



EVALUATION REPORT

TRAINING OF TRAINERS



**“Building Future Expertise in Climate Change Research for
Agricultural Universities and Institutions in Cambodia”**
(Project Reference Number: CBA2020-FP12-SOPHEAK)

03rd-06th January, 2022

“Building Future Expertise in Climate Change Research for Agricultural Universities and Institutions in Cambodia”

I. Project Background

Building capacity of young talented researchers/lecturers in agricultural education institutions is in need for Cambodia to improve climate change education in agricultural sector. The proposed project aims at contribute to capacity development in climate change research for early-career researchers/lecturers in higher education institutions of Cambodia with the following specific objectives: (i) to build up capacity of early career researcher in 8 universities by TOT, (ii) to mainstreaming current climate change impacts into agricultural curriculum, and develop pilot research proposals under area-based assessment of climate change impacts on agricultural sectors, and, (iii) to contribute the project results to improve understanding and awareness of mainstreaming CC education into risk and vulnerability of community development. The main approach using in this project include training of trainers (ToT), integrated climate change education into existing curriculum/courses, and policy brief recommendation. Under the framework of this project, 32 young talented researchers/lecturers will be directly benefit from the project and the knowledge of 240 students will be approved through replication training. The project is support to APN Fifth Strategic Plan 2020-2024 in strategic goal #2,#3, and align with Cambodia Climate Change Strategic Plan 2014-2023 Goal No.3. Under the framework of the project, the Training of Trainers will be held to build capacity of lecturers/researchers in agricultural universities and institution in Cambodia.

II. Training Objectives

The first of four ToTs planned under the framework of the project in order to build capacity of sub-national institution on climate change took place in December 2021 in Dragon Royal Angkor Hotel, Siem province, for 4 days and focus on the basic of climate change, climate change adaptation and mitigation and water resources. Basic of training skill was added to fulfill the capacity of the participants. Trainees were invited from 8 institutions including: Royal University of Agriucture, Preak Leap National Institution for Agriculture, Kampongcham National Institute for Agriculture, Savy Rieng University, University of Heng Samrin Tbong Khmum, University of Kratia, Meachey National University, and Battambang National University. Totally, there were 32 trainees who are interesting on climate change research, education, and extension that invited for this ToT. The keys objectives of the training were:

- To introduce climate change related issues and doable response to the trainers.

- To introduce and building capacity of agricultural institution on the concept of climate change adaptation and mitigation.
- Building capacity of selected participants on how to mainstream climate change into existing courses or curriculum.

III. Training Methodology

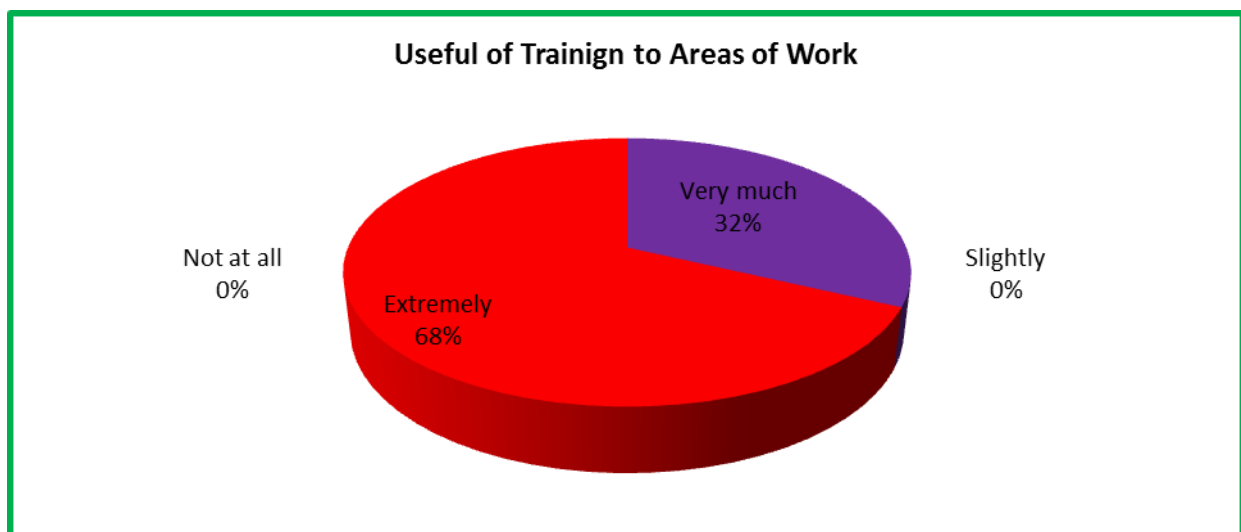
- Power point presentation
- Experience sharing
- Group Discussion
- Game
- Role play

IV. Result of Evaluation

As mentioned of the objectives, it is commonly aimed at promoting the capacity building and awareness raising in relation to climate change adaptation and climate change response to selected officials of local line agencies. Therefore, evaluation did two times (during pre-and-at the final course) by using prepared questionnaires.

1. Evaluation on General Opinion on the training

All the trainees were asked to response a question on how they find this training useful to their current area of work. As the result, 32% of the trainees thought that the training is very important to their current work while 68% claimed that it is extremely important to understand about the climate change since they are working in the context of what the training was addressing. Before the training start, some participants talked directly to the training that they always limited with the knowledge of climate change that's why they were very hard to explain to the community.



Graphic01: Percentage of trainee on the useful on the training to their current area of work

Most of the trainees (96%) agreed that they were very much satisfied with the training approach. The training approach consist of lecture with PowerPoint presentation, group discussion, group work, and role play which allowed them to had enough time to ask, answer, explain, or communicate in the training. As the positive result, there were no participants who not satisfy to the training approach therefore the training was very successful.



Graphic02: Percentage of the trainees satisfied with the training approach

Some participants (7%) slightly satisfy with the training manual since it was developed in English. It was not easy to read and understand, they said. However, there were 70% of the total trainees satisfy very much with the training manual and 23% in the condition of extremely and understandable with the manual. In this regard, the training manual is one of the components which enhanced the effectiveness of the training achievement.



Graphic03: Percentage of the trainees satisfied with the training manual

1. Evaluation on knowledge

The knowledge of the participants was evaluated with a pre and post evaluation as well as with individual lessons. The frequency as well as the percentage of the respondents has been change notability in knowledge for pre and post training.

Before the training, the respondent knowledge on Introduction to climate change was limited with 32% claimed that they know not well about that topic and 18% never known at all while only 48% know well about the topic. This amount of percentage let us know that some trainees participated in the training have low knowledge on climate change even they are working in that

area of work. Regarding the topic of Cause and Effect of Climate Change, 60% of the trainees said that they don't have any knowledge and another 35% known not well while only 05% come up with the answer *well*, they have well knowledge to be utilized in their area of work. However, the percentage is very low if compare to those who had limited knowledge in Cause and Effect of Climate Change. In the same way, 54% of the trainees never known at all on the topic of Impact of Climate Change on Agricultural Sector and Gender Aspect and as well as 80% on Doable Response to Climate Change. It was cleared that the knowledge of the trainees on Climate Change Adaptation before the training was not well with only 15% knows about climate change adaptation. Nearly all of the respondents (95%) know nothing about Vulnerability and Impact Assessment (VIA) and 60% on Climate Change Mitigation with Gender Reflection. In this regard, the knowledge of Climate Change and Water Resource Management is going to the similar way with only 10% know well and 80% didn't have any knowledge at all in the above mentioned topic. It was noted that the basic of the training skill was very limited with 85% of the trainees mentioned that they don't have knowledge at all on the developing training skill. All in all, even the training on climate change is very important to their current area of work, but the trainees' knowledge was very limited and need to be enhanced.

Table01: Pre knowledge evaluation by courses

ITEMS		Not at all	Not well	Well	Very well
a)	Introduction to Climate Change	18%	32%	48%	0%
b)	Cause and Effect of Climate Change	60%	35%	05%	0%
c)	Impact of Climate Change on Agricultural Sector and Gender Aspect	54%	30%	16%	0%
d)	Doable Response to Climate Change	80%	20%	0%	0%
e)	Introduction to Climate Change Adaptation	50%	35%	15%	0%
f)	Appropriate Climate Change Adaptation in Agricultural Sector with Gender Perspective Included	92%	8%	0%	0%
g)	Vulnerability and Impact Assessment (VIA)	95%	2%	3%	0%
h)	Climate Change Mitigation with Gender Reflection	60%	30%	10%	0%
i)	Water Resource Management in the context of Climate Change	80%	20%	0%	0%
j)	Developing Training Skills	85%	15%	0%	0%

At the end of the training on Building Future Expertise in Climate Change Research for Agricultural Universities and Institutions in Cambodia, the evaluation was done again to see how the knowledge of the trainees changed and to ensure that the training already achieved the objectives. Nearly all the participants' knowledge on climate change was enhanced with the answered come up with "well, my knowledge can be used well" or "my knowledge increased very well", that's a positive result of the training. In this evaluation, the training already achieved the objectives of introducing climate change related issues and doable response to the trainers, introducing and building capacity of selected provincial officials on concept of climate change adaptation and mitigation, building capacity of selected provincial officials on how to mainstream climate change adaptation into provincial development plans by sectors, and Introducing climate change, gender and approach of gender mainstreaming into climate change adaptation with more than 80% of the trainees in each topic received well knowledge after the training. Only one topic "Vulnerability Impact Assessment" was very difficult for the trainees to understand with the result of 6% of the total respondents still understand not well about that topic. Even it is a little bit technical for this topic, however percentage of those trainees who understand well, was also high (76%). To sum up, the training already enhanced the knowledge of the participants on the following topics as shown in table 02 below.

Table02: Post knowledge evaluation by courses

ITEMS	Not at all	Not well	Well	Very well
a) Introduction to Climate Change	0%	0%	13%	87%
b) Cause and Effect of Climate Change	0%	0%	12%	88%
c) Impact of Climate Change on Agricultural Sector and Gender Aspect	0%	0%	83%	17%
d) Doable Response to Climate Change	0%	0%	75%	25%
e) Introduction to Climate Change Adaptation	0%	0%	7%	93%
f) Appropriate Climate Change Adaptation in Agricultural Sector with Gender Perspective Included	0%	0%	82%	18%
g) Vulnerability and Impact Assessment (VIA)	0%	06%	74%	20%
h) Climate Change Mitigation with Gender Reflection	0%	0%	15%	85%
i) Water Resource Management in the context of Climate Change	0%	0%	43%	57%
j) Developing Training Skills	0%	0%	76%	24%

1. Summary of end of workshop evaluation

At the end of the training workshop participants evaluated the workshop on a scale of 5 scale points (1= very poor, 2= poor, 3= fair, 4= good, 5=Very good). Moreover, they gave their written assessment about the strength and weakness of the training workshop. The results are presented below.

Table03: summary evaluation result at the end of the training

	Mean	Std. Deviation	Minimum	Maximum
1. Level of Understanding gain from ToT in each topic	4.66	0.48	4	5
2. Level of skills developed on climate change of ToT	4.32	0.59	3	5
3. Content of the workshop	4.60	0.53	3	5
4. Clarification on Power Point presentation	4.66	0.52	3	5
5. Practicality of group exercises	4.22	0.71	3	5
6. Trainees' participation	4.36	0.57	3	5
7. Level of experience sharing	4.14	0.73	2	5
8. Responsiveness of facilitators to participants' need	4.44	0.58	3	5
9. The workshop fulfilled its objectives	4.70	0.58	3	5
10. Overall rating of the workshop	4.48	0.58	3	5

(11) Conclusion on the Evaluation

All in all, the training completely achieved the objectives as well as the expected outcomes since the selected 32 trainees from 8 different institutions already well aware of climate change related issues, the concept of climate change adaptation planning, various suitable adaptation technique in coastal area of Cambodia. The training, in the same way, enhanced the capacity of the selected trainees on how to mainstreaming climate change existing curriculum or existing courses. Therefore, the selected trainees' capacity already become trainers and will be a future climate change expert in Cambodia.

(12) Strength, Weakness, and recommendations:

12.1 Strength of the Training Workshop

- Excellent clarification and dedication to share knowledge
- It was participatory, open and transparent
- Methodology (system used) for practical training is very good
- Presentation materials was adequate and good
- It creates great knowledge and skill and meets the target
- Very interesting and applicable
- Topic selection was very relevant
- Excellent time management and utilization
- The training met almost all expectations of the trainees
- Used local experience

12.2 Weakness of the Training Workshop

- Total time given to the training is short
- No practical field visit
- Too many participants

12.3 Recommendation

- The total time given should be 7 days
- Field visit should be considered

(13.) Training Delivery and Future Direction

13.1 Training Delivery

Strength of Group

- Good communication and group management(task divided)
- Manage sufficient time for training
- Provide enough materials for training
- Example or case studies are clear, useful, and reliable

Weakness

- Some participants still unconfident to be a trainer
- There were too many members per group

13.2 Future Training Delivery

By given the time to discuss and brainstorm what are they going to do with this knowledge for the next step, some participants raised up with some plans as follow:

- Apply the knowledge to teach students in respective institutions
- Train his/her colleague or staff for basic of climate change

Appendix01: Training Agenda

Training of Trainers on **Building Future Expertise in Climate Change Research for** **Agricultural Universities and Institutions in Cambodia** Venue: Royal Dragon Angkor Hotel, Siem Reap, Cambodia 03rd-06th January, 2022

DAY 1: 03rd January, 2022		
Time/Session	Activities	Responsible Person(s)
07:30 – 09:00	<i>Registration</i>	Staff & Participants
09:00 – 09:30	Opening Ceremony <ul style="list-style-type: none">• Welcome Remarks• Opening Speech	MC: Mr. Vann Sakanan Mr. Thav Sopheak Assoc.Prof.Dr. Huon Thavrak
09:30-09:45	Introduction to Workshop Objectives and Structure	Mr. Thav Sopheak
09:45-10:15	<i>Coffee Break</i>	All participants
10:15-10:45	Introduction to Climate Change	Dr. Huon Thavrak
10:45-11:00	<i>Question and Answers</i>	All participants
11:00-11:45	Cause and Effect of Climate Change	Mr. Kim Soben
11:45-12:00	<i>Question and Answers</i>	All participants
12:00-13:30	<i>Lunch Break</i>	All participants
13:30-14:25	Impact of Climate Change on Agricultural Sector and Gender Aspect (<i>Question and Answers included</i>)	Mr. Thav Sopheak
14:25-15:25	<i>Group Exercise on Impact Change (Group Presentation Included)</i>	All participants
15:25-15:40	<i>Coffee Break</i>	All participants
15:40-16:20	<i>Doable Response to Climate Change</i>	Mr. Kim Soben
16:20-16:35	<i>Question and Answers</i>	All participants

16:35-17:00	<i>Evaluation of Day 1</i>	Mr. Thav Sopheak
DAY 2: 04th January, 2022		
08:00-09:45	<p>Introduction to Climate Change Adaptation</p> <ul style="list-style-type: none"> - <i>Definition of Adaptation and Resilience</i> - <i>Important of Climate Change Adaptation</i> - <i>Climate Change Adaptation Action</i> - <i>Mainstream climate change adaptation into provincial development plans by sectors</i> 	Mr. Kim Soben
09:45-10:00	<i>Question and Answers</i>	All participants
10:00-10:20	<i>Coffee Break</i>	All participants
10:20-11:00	Appropriate Climate Change Adaptation in Agricultural Sector with Gender Perspective Included	Dr. Huon Thavrak
11:00-11:15	<i>Question and Answers</i>	All participants
11:15-12:00	<i>Group Discussion on Planning for Climate Change Adaptation</i>	All participants
12:00-13:30	<i>Lunch Break</i>	All participants
13:30-14:00	<p>Vulnerability and Impact Assessment (VIA)</p> <ul style="list-style-type: none"> - <i>Terminology</i> - <i>Concepts: exposure, sensitivity, potential impacts, adaptive capacity, vulnerability</i> 	Mr. Thav Sopheak
14:00-14:15	<i>Question and Answers</i>	All participants
14:15-15:00	<p><i>Method and tool set for VIA: Sensitivity and adaptive capacity Assessment</i></p> <ul style="list-style-type: none"> - <i>Group Discussion</i> - <i>Matrix of Sensitivity and adaptive capacity assessment</i> 	Mr. Thav Sopheak
15:00-15:20	<i>Coffee Break</i>	All participants
15:20-16:30	<p><i>Method and tool set for VIA: Potential impact assessment</i></p> <ul style="list-style-type: none"> - <i>Group Discussion</i> - <i>Matrix of Impacts and Vulnerability assessment</i> 	Mr. Thav Sopheak
16:30-17:00	<i>Evaluation of Day 2</i>	Mr. Thav Sopheak
DAY 3: 24th December, 2015		
08:00-09:45	<p>Climate Change Mitigation with Gender Reflection</p> <ul style="list-style-type: none"> - <i>Definition and Scope of Mitigation</i> - <i>Greenhouse Gas Mitigation</i> - <i>linkage between Mitigation and Adaptation</i> 	Mr. Chhun Vireak and Mr. Thav Sopheak
09:45-10:00	<i>Question and Answers</i>	All participants
10:00-10:20	<i>Coffee Break</i>	All participants

10:20-11:00	Water Resource Management in the context of Climate Change <ul style="list-style-type: none"> - <i>Current water Resource management</i> - <i>Water Efficiency: Agricultural Irrigation</i> - <i>Doable Practice to deal with climate change</i> 	Mr. Kim Soben
11:00-11:15	<i>Question and Answers</i>	All participants
11:15-12:00	Developing Training Skills <ul style="list-style-type: none"> - Introducing training and learning - Participatory training - Training Design and session planning - The training Agenda - Setting Training Objective - Developing session plan - Training Method 	Mr. Chhun Vireak
12:00-13:30	<i>Lunch Break</i>	All participants
13:30-14:30	Developing Training Skills (con't) <ul style="list-style-type: none"> - Introducing training and learning - Participatory training - Training Design and session planning - The training Agenda - Setting Training Objective - Developing session plan - Training Method 	Mr. Thav Sopheak
14:30-14:45	<i>Question and Answers</i>	All participants
14:45-15:00	<i>Coffee Break</i>	All participants
Training Delivery Session		
15:30-16:45	Preparation of a 60 minute training module with session plan and materials	All participants
16:45-17:00	Evaluation of Day 3	Mr. Thav Sopheak
DAY 4: 25th December, 2015		
08:00-09:30	Preparation of a 60 minute training module with session plan and materials (Con't)	All participants
09:30-10:30	Training Delivery for Group 01	Group 01
10:30-10:35	Comment and Feedback from the audiences	All participants
10:35-10:55	<i>Coffee Break</i>	All participants
10:55-11:55	Training Delivery for Group 02	Group 02
11:55-12:00	Comment and Feedback from the audiences	All participants
12:00-13:30	<i>Lunch Break</i>	All participants
13:30-14:30	Training Delivery for Group 03	Group 03
14:30-14:35	Comment and Feedback from the audiences	All participants
14:35-15:35	Training Delivery for Group 04	Group 04

15:35-15:40	Comment and Feedback from the audiences	All participants
15:00-15:30	<i>Coffee Break</i>	All participants
15:30-17:00	Evaluation, Certification ceremony and closing <ul style="list-style-type: none"> - Reviewing the expectations - Brainstorming/discussion on future training delivery - Course evaluation - Certificate ceremony and group photos - Next steps 	Mr. Thav Sopheak

Appendix02: Picture during ToT















