Overview

- Background of the TNA project
- Overarching issues with capacity building in CCA in the AP region
- Underlying principles
- Overall Process
- Discussion
Training Needs Assessment Project

- Duration: since Sept 2010
- Expected outputs
  - Country level TNA reports
    - 5, one each from Bangladesh, Cambodia, Lao PDR, Mongolia and Nepal
  - A synthesis report comprising of
    - Analysis on current issues with adaptation training in the AP region,
    - Process and draft modules
    - Policy suggestions
- Finalization
  - Piloting of the training modules and evaluation
  - Revision of modules based on pilot outcomes

OVERVIEW OF APPROACH

3 steps:
1. Training Needs Assessment (TNA)
2. Drafting Training Modules
3. Piloting of Training Modules

Vulnerable sectors:
- Agriculture
- Water for agriculture

Five target countries:
- Cambodia
- Lao PDR
- Mongolia
- Bangladesh
- Nepal

APN Project
APAN Funded
Proposed Activities

- TNA preliminary meeting (1st TNA Meeting)
- Preliminary TNA done by national partners (training institutes) in targeted countries
  → Expected result: TNA preliminary report
- TNA review meeting (2nd TNA meeting): end of February 2011 – Bangkok
  - Detailed TNA done by national partners in targeted countries with monitoring by APAN
  → Expected result: TNA comprehensive report

Proposed Activities Cont...

- Training Modules Drafting Workshop
- Training Modules Finalization Workshop
  Targeted participants: national partners, CCA experts, pedagogic experts
Overarching Issues for Capacity Building in CCA

From our experience of working on climate change adaptation and capacity development and education in the Asia-Pacific region

Training & Capacity Building Environment

- Several forms both by governments and non-governmental agencies
  - Linked to recruitment processes:
    - Induction training: Probationers’ training or before entering the job
    - On-the-Job training (OJT): While on-the-job
  - Ad-hoc training: not linked to recruitment processes
    - Most of the training programs organized as and when certain capacity building projects are available
Who is providing training?
- Professors at universities (predominant countries),
- Trainers at specialized training institutes (few countries and ministries),
- Developmental workers at non-governmental organizations including networks and consortiums

Who is being trained?
- Administrators in government departments
- Policy makers (Elected representatives)
- Field workers, researchers, and developmental workers.

Some Overarching Issues for Training on Adaptation

- Few number of training institutions and programs
- Often fragmented/lacks coordination
- Movement of staff across different ministries and sectors
- No information on how many were trained, who needs to be trained, and on what aspects.
- No national level targets, timescales and strategies!
- Little understanding on what knowledge and skill areas are needed for effective mainstreaming of adaptation at different levels: Few or no TNAs done to date
- Trainings are often limited to ‘class room sessions’ with more focus on ‘information flow’ (knowledge?) with little or no emphasis on imparting skills relevant for the job
- No reflection of knowledge and skills imparted vis-a-vis duties of various staff in their real world work. So, often the trainings makes little or no matter for the staff after they go back to their duties.
Most universities teach meteorology, climatology, and risk management in their basic and applied variants. 
- Agro-meteorology
- Agro-climatology
- Hydro-meteorology
- Medical climatology
- Urban climatology
- Risk management in financial, business, IT and engineering sectors
- Biology (e.g. species structural and behavioral adaptation)…
- Sociology and political sciences: social and institutional adaptations to changes (non-climatic)

Some of them include different aspects of change in climate and risk, both long-term and short term.

This situation may be changing slowly as more and more departments in universities are offering higher degrees/research in adaptation

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How to Integrate these Pieces for Effective Training on Adaptation for a Better on-the-job Performance?

- Climate Change (Climatologists)
- Natural Resources
- Adaptation to Change (Socio., Biol.)

The process of designing training?

A training program
Further Challenges to Overcome

- Generalization vs specialization: Tasks are specific, subjects/sectors are numerous and no one-fit-all training program works.
- Who will administer training?
- How much to train? The syllabus burden!
- Limited resources: Limited time of the staff for training (max 1 week).
- In what knowledge and skill ratios?
- Mainstreaming a specific module with the existing training programs may address all the above issues: Do we have successful examples?

PRINCIPLES AND PROCESSES ADOPTED FOR THE TNA PROJECT
Principle I: A Training Program that Stimulates all Three Spheres of Learning

Cognitive domain (mental or knowledge)

Affective domain (attitude and belief)

Psychomotor domain (physical skills)

Principle II: A Training Program that Helps in Moving from Autonomous to Anticipatory Learning

Autonomous learning

Anticipatory learning
Principle III: A Training Program that Matches with the Real Situation

Skills and tools at different places?

Guideposts for Designing Training Programs on Adaptation

- **No one-fit-all**: Not one program but we need several programs targeted at specific sectors/subjects/staff/professionals
- **Adaptive**: review and revise at regular intervals with changing times
- **Flexible** enough to rekindle innovation at the local/institutional level
- **Practical**: Consider the existing resources and have plans for future resources
- **Incentives**: capacity building and other resources to help implement the program
- **Participatory**: Involve national HRD ministries & institutions etc.
- **Differentiated/targeted**: Each hierarchy of officers are trained on their specific expected roles
- **Inclusive**: Addresses institutional and on the job responsibilities & issues.
At places with well established training programs

<table>
<thead>
<tr>
<th>Current</th>
<th>Future (example)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Agro-climatic conditions</td>
<td>(1) + climate change trends and projections</td>
</tr>
<tr>
<td>(2) Crop management practices</td>
<td>(2) + drought resilient crop management practices</td>
</tr>
</tbody>
</table>

At places with no training programs/ad-hoc systems

- Option I: Create a framework for proper regular training programs that includes adaptation concerns
- Option II: To prepare stand-alone modules with a plan to regularize them eventually when formal training systems are put in place

Both strategies involve lobbying at policy level for allocating additional resources and preparing proposals for external funding for implementation
**State level:**
e.g. DG

**District level:**
e.g. JD

**Group of villages:**
e.g. AEO

**Village level:**
e.g. VAO

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**Knowledge**

**Skills**

**Strategic planning**

**Practices (crop prod.)**

**V&R Assessments**

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**The Process**

Needs assessment, Program drafting, piloting, and review and revise.
a) Planning: Identify target group/s, areas etc

b) Data collection: Where are we now and what is ideal?

This is where we are now

Stage I: Training Needs Assessment
(Knowledge, Skill, and Environment Needs Assessment)

c) Analysis: What are the gaps (training needs)?

Questionnaire survey

Stage II: Design Modules

Study expert II: Climate change adaptation expert

Bangkok, July 2011

Domain expert I: E.g. Agriculture expert

Pedagogy expert: Expert who knows how to impart training

Stage III: Pilot

Stage IV: Review & revise
Stage 1a) Understanding the current status
- Skills and knowledge (Form I, II, & IV)
  - Trainers
  - Those who will need to be trained (agriculture officers and other departmental technical personnel)
- Training Environment (Form III)
  - What physical facilities exist for imparting training

Stage 1b) What is ideal?
- Needs to be identified with the help of climate change, adaptation and domain experts in each country (since it is specific to each specific country).
  - Desk review of adaptation literature by each country partner to identify what adaptation activities are necessary in agriculture sector. Focus on specific crops as/if necessary.

Stage 1c) Compare the above with the survey outputs and identify gaps.
- Tabulation would be much useful method of comparing
### Gap (Training needs) = Comparing existing with the ideal

<table>
<thead>
<tr>
<th>Issue</th>
<th>Existing (evaluation from survey)</th>
<th>Ideal*</th>
<th>Gap (Training Needs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>• What is climate change?</td>
<td>1. Do not know 2. Not exactly known</td>
<td>Knowledge on climate change impacts not known</td>
</tr>
<tr>
<td></td>
<td>• What are climate change impacts in the country?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• What agricultural practices help?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• What is Climate change vulnerability assessment?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources for identifying ‘ideal’: national adaptation plan of actions, scientific publications from local/national/regional research institutions, etc.

### Gap = Comparing Existing with Ideal

<table>
<thead>
<tr>
<th>Issue</th>
<th>Existing (evaluation from survey)</th>
<th>Ideal</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills</td>
<td>How to implement practice x?</td>
<td>• Cannot do entirely • Can do partially</td>
<td>Able to do</td>
</tr>
<tr>
<td>Environment</td>
<td>• Classroom facilities • Laboratory/field facilities • Funds • Personnel (number)</td>
<td>Sufficient/not sufficient</td>
<td>Estimate in consultation with pedagogic experts/trainers</td>
</tr>
</tbody>
</table>
Training module design workshop in July 2011, Bangkok.
- Precipitate all the above processes at a single place and convert each gap into measurable and verifiable training objectives with the help of pedagogic experts.
- Output: Draft modules [to be eventually perfected in a collaborative process over email and by peer review]

### Training Modules Developed

<table>
<thead>
<tr>
<th>Country</th>
<th>Training module</th>
<th>Days (sessions)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Induction</td>
<td>In-service</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1. Sub-Assistant Agriculture Officers (DAE)</td>
<td>5 (10)</td>
<td>5 (20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. District and Upazilla (Sub-District) level Ag. Off.</td>
<td>2 (10)</td>
<td>5 (20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Policy Makers</td>
<td>2 (10)</td>
<td>4 (15)</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>1. PDA district and commune level</td>
<td>7 (6)</td>
<td>20 (7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. GDA-national level</td>
<td>4 (5)</td>
<td>14 (7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. PDA Province level</td>
<td>7 (9)</td>
<td>20 (9)</td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td><strong>Provincial agriculture officers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Integrated water management</td>
<td></td>
<td>4 (10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Soil management</td>
<td></td>
<td>2 (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Integrated pest management</td>
<td></td>
<td>1.5 (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d) Paddy cultivation</td>
<td></td>
<td>3 (7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>District agriculture officers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Animal feed management</td>
<td>-</td>
<td>2 (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Concepts of climate change adaptation</td>
<td>1 (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td>1. Entry level agriculture officers</td>
<td></td>
<td>3 (15)</td>
<td>2 (9)</td>
</tr>
<tr>
<td></td>
<td>2. Implementation level agriculture officers</td>
<td>2 (10)</td>
<td>2 (8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Senior agriculture extension officers</td>
<td>1 (8)</td>
<td>1 (7)</td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>1. Implementation officers</td>
<td>0.5 (2)</td>
<td>1 (5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Frontline extension staff</td>
<td>0.5 (2)</td>
<td>1 (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Policy makers</td>
<td></td>
<td>0.5 (2)</td>
<td></td>
</tr>
</tbody>
</table>
There is a dearth of country and location specific knowledge pertaining to climate change impacts, projections and practices that will help improve the adaptive capacity.

Mandates: Most personnel in government departments do not have mandate to work on CCA. No incentive to get trained on CCA.

Country training practices vary widely and hence one-fit all training programs doesn’t work.

For most part, the knowledge and skills imparted remained close to best management practices that have been advocated before.

There is a dearth of resources and institutional commitment to design and implement training on climate change adaptation.

Lack of country capacity building frameworks and human resource development plans make the modules unsustainable, no guarantee that they will be revised.