

**PROCEEDINGS REPORT:  
REGIONAL TRAINING WORKSHOP ON  
“EVALUATING CLIMATE CHANGE ADAPTATION  
PRACTICES IN CENTRAL ASIA”,  
11-12 JULY 2012, ALMATY, KAZAKHSTAN**



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## BACKGROUND

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Previous needs assessments and gap analysis study in adaptation to climate change within APAN identify the priority sectors in Central Asia where urgent adaptation actions are necessary, which are water, agriculture and natural disasters. At the same time it was found that currently it is challenging to do an effective planning of further adaptation activities since there is a lack of comprehensive evaluation of the progress of on-going and the effectiveness of implemented adaptation projects. Moreover, monitoring and evaluation (M&E) of adaptation is globally one of the weakest areas of adaptation practice. Thus the assessments reports and a series of consultations in the region of Central Asia highlight the need in improving the capacity of the key stakeholders in the region on evaluation knowledge and skills.

Although in Central Asia there is a number of stakeholders conducting trainings related to adaptation to climate change (e.g. UNDP trainings on disaster risk management, CAMP Alatau on capacity building programme development, etc.), only a few capacity building activities were conducted on the issues of assessment and evaluation methods. Moreover, the outcome of APAN consultation meeting in Turkmenistan, September 2011, suggests the relevance of such trainings for targeted subject matter specialists or technical experts in different sectors, as well as policy-makers.

The international experience in evaluation and measurement of the effectiveness of adaptation projects, programmes and policies suggests that it is a complex issue, since the adaptation interventions vary by sector, scale and approaches. Thus a range of different approaches exist to measure effectiveness of adaptation. Some assessment methodologies aim at measuring the progress (process-based methods) and some measure the effectiveness of the intervention (outcome-based method).<sup>2</sup> The other way of how the M&E tools in adaptation can be divided is by objective. Some of these categories include economic efficiency tools, effectiveness tools and improvement-oriented participatory tools.

CAREC, which since 2010 functions as a sub-regional node (SRN) of APAN, has conducted the first training on 11-12 of July for policy-makers and practitioners of Central Asia specifically targeted at evaluation methods of projects and programmes on adaptation to climate change.

<sup>2</sup>“Governance and Social Development Resource Centre” <http://www.gsdr.org/go/topic-guides/climate-change-adaptation/monitoring-and-evaluating-adaptation>

## TARGET GROUPS

The Training was organized for 18 representatives of:

- UNDP country offices in Kazakhstan and Uzbekistan;
- Ministries and departments of environmental protection, agriculture, and emergency situations;
- Non-governmental organizations, scientific institutions, farmers support agencies.

Coordinator of the Regional Hub for Asia-Pacific Adaptation Network (APAN), Dr. Puja Sawhney, also contributed to the training with the presentation and comments during the discussion sessions.

CAREC experts involved: Talaibek Makeyev, Mariya Genina, Ekaterina Strikeleva

External facilitators: Galiya Khamitova, Dina Abaydildinova – “Step&Grow” training agency.

## OVERALL TRAINING GOAL

To improve knowledge and skills of the key stakeholders – decision makers and practitioners – on evaluation methods in adaptation to climate change.



*Presentation on recommendations from adaptation needs assessments in CA*





## TRAINING COMPONENTS

- An overview of the conclusions and recommendations of CAREC publications within APAN (such as technology needs assessment, inventory of good adaptation practices on adaptation in Central Asia);
- Overview of international experience on adaptation assessment and evaluation methods, including a separate presentation of APAN study on the available frameworks, methods and tools for assessing climate impacts, vulnerability and adaptive capacity, and their applicability in Asia-Pacific region;
- Clarification of the adaptation terminology; The review of priorities and measures in adaptation to climate change in each of the five Central Asian countries;
- Facilitation sessions with the use of the British technology Pinpoint™



## TRAINING RESULTS

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- Improved understanding of the priority needs and practices on adaptation to climate change in Central Asia;
- Acquired and/or improved knowledge on evaluation methods in adaptation to climate change, and discussed the most applicable assessment methodologies for the region;
- Strengthened the practical skills to select and apply the appropriate evaluation methodology of existing adaptation practices;
- Positive feedback from participants was received after the training, especially emphasizing the relevance of the topics discussed, high quality presentations, as well as high level of participants' involvement during the practical sessions.
- The training was covered by the regional media <http://www.ekois.net/wp/?p=9934>

### Evaluation methodologies examined during this training included:

- Economic efficiency: Cost-Benefit Analysis, Cost Effectiveness Analysis;
- Effectiveness: Real-Option Analysis, Multi-Criteria Analysis;
- Participatory: ADAPT approach, Collective video; Vulnerability Reduction Assessment.

### Recommended Training Topics

Based on the training evaluations from the participants and organizers, the recommendations for the future training topics are the following:

- a. Development and implementation of NAPA;
- b. Public awareness skills;
- c. Innovative approaches in the field of adaptation;
- d. The specific adaptation practices and technologies, including especially the water saving technologies;
- e. Climate change impacts in general with an emphasize on agriculture;
- f. Adaptation in the municipal housing sector;
- g. The legal, fiscal, financial support for adaptation practices.





*Group work*

## CONCLUSION AND FUTURE STEPS

During the training it was revealed that very few participants have had an earlier experience in project/programmes evaluation. At the same time the overall interest and demand in this knowledge and skills has been expressed. Especially, the observation shows that the most urgent need is in the literature and practical manuals on different evaluation tools available to use in the adaptation sector. It was noted that the guidance document was been developed within the Asia-Pacific Adaptation Network "Review of assessment frameworks, methods and tools for climate impacts, vulnerability, adaptive capacity and decision support", which could be translated into Russian and distributed among Central Asian stakeholders in the future.

### The future steps will include:

- 1) Conduct further research on the needs and the assessment tools available in the sector of adaptation to climate change;
- 2) Translate the available Review of APAN mentioned above into Russian language and distribute it widely in Central Asia;
- 3) Improve the training module of the training conducted and extend the number and improve the quality of evaluation methods and cases presented.
- 4) Develop other training modules in the field of adaptation to climate change to respond to the growing demand of capacity building in various aspects of adaption from the local stakeholders;
- 5) Develop at least one additional project proposal by the end of 2012 to address the capacity building aspect of adaptation to climate change in the region.



*Five-minute game*

## ANNEXES

### Annex 1: Agenda

#### Regional training-workshop: "Evaluating climate change adaptation practices in Central Asia" 11-12 July 2012, Almaty, Kazakhstan

#### Day 1. 11 July 2012

Time	Title of presentation/session theme	Training ethod/Speaker
09:00-9:30	Registration of participants	Trainers from "Step&Grow"
9:30-9:40	Introductory words	Mr. Talaibek Makeyev CAREC Executive Director
		Dr. Puja Sawnhey Coordinator of the Regional Hub for Asia-Pacific Adaptation Network (APAN), IGES
9:40-09:50	Round of self-introductions	
09:50-10:10	Asia-Pacific Adaptation Network: goals and expected benefits	Dr. Puja Sawnhey, Coordinator of the Regional Hub of APAN, IGES
10:15-10:30	Presentation: "Overview of priority adaptation needs and measures in Central Asia". <i>Based on the previous analytical reports of CAREC within APAN network.</i>	Mrs. Mariya Genina, Project Manager
10:30-11:30	2. presentations of national experts on the priority adaptation practices and technologies in Central Asia	Presentations of the national experts
11:30-12:00	Coffee Break	
12:00-13:00	3. presentations of national experts on the priority adaptation practices and technologies in Central Asia	Presentations of the national experts
13:00-14:00	Lunch break	
14:00-14:30	Range of existing methodologies of evaluating the adaptation practices	Mrs. Mariya Genina Project manager
14:30-14:50	Introduction to the topic	Facilitation techniques

14:50–16:00	Analyzing and discussing the applicability of various evaluation methods; Discussing the input data necessary to conduct the evaluation; Applying evaluation methodologies using the cases provided.	Brainstorming in small groups
16:00-16:30	Coffee break	
16:30-17:30	Providing recommendations and justifying the applicability of selected evaluation methodologies.	Work in small groups

### Day 2. 12 July 2012

9.30-9.40	Overview of the first day	
	Developing the ppt or word group presentations	
9:40-11:30	Presentations of the discussion results	15 - minute presentations of 4 groups
11:30-12:00	Coffee break	
12:00-13:00	Discussing the results and presentations	Overall discussion
13:00-14:00	Lunch break	
14:00-16:00	Practicing the evaluation methods based on case studies	General discussion and group work
16:00-16:30	Coffee break	
16:30-17:00	Developing the recommendations on possible use of studied evaluation methods in Central Asia and a way to include their introduction in the national strategic documents.	General discussion and group work
17:00-17:30	Conclusions, summary of recommendations, questions and answers, evaluation and training closure.	

## Annex 2: List of Participants

	<b>Name</b>	<b>Position, organization</b>	<b>Contacts</b>
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9.	Rais Karaibragimov	Chairman of Fund of Assistance Farmers and Businessmen	
10.	Botagoz Khakimzhanova	Expert of Low carbon department, Ministry of Environment of RK	Astana, Kazakhstan 8 (7172) 74-08-70 hakimzhanova@eco.gov.kz
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15.	Zhanat Bimbetova	Head of department, Ministry of emergency situations of Kazakhstan	Almaty, Kazakhstan
16.	Jamshid Maksumov	Programmeme assistant, GEF SGP in Uzbekistan	Tashkent, Uzbekistan Jamshid.Maksumov@undp.org
17.	Ekaterina Gauk	Engineer of transboundary monitoring of nature protection, Hydromet center of Uzbekistan	Tashkent, Uzbekistan (99871) 233 6180, 2360 758 Fax: (99871) 233 2025 gaukaterina@yandex.ru
18.	Kamila Toktagulova	Expert, State agency for nature protection and forestry of Kyrgyzstan	Bishkek, Kyrgyzstan Tel: (312) 35-27-27 Fax: (312) 35 31 02



## Annex 3: Evaluation methodologies and cases examined at the training

### 1) Cost-benefit analysis

**Definition:** Cost-benefit analysis (CBA) involves calculating and comparing all of the costs and benefits, which are expressed in monetary terms. The comparison of expected costs and benefits can help to inform decision makers about the likely efficiency of an adaptation investment. CBA provides a basis for prioritizing possible adaptation measures. The benefit of this approach is that it compares diverse impacts using a single metric.

**Aim:** Efficiency of adaptation measures

**Challenge:** adding reliable estimates of non-market things

**Steps:**

- 1) Define adaptation objective(s) – an adaptation objective must be well defined and its attainment must be quantifiable in monetary terms. It can, for example, be defined in terms of reducing vulnerability, such as achieving a particular standard of protection from flood risks;
- 2) Establish a baseline – it is essential to define a baseline (the situation without the adaptation intervention being carried out) and the project-line (the situation with successful implementation of the adaptation option) to determine the costs and benefits by comparing the two situations.
- 3) Quantify and aggregate the costs over specific time periods – Costs of an adaptation action include direct costs (e.g. investment and regulatory) and indirect costs (e.g. social welfare losses and transitional costs).
- 4) Quantify and aggregate the benefits over specific time periods – Benefits of an adaptation intervention should include the avoided damages from climate change impacts and co- benefits, where relevant. If there is no market for the goods or services provided by the adaptation activity, benefits can be estimated in indirect ways through nonmarket-based approaches, such as contingent evaluation.
- 5) Compare the aggregated costs and benefits. The bottom line for choosing an adaptation option is the comparison of the monetized elements of costs and benefits. The costs and benefits need to be discounted to properly calculate their present value.

### 2) Cost-Effectiveness Analysis

**Definition:** Cost-effectiveness analysis (CEA) is used to find the least costly adaptation option or options for meeting selected physical targets. Given



that CEA is performed when the objectives of the adaptation measures have been identified and the remaining task is to find the lowest-cost option for meeting these objectives, it does not evaluate whether the measure is justified (e.g. by generating a certain benefit-cost ratio or IRR). CEA is applied in assessing adaptation options in areas where adaptation benefits are difficult to express in monetary terms, including human health, freshwater systems, extreme weather events, and biodiversity and ecosystem services; but where costs can be quantified. For example, given the necessity for water, the aim of an assessment is not to find alternative adaptation options that might yield higher adaptation benefits, but to find those options that ensure sustainable water quality and quantity for vulnerable communities.

Aim: To compare the cost of alternative ways of achieving similar results (efficiency).

The thinking behind this approach is: 'how much to adapt is an economic problem' (World Bank, 2010:19). However, cost-effectiveness evaluations also involve deciding on acceptable levels of risk as a trade-off with the resources invested (Hedger et al., 2008). Perceptions of risk, which may vary from individual to individual, play a critical role in determining efficiency.

Steps:

(1) Agree on the adaptation objective and identify potential adaptation options. An adaptation objective must be well-defined and its attainment must be measurable. It can either be defined in terms of reducing vulnerability or achieving a certain level of adaptive capacity or resilience. Options identified must be expected to reasonably achieve the adaptation objective (e.g. installing water tanks to harvest rainwater).

(2) Establish a baseline. A baseline is necessary to analyze whether the objective has been met, and to understand how far away the target is. The baseline can either be the status quo or a projected baseline which should be based on a 'business as usual' or 'do nothing' scenario. In addition, planners need to agree on a set of indicators for evaluating and tracking benefits in non-monetary terms over time against the baseline.

(3) Quantify and aggregate the various costs. All costs of each option need to be quantified and aggregated, including direct and indirect costs over the life-cycle of each option. Similar to CBA, all costs should be discounted to their present value by using an agreed discount rate.

(4) Determine the effectiveness. The definition of effectiveness depends on the adaptation objective and the established baseline. In the case of water resources an option can be effective if it yields a certain amount of water.

(5) Compare the cost effectiveness of the different options. Cost-effectiveness can either be compared overall or in incremental terms. An overall cost-effective analysis simply compares the cost per unit of effectiveness for each adaptation option (e.g. USD per 1 litre of water). In contrast, an incremental cost effectiveness analysis considers the difference in costs divided by the difference in effectiveness that result from comparing one adaptation option to the next most effective policy measure (or a baseline situation). An incremental cost effectiveness ratio is expressed by  $(\text{Cost Option A} - \text{Cost Option B}) / (\text{Effectiveness of A} - \text{Effectiveness of B})$ , where A is the more effective policy measure and B is the second most effective

### 3) Multi-Criteria Analysis

Category: Before project + qualitative and quantitative

Definition: Multi-Criteria Analysis is a decision-making tool developed for complex multi- criteria problems that include qualitative and/or quantitative aspects of the problem in the decision-making process.

Context: Often, decision makers need or want to evaluate alternatives across a range of different and potentially incommensurate criteria. This is especially true in the context of agriculture and climate change, where an adaptation project can help reduce the negative effects of climate change on a number of social, environmental and economic indicators. There also may be many instances, as already noted, when information on the monetary value of potential benefits or their likelihood of being realized is scarce and significant amounts of informed judgment must be substituted.

How: Assigning weights and criteria for each challenge: adding reliable estimates of non-market things

Steps:

- 1) Define options and broad objective of the decision-maker
- 2) Define qualitative and quantitative evaluation criteria (stakeholder involvement)
- 3) Quantify impacts or assign scores (expert judgment)
- 4) Normalize scores
- 5) Weight evaluation criteria (stakeholder involvement)
- 6) Rank options
- 7) Choose the alternative with the preferred outcome (i.e., maximum expected utility).

#### 4) ADAPT approach

Category: process-based and learning oriented; qualitative and quantitative

Definition: ADAPT principles (Adaptive, Dynamic, Active, Participatory and Thorough) are proposed, to guide the development of future M&E approaches, frameworks and indicators which embrace learning and contribute to build an evidence-based understanding of the processes that lead to adaptation.

Context: It is critical to learn how capacity is put into action and how this action leads to a reduction of vulnerability at large. Monitoring and evaluation frameworks that support learning and space to gather evidence of such issues will allow for improved practice.

Aim: A perspective on M&E that enhances learning and knowledge promotion would examine the linkages between capacity and action by looking at the driving forces of individuals and communities towards change. The aim of the approach is to ensure that the complexities and dynamics involved in a constantly changing environment are captured.

Principles:

1) Adaptive learning: this emphasizes the need for methodological flexibility and triangulation and adapting the M&E framework to dynamic and heterogeneous local conditions. An adaptive M&E process evolves as understanding of the situation improves and searches for innovative strategies that will enable adaptation for development.

2) Dynamic monitoring: establishes dynamic baselines, which provides real time feedback to inform practice. Continuously tracking climate data needs to be a key part of a climate smart DRM approach, which needs to be flexible enough to incorporate any required changes before, during and after programme implementation. The ability to deal with uncertainty and the dynamics of the changing environment therefore becomes a key component of the M&E process.

3) Active: in understanding the social, cultural and personal issues such as values, confidence, motivation, risks and perception.

4) Participatory approaches in the monitoring and evaluation process of those with stake in the process. Participatory monitoring and evaluation (PM&E) strives to be an internal learning process that enables people to reflect on past experience, examine present realities, revisit objectives, and define future strategies, by recognizing different needs of stakeholders and negotiating their diverse claims and interests. In short, a participatory M&E process is more likely to be able to support flexibility and adaptability to local context and address the needs and concerns of all stakeholders.

5) Thorough: captures the wider operational environment, accounts for underlying causes of vulnerability and checks and rectifies possible maladaptation.

Suggested ADAPT Indicators:

**Adaptive**

Adaptive Indicators reflect possibility of changing conditions

**Dynamic**

Dynamic Indicators capture the way processes are changing

**Active**

Active Indicators capture actions rather than states

**Participatory**

Participatory Indicators are developed by and with those affected by interventions

**Thorough**

Thorough Indicators include maladaptation indications and capture how, or not, the intervention addresses the underlying causes of vulnerability

## 5) Participatory Video (PV) What is participatory video?

Participatory Video (PV) is a set of techniques to involve a group or community in shaping and creating their own film. The idea behind this is that making a video is easy and accessible, and is a great way of bringing people together to explore issues, voice concerns or simply to be creative and tell stories.

This process can be very empowering, enabling a group or community to take action to solve their own problems and also to communicate their needs and ideas to decision-makers and/or other groups and communities. As such, PV can be a highly effective tool to engage and mobilize marginalized people and to help them implement their own forms of sustainable development based on local needs.

How does it work?

- Participants rapidly learn video skills through games & exercises;
- Facilitators help groups identify & analyze their important issues;
- Short videos & messages are directed & filmed by participants;
- Footage is shared with the wider community at daily screenings;
- A dynamic process of community-led learning & exchange is set in motion;
- Communities always have full editorial control.

Video is an attractive tool, which gives immediate results.

A rigorous but fun process giving participants control over a project. Participants find their voices and focus on local issues of concern.

Participants share their voices with other groups or communities, including decision-makers, donors and general public.

Participants become a community, which takes further action.

InsightShare have worked with a wide range of groups internationally, from farmers to street children, in the UK and abroad.

Living stories are captured by communities themselves; projects can be documented and evaluated; policy information and decisions can also be transferred back to the community level through PV.

Group-working and listening skills, self-esteem building and motivation techniques; PV develops an active role for participants in improving their quality of life.

A range of impressive initiatives and suggestions can be documented by those directly involved, cheaply and effectively, and shared across the country and even further abroad; policymakers can be deeply affected by powerful stories and images captured at, and by, the grassroots.

Helping us identify issues/changes we may not be aware of.

Decision-makers, scientists, other diverse stakeholders and the public can connect with PV films and learn from communities or groups who are marginalised. Web 2.0 enables videos to be streamed and downloaded freely and shared across boundaries. Thus PV has the potential to bridge the digital divide!

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