Strengthening Professional Environmental Advocacy and Knowledge (SPEAK) Climate Change: From Science to Action

For [MAIL, MEW, MRRD BORDA, RGEO, AMA, NEPA and UNEP Colleagues]

TRAINING REPORT

[30 April -3 May, 2016]

Project name:	Building Adaptive Capacity and Resilience to Climate Change in Afghanistan (LDCF1)
Project component/ activity:	The training is mainly for below activities of the LDCF1 project: • 1.3.2. Conduct a training course on climate change risks to water and other relevant sectors for policy makers in government. • 2.4.2. Carry out training courses to build capacity of various sectors to understand and make use of the climate change adaptation strategy. • 4.3.1. Formalize training tools for climate change adaptation and flood/drought prevention from lessons learned. • 4.5.1. Carry out training course on strategic planning and proposal writing for relevant agencies.
Curriculum title:	SPEAK Climate Change: From Science to Action
Training mission statement:	The SPEAK Climate Change curriculum empowers participants to effectively identify, mitigate and adapt to climate change risks.
Target audience:	MAIL, MEW, MRRD BORDA, RGEO, AMA, NEPA and UNEP
Number of Participants:	18 (15 Male, 3 Female) from MAIL, MEW, MRRD BORDA, RGEO, AMA, NEPA and UNEP
Lead author:	Ahmad Jamshed Khoshbeen and Haris Sherzad
Timeframe:	What is the overall schedule of curriculum development and training delivery? Will it coincide with any events? The training curriculum development started in December 2015 and was finalized in April 2016. The training was delivered for four days on 30 April to 3 May 2016.
Budget:	700 USD
Key words:	Climate changes impacts, Mitigation, Adaptation and Technologies, UNFCCC, Climate-Smart Technologies

1. SUMMARY AND OVERVIEW:

Understanding the potential consequences of climate change for ecosystems and human populations is essential to make informed decisions and planning responses to pressing climate issues. Although there is a wide range of scientific literature on the impacts of climate change available, including from the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Panel on Climate Change (IPCC), still much remains to be researched and understood. Moreover, climate change is also expected to exacerbate the frequency and severity of global weather phenomena, which will likely lead to an increased frequency and severity of natural hazards and necessitates greater planning for applying sustainable environment management solutions for adaptation and reducing disaster risk. We are only now beginning to see the preliminary impacts of climate change, and what the future holds for us is still unknown. Nevertheless, ecosystem-based solutions are among the most sustainable methods to building adaptive capacity, primarily because they capitalize on ecosystem-services, such as forests and wetlands, that act as natural infrastructure that help reduce exposure to many hazards (floods, droughts, landslides, etc.) and increase the socio-economic resilience of people and communities by sustaining local livelihoods and providing other essential resources, such as food, water, and building materials (CNRD-PEDRR, 2013: 11).

Considering this, UNEP has developed the SPEAK Climate Change training course which has been designed under overall UNEP BERA program contributing directly to the objectives of many

projects including Building Adaptive Capacity and Resilience to Climate Change (LDCF-1), Strengthening the Resilience of Afghanistan's Vulnerable Communities against Natural Disasters (SRACAD), Second National Communication (SNC), National Biodiversity Strategic Action Plan (NBSAP), ESTONIA and Department for International Funding (DFID), all of which place emphasis on capacity building of senior Afghan counterparts in government and raise awareness-raising of community based approaches to environmental management.

2. CURRICULUM AND TRAINING BACKGROUND AND SCOPE:

The United Nations Environment Programme (UNEP) is the overall coordinating organization for environmental activities within the United Nations system. UNEP is present in Afghanistan since 2002, assisting the Government of Afghanistan in environment related issues. UNEP's Afghanistan Building Environmental Resilience in Afghanistan (BERA) programme currently involves training and mentoring government counterparts and providing technical assistance and advice in the fields of environmental coordination, environmental law and policy, environmental impact assessment and pollution control, environmental education and awareness, community-based natural resource management, protected areas and multilateral environmental agreements.

UNEP's aim has been to explore ways to enhance capacity building efforts by identifying gaps, key elements, successful delivery mechanisms, and substantive areas for capacity building that reflect national needs and priorities. In this regard, UNEP has conducted a Training Needs Assessment for its partners and one of the key area identified was the need for capacity building on climate change.

3. CURRICULUM AND Training Mission Statement:

The SPEAK Climate Change curriculum empowers participants to effectively identify, mitigate and adapt to climate change risks, nationally and locally at the community level, by providing the knowledge of climate change science, international frameworks, impacts, and response.

4. NUMBER OF PARTICIPANTS:

18 Technical Staff including 15 Male and 3 Female staffs from below organizations attended the training:

- Ministry of Rural Rehabilitation and Development (MRRD);
- Ministry of Energy and Water (MEW);
- Ministry of Agriculture, Irrigation, and Livestock (MAIL);
- Afghanistan Meteorological Authority (AMA);
- National Environmental Protection Agency (NEPA);
- Rural Green Environmental Organization (RGEO);
- Bremen Overseas Research and Development Agency (BORDA);
- United Nations Environment Programme (UNEP).

Please refer to Annex I for list and contacts of participants.

5. TEACHING PHILOSOPHY:

The course has adopted multiple philosophies for more efficient learning. All the modules included:

- A lecture (presentation from the teacher).
- Videos as global or national case studies.
- Hands on exercise to make participants use the knowledge in their local context.

6. CURRICULUM AND TRAINING COURSE GOALS:

- Students will understand the science of climate change, differences between climate and weather, and how greenhouse gases are causing climate change.
- Students will understand the impacts of climate change on various sectors and how climate change is linked to disasters.
- Students will learn how to address climate change through the mitigation and adaptation measures and gain knowledge on climate technologies, its mechanisms and uses and opportunities.
- The course will provide students with the knowledge of global and national policy frameworks and actions taken to address climate change.
- Students are able to develop skills to identify, monitor and adopt to climate change risks in their work area.

7. CURRICULUM MODEL:

The training took place between 30 April to 3 May 2016 starting daily at 08:45 and ending around 1600. The training was designed in 7 modules (6 training modules + 1 Practical) including:

- **Module 1**: Participants Climate Change Science: This module focused on basic science of climate change, difference between weather and climate, anthropogenic causes of climate change, and Afghanistan's vulnerability to climate change. The participants used the climate change guidance chart to identify various impacts of climate change in Afghanistan that they face in their work localities.
- **Module 2**: Impacts of Climate Change: This module presented the main impacts of climate change on three most important sectors including agriculture and food chain, biodiversity and water resources. The participants were able to map climate change risks in their work areas.
- **Module 3**: Climate Change Adaptation: The module presented one of the mechanisms to cope with changing climate i.e. to adopt to the changes in order to minimize the risks associated with it. Students were able to identify adaptation measures for the risks identified in the activity done in module 2 along with its prioritization as per budget and time resources required.
- **Module 4**: Climate Change Mitigation: This module trained the participants with ways to reduce the Greenhouse Gases emissions to mitigate the climate change impacts. During this module, students were able to identify examples of best practices applicable in the country for reducing GHG emissions including alternative energy, carbon sequestration and energy conservation.
- **Module 5**: Climate-Smart Technologies: This module presented on climate-smart technologies that are vital for both climate change adaptation and mitigation and the Climate Technology Centre and Network (CTCN) which provides supports to governments on technology transfer.
- **Module 6**: Climate Change Governance, Frameworks, and Finance: This module presents the global to national governance mechanisms to address climate change globally and nationally as climate change is a global phenomenon. Moreover, the module presented the financial resources that are available globally and the ways to mainstream climate change into national plans and policies.

- **Module 7**: The Practical Module was designed so the participants can be part of a national governance activity to identify and prioritize best technologies for climate change adaptation and mitigation for agriculture, water and energy sector.

8. REVIEW OF INTERNATIONAL, NATIONAL, AND LOCAL STANDARDS:

NEESAP: Under the NEESAP, the training is addressing the objectives 1 (raising awareness), 7 (government leadership), 10 (educational material development) and 9 (professional development of instructors.

9. TRAINING ASSESSMENT SUMMARY

9.1.PRE- AND POST-TRAINING ASSESSMENT

This section provides the average percentage of change for each participant's evaluation of the pre-training and post-training tests, both of which had similar questions in order to easily quantify the level of learning of participants. Student's names are not provided here for privacy purposes. Overall most of the students showed significant increase in post-training test with an overall of change of 56%.

Student ID/Name	COURSE ASSESSMENT		
	Pre-test Score	Post-test Score	% Change
1	22	81	59%
2	13	88	75%
3	22	96	74%
4	30	85	55%
5	18	74	56%
6	15	88	73%
7	25	93	68%
8	15	65	50%
9	15	64	49%
10	15	79	64%
11	30	80	50%
12	24	92	68%
13	29	9	-20%
14	20	77	57%
TOTAL:	**20.9**	**76.5**	**56%**

9.2. MODULE ASSESSMENT

At the end of each modules, all participants rate the module and its instructor in order to improve the training for the next delivery. These assessments are anonymous. This section provides the average of the ratings that participants have provided for each module and questions. The scoring is done on 1-5 skills (1- Very bad, 2-Bad, 3-Satisfactory, 4-Good, and 5-Excellent). Overall, all the criterias got rating of "4-Good".

MODULE	INSTRUCTOR	MODULE ASSESSMENT					INSTRUCTOR ASSESSMENT						Average of each module
		Q1. Quality of classroom	Q2. Usefulness of course	Q3. Content	Q4. Time allocation	Q5. Quality of learning materials	Q6. Knowledge of material and concepts	Q7. Ability to explain material	Q8. Teaching style	Q9. Ability to communicate	Q10. Quality of knowledge	Q11. Fairness and respect	
Module 1		3.6	4.2	4.1	4.2	4.1	4.0	4.1	4.1	4.1	4.2	4.1	**4.1**
Module 2		3.8	4.0	3.8	3.8	3.9	4.0	4.3	4.2	4.1	4.1	4.3	**4.0**
Module 3		3.1	4.1	4.2	3.9	4.0	4.2	3.9	3.8	4.1	4.0	4.1	**4.0**
Module 4		3.8	4.4	4.4	4.0	4.4	4.5	4.6	4.6	4.4	4.4	4.6	**4.4**
Module 5		4.2	4.5	4.2	4.3	4.2	4.4	4.2	4.2	4.2	4.0	4.3	**4.2**
Module 6		4.1	4.3	4.5	4.0	4.5	4.5	4.6	4.6	4.6	4.5	4.5	**4.4**
Module 7		4.0	4.4	4.3	4.3	4.5	4.4	4.5	4.7	4.4	3.9	4.5	**4.4**
Average of each question		**3.8**	**4.3**	**4.2**	**4.1**	**4.2**	**4.3**	**4.3**	**4.3**	**4.3**	**4.2**	**4.3**	**4.2**

9.3. STUDENT COURSE FEEDBACK FORM

At the end of each the training, participants were provided an opportunity to assess the course, its materials, trainers and timing but also their level of understanding before and after the training in order to help the organizers improve the training for future deliveries. These ratings are anonymous. The ratings are done on a scale of 1-10 (1-low and 10-High).

Student ID/Name	**COURSE ASSESSMENT**					
	A. Knowledge of subject prior to training?	B. Knowledge of subject after training?	C. Rating of training materials?	D. Rating of trainer(s)?	E. Rating of time allocation?	**Average rating per student**
1	2	7	8	10	9	**7.2**
2	3	9	9	9	9	**7.8**
3	5	8	9	9	10	**8.2**
4	6	9	7	9	7	**7.6**
5	1	6	6	8	10	**6.2**
6	8	9	10	8	7	**8.4**
7	4	8	9	10	4	**7**
8	3	7	9	10	8	**7.4**
9	10	9	9	8	7	**8.6**
10	5	9	8	9	5	**7.2**
11	6	5	5	8	4	**5.6**
12	2	7	10	9	8	**7.2**
13	5	7	10	10	1	**6.6**
Average rating per question:	**5**	**8**	**8**	**9**	**7**	**7.3**

10.TRAINING FEEDBACK

- Overall students commented that training was outstanding and one of the main issue i.e. climate change, its impacts and climate adaptation and mitigation was new things for us and we learned.
- Time length of training should be more and long and also translation of training materials if possible translate it to our local languages.
- At the end participants undertook that we could apply these things to our daily works and would share with colleagues.

11.TRAINING FOLLOW-UP

Through following activities, UNEP-NEPA will follow up with training participants of SPEAK CLIMATE:

- ✓ Training participants prepare a poster on how climate change has affected their relevant sector or a sector of their choice (e.g. water, agriculture, biodiversity, health, etc.):
  This will enable the students to know more the impacts of climate change through a poster which includes (climate impacts, causes of climate change, resources of GHGs, Maps, photos and the way of adaptation) all of these features will be shown at a poster and the audience will know it easily. UNEP-NEPA will support the cost and logistics of printing and publication. This can be individual or group activities.
- ✓ Training participants will write a topic related to climate change in Afghanistan and its impacts on a sector of the participants' choice and/or a geographical location of participants' choice. After submission to UNEP-NEPA, the topic will be published in Environmental Quarterlies.
- ✓ Training participants will prepare a presentation that can be shared and presented in their relevant organizations sharing the results of the training, main findings, lessons learned and best practices, etc.
- ✓ Support in delivery of the same training in their organizations when UN Environment is delivering it in their organizations as the teaching assistants.

ANNEX 1: Attendance List (scanned original copy)

S.N	Name	Position	Organization	Phone #	E-mail ایمیل آدرس
1	Bashir Ahmad Rashidi	Director of Network observation	AMA	700195957	Bashir.rashidi@yahoo.com
2	Najibullah Amiry	Director of Hydrology	AMA	781894847	
3	Masoumeh Mirzaei	M&E Officer	BORDA	783635424	mirzaei@borda-afg.org
4	Abdul Baqi Noori	NRM	MAIL	700675141	abdulbaqinoori@ymail.com
5	Abdul Sami Sakhi	مدیر عمومی محیط زیست	MAIL	799310583	Abdul.sami600@yahoo.com
6	Hamadullah Sidiqi	Water Policy	MEW	747626533	Sidiqi.2012@gmail.com
7	Mohammad Shafiq Hameedi	Environmental Policy Expert	MEW	799316609	shafiqhamidee@yahoo.com
8	Mojtaba Haidari	Renewable Energy Advisor	MEW	744850067	Haidari87@gmail.com
9	Sadia Bariz	Engineer	MEW	774816694	Sadiabariz@yahoo.com
10	Mohammad Tayib Bromand	Expert	MEW/IRDP	785218854	t.bromand22@gmail.com
11	Sayed Farshid Hashimi	Engineer	MEW/RED	787834525	Red.hashimi@gmail.com
12	Eng. Najia Kharoti	Advisor	MRRD	700201156	Najia.kharoti@mrrd.gov.af
13	Mohammad Reza Mohammady	Engineer	MRRD	77120751	D_m.reza@yahoo.com
14	Ghulam Abbas Leaqat	مدیر گزارش دهی به UNFCCC	NEPA	784949737	Ghulamabbasleaqat@gmail.com
15	Naqibullah Sediqi	CC Mitigation Officer	NEPA	790697324	naqib_sediqi@yahoo.com
16	Siar Bilal		RGEO	783859303	Siarbilal.33@gmail.com
17	Noor Bibi Gouhari		UNEP	790697326	administration.kabul@unep.org
18	Sayed Habibullah Nasiri	Field Expert	UNEP	790697315	field.kabul@unep.org