. Voravate, Training Expert, AIT Extension			
10:30-10:45	Tea break			
10:45-12:30	Group Exercise: Contents organization and selection of training methods			

	Facilitators:				
	Mr. Voravate, Training Expert, AIT Extension				
	Dr. SVRK Prabhakar, Senior Policy Researcher, IGES				
	Dr. Le Thi Thu Huong, Climate Change Adaptation Specialist, IGES Regional Center – APAN				
12:30-13:30	Lunch break (at AITCC)				
13:30-17:00	Group Exercise: Finalization of training course design and preparation for country presentation				
	Facilitators:				
	Mr. Voravate, Training Expert, AIT Extension				
	Dr. SVRK Prabhakar, Senior Policy Researcher, IGES				
	Dr. Le Thi Thu Huong, Climate Change Adaptation Specialist, IGES Regional Center – APAN				
Friday - August 12, 2011					
9:00-12:00	Country presentation and feedback (20 min./presentation and 10 min./discussion)				
	(tea break at 10:30)				
12:00-13:00	Lunch break (at AITCC)				
13:00-13:30	Work plan for next steps:				
	Dr. Le Thi Thu Huong, Climate Change Adaptation Specialist, IGES Regional Center – APAN				
13:30-14:00	Wrap up:				
	Dr. SVRK Prabhakar, Senior Policy Researcher, IGES				
14:00-14:30	Closing remarks:				
Dr. Mozaharul Alam, Regional Climate Change Coordinator, United Nations Environm (UNEP) - Asia and the Pacific, Thailand					

Appendix 2: List of Attended Participants

No.	Name	Position and Organization	Country
1	Dr. KANG Kroesna (Ms.)	Dean, Faculty of Agricultural Technology and Management, Royal University of Agriculture (RUA)	Cambodia
2	Mr. HOK Kimthourn	National Project Manager Project Support Unit, Ministry of Agriculture Forestry and Fisheries (MAFF)	Cambodia
3	Mr. CHEA Chan Thou	Deputy Director, Climate Change Department (CCD), Ministry of Environment (MoE)	Cambodia
4	Dr. Silinthone SACKLOKHAM (Ms.)	Vice Dean, Faculty of Agriculture, National University of Lao (NUL)	Lao PDR
5	Mr. Somphanh PASOUVANG	Associate Professor, Research and Training Division, Faculty of Agriculture, National University of Lao	Lao PDR
6	Mr. Fongsamouth SOUTHAMMAVONG	Dean, Faculty of Agriculture, National University of Lao (NUL)	Lao PDR
7	Mr. Somphone NOIVONG	Agronomist/Trainer, National Agricultural and Forestry Extension Service (NAFES), Ministry of Agriculture.	Lao PDR
8	Mrs. BURMAA Badral	Director-General, Department of Information and Monitoring, Ministry of Food, Agriculture, Food and Light Industry (MoFALI)	Mongolia
9	Mr. PUREVSUREN Buyan-Ulzii	Director, National Agriculture Extension Center, Ministry of Food, Agriculture and Light Industry (MoFALI)	Mongolia
10	Dr. OYUNTUYA Sharavjamts	Vice Director, School of Ecology and Technological Development, Mongolian State University of	Mongolia
11	Mr. OTGONBAATAR Bayaraa	National Agricultural Extension Center, Ministry of Food, Agriculture and Light Industry, Project Assistant	Mongolia
12	Dr. Md. Sekender ALI (Mr.)	Associate Professor, Department of Agriculture Extension & Information System, Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh	Bangladesh
13	Mr. Md. Fazlul KARIM	Director, Training Wing, Department of Agriculture Extension, Ministry of Agriculture,	Bangladesh
14	Mr. Ram Bhakta SHRESTHA	Director, Centre for Organization Development, NASC, Nepal Administrative Staff College (NASC)	Nepal
15	Mr. Shyam Prasad PAUDYAL	Program Director, Director of Livestock Services Training and Extension, Department of Livestock Services, Ministry of Agriculture and Cooperatives	Nepal
16	Mr. Ganesh Kumar SHRESTHA	Agronomist, Senior Horticulture Development Training Officer, Directorate of Agricultural Training, Harihar Bhawan, Lalitpur,	Nepal
17	Dr. Mozaharul ALAM	Regional Climate Change Coordinator, United Nations Environment Program - Regional Office for Asia and the Pacific (UNEP-ROAP), Thailand	Distinguished participant
18	Ms. Raji DHITAL	Assistant Program Officer, UNEP-ROAP	Distinguished participant
		19	

19	Mr. Voravate CHONSALIN	Senior Program Officer, Head of Public Sector Capacity Building Unit, AIT Extension, Asian Institute of Technology (AIT)	Lecturer
20	Dr. Abha MISHRA	Senior Research Specialist and Affiliated Faculty	Lecturer
21	Dr. SVRK PRABHAKAR	Policy Researcher (Adaptation Team), Natural Resource Management Group, IGES Headquarters, Japan	Resource person
22	Dr. LE Thi Thu Huong	Climate Change Adaptation Specialist, APAN - IGES Bangkok Office	Organizer
23	Ms. Narudee LERDPHORNSUTTIRAT	Administrative Associate, IGES Regional Center	Organizer
24.	Ms. Supaporn PHUSATORN	Administrative Associate (APAN) AIT/UNEP Regional Resource Center for Asia-Pacific (RRC.AP)	Organizer

Appendix 3: Meeting Photos



Participants of 3rd workshop: Training Modules Design Workshop August 10-12, 2011 - Bangkok, Thailand





Lecture on "Training Cycle and Design of Training Program" by Mr. Voravate



Wrap up session by Dr. Prabhakar