

APN PROJECT: PURPOSE & PROCESS

TRAINING NEEDS ASSESSMENT FOR MAINSTREAMING ADAPTATION IN AGRICULTURE AND RELATED WATER SECTORS

SVRK Prabhakar¹, Le Thi Thu Huong² & Team

¹Adaptation Team, NRM Group, IGES, Hayama, Japan

²Regional Hub, UNEP Asia Pacific Adaptation Network, AIT, Bangkok, Thailand



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Institute for Global Environmental Strategies (IGES)

Hayama, Japan

www.iges.or.jp

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Overview

- ▣ Overarching issues
- ▣ The APN Project
 - Underlying principles
 - Overall Process
- ▣ Discussion

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Overarching Issues for Training

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

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Our Understanding of Current State of Training & Capacity Building

- ▣ 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

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- ▣ Who is training?
 - Trainers at specialized training institutes,
 - professors at universities,
 - developmental workers at non-governmental organizations including networks and consortiums
- ▣ Who is being trained?
 - Administrators, policy makers, field workers, researchers, and developmental workers.

Some Overarching Issues for Training on Adaptation

- ▣ Few number of training programs
 - ▣ Often fragmented/lacks coordination
 - ▣ Movement of staff across different ministries and sectors
 - ▣ No information on who many were trained, who needs to be trained, and on what aspects. No targets and timescales!
 - ▣ Little understanding on what knowledge and skill areas are needed for effective mainstreaming of adaptation at different levels: Few or no TNAs
 - ▣ 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.
- } Institutional issues
 } Pedagogic issues

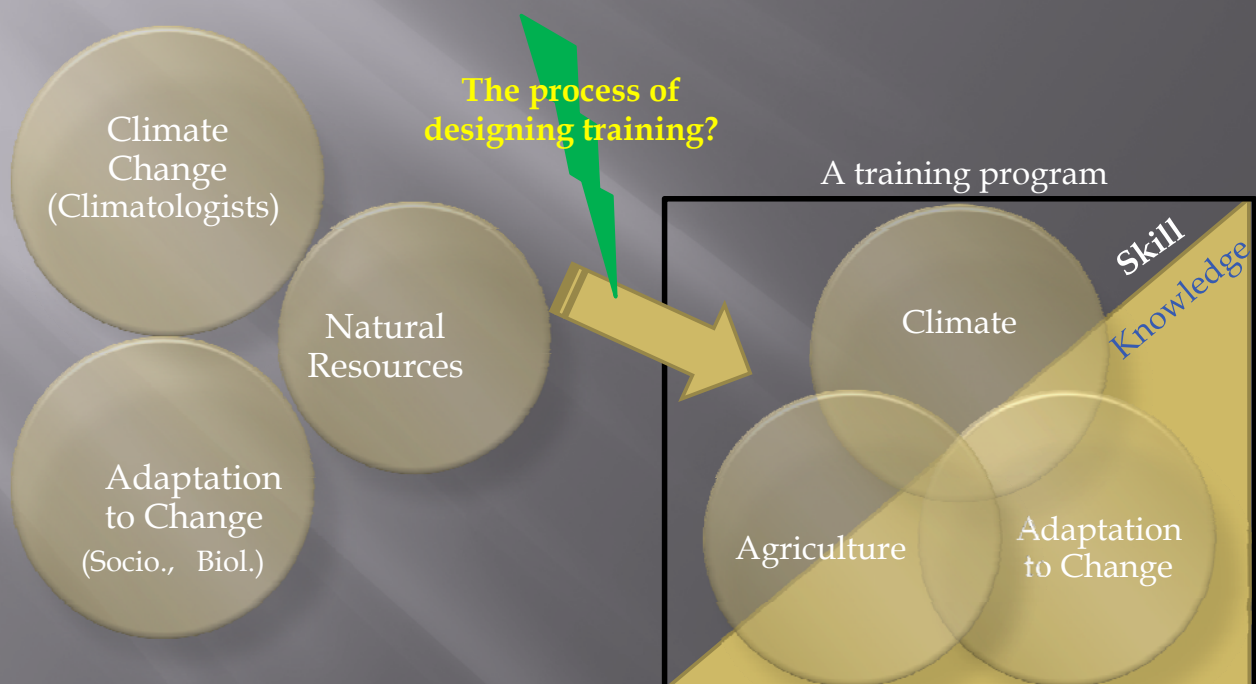
Some Overarching Issues Cont...

- 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 universities are offering higher degrees in adaptation

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



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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?

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PRINCIPLES AND PROCESSES FOR TNA

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Principle I: A Training Program that Stimulates all Three Spheres of Learning



Cognitive domain



Affective domain

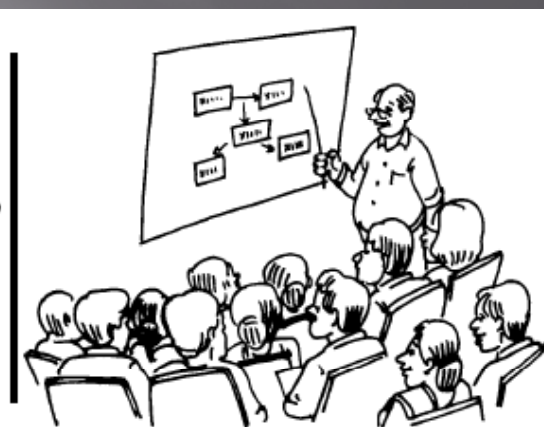


Psychomotor domain

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?

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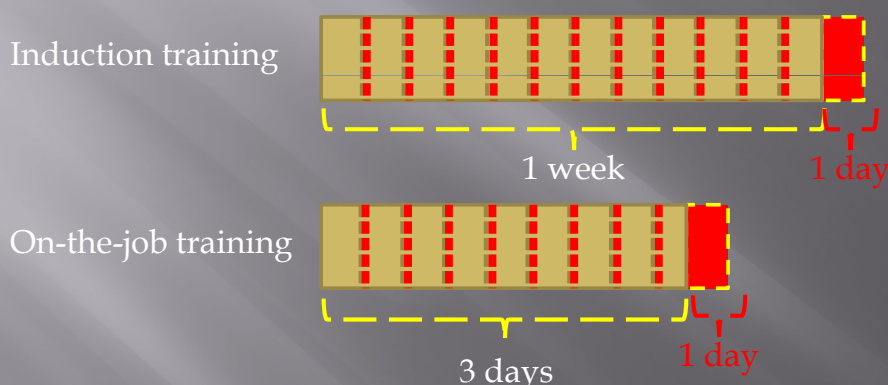
Guideposts for Designing Training Programs on Adaptation

- ❑ **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:** national HRD ministries etc.
- ❑ **Differentiated:** Each hierarchy of officers are trained on their specific expected roles
- ❑ **Inclusive:** Addresses institutional and on the job responsibilities issues.

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Strategy for Mainstreaming

At places with well established training programs



Current	Future (example)
(1) Agro-climatic conditions	(1) + climate change trends and projections
(2) Crop management practices	(2) + drought resilient crop management practices

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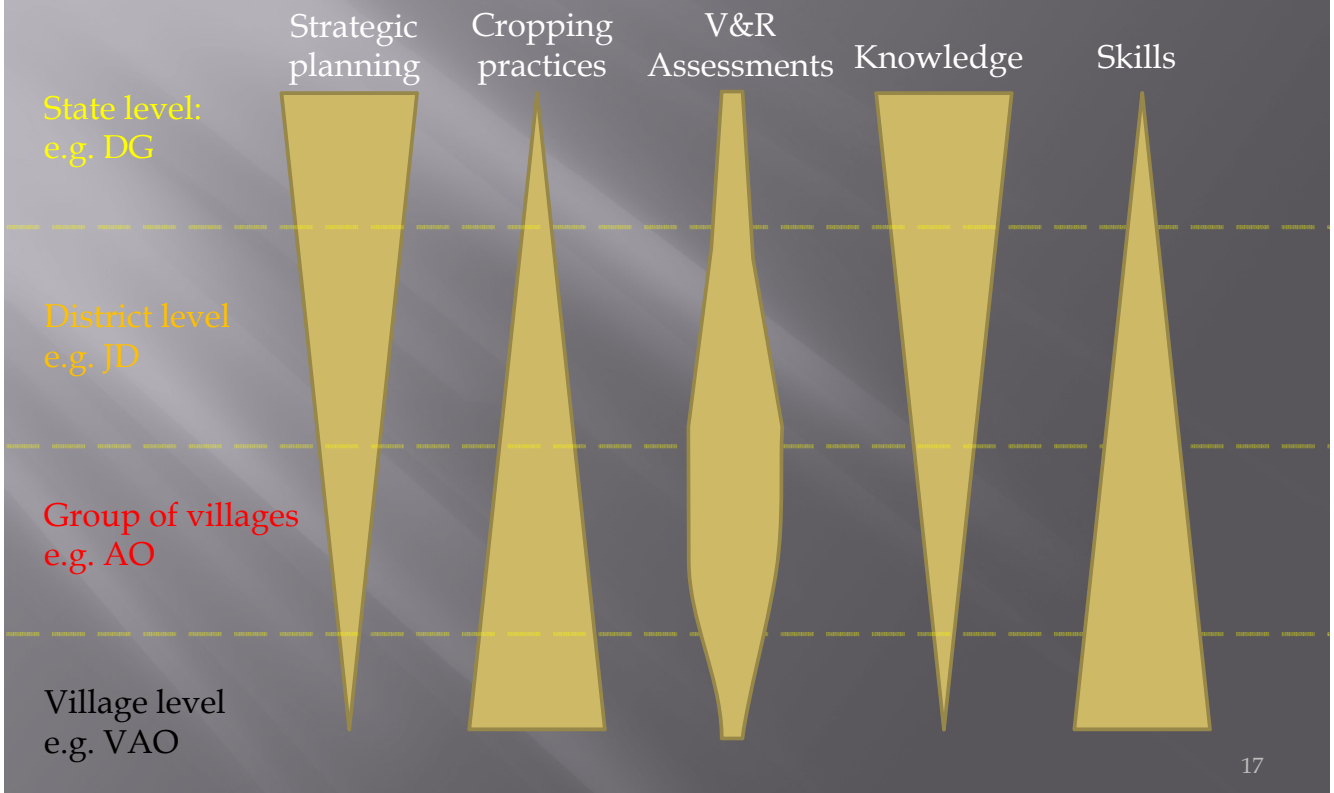
Strategy for Mainstreaming

At places with no training programs/ad-hoc systems

- ❑ Option I: Create a framework for proper regular training programs for staff 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

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Differentiated



The Process

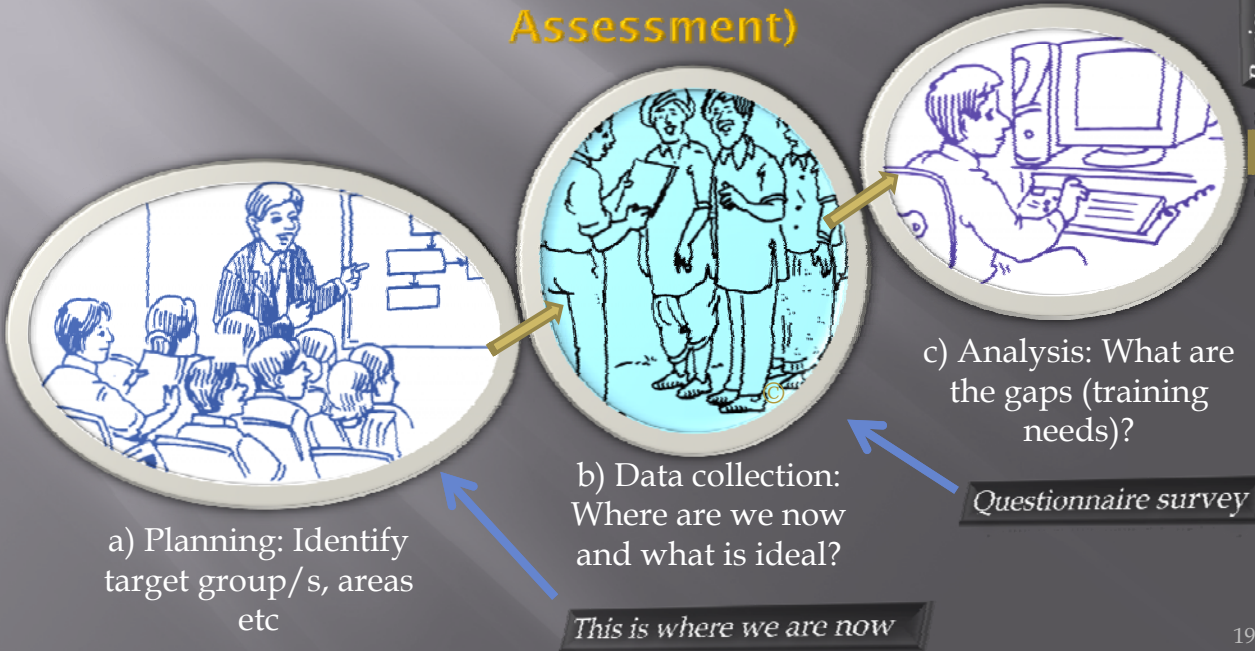
Needs assessment, Program drafting, piloting, and review and revise

The Four-Stage Process

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

Review Meeting: March 2011

Stage II



Stage II: Design Modules

Domain expert II: Climate change adaptation expert

Bangkok, July 2011

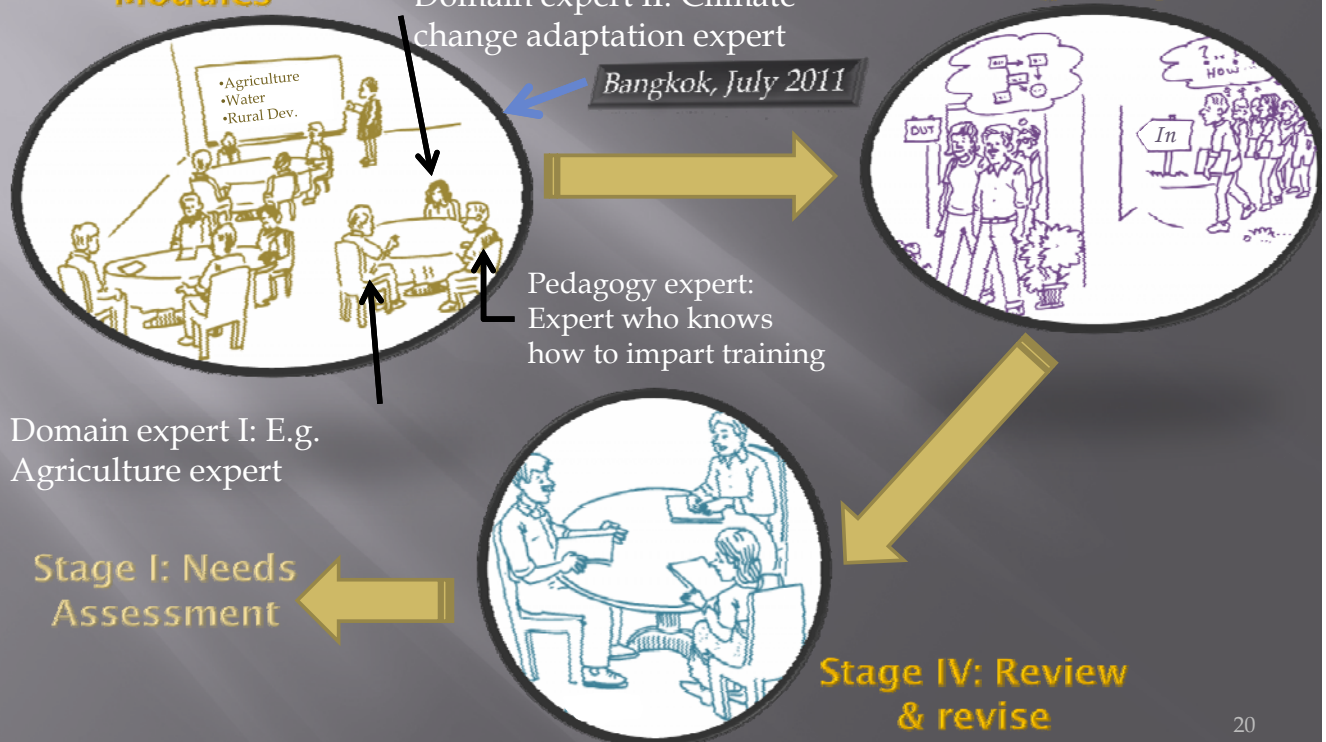
Pedagogy expert: Expert who knows how to impart training

Domain expert I: E.g. Agriculture expert

Stage I: Needs Assessment

Stage IV: Review & revise

Stage III: pilot



TNA Stage I

- ▣ 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

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TNA Stage I

- ▣ 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

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Gap (Training needs)=Comparing existing with the ideal

Issue		Existing (evaluation from survey)	Ideal*	Gap (Training Needs)
Knowledge	<ul style="list-style-type: none"> •What is climate change? •What are climate change impacts in the country? •What agricultural practices help? •What is Climate change vulnerability assessment? 	<ol style="list-style-type: none"> 1. Do not know 2. Not exactly known 	<ul style="list-style-type: none"> •Agriculture sector in Bangladesh will undergo losses •Crops such as rice and wheat are most vulnerable •Integrated crop management, System of rice intensification are important 	Knowledge on climate change impacts not known

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

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Gap=Comparing Existing with Ideal

Issue		Existing (evaluation from survey)	Ideal	Gap
Skills	How to do practice x?	Cannot do entirely Can do partially	Able to do	Skills for practicing/teaching/training certain aspects are missing/not fully familiar with.
Environment	Classroom facilities Laboratory/field facilities Funds Personnel (number)	Sufficient/not sufficient	Estimate in consultation with pedagogic experts/trainers	Difference between existing and what is needed

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TNA Stage II: TNA Modules Preparation

- ▣ Training module design workshop in July 2011, Bangkok.
 - To 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]

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Summing up: What needs to be done after this Meeting?

1. Establish a TNA team in your individual countries (please send us their CVs/background>to plan for module writer workshop)
 - 1. **Agriculture expert** who has specific knowledge on agricultural best practices advised to farmers [and the climate change adaptation]. He can be a lead trainer as well.
 - **Climate change adaptation expert:** Agriculture sector [may not necessary to know the way the agriculture department works].
 - **Departmental expert:** A person who works within the agriculture department.

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Cont...

- ▣ **Conduct desk review** of existing training programs, identify 'ideal capacity scenario'
- ▣ **Conduct questionnaire survey** of trainers and department personnel and obtain estimates of numbers of personnel to be trained
 - Sector: Agriculture
 - One representative administrative division (e.g. district)
 - Number: Include all the hierarchy involved in a training institute/department

Review meeting

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Open Discussion

- ▣ Overall Process
- ▣ Funding utilization, financial guidelines etc
- ▣ Questionnaire survey procedures
- ▣ Review meeting
- ▣ Training Module Design Workshop
- ▣ Expected outputs & reporting

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THANK YOU