

How do we know if it's time for plan B?

Determining failure or success of community-based climate change adaptation programs in building disaster resiliency

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Identifying success from failure in disaster resiliency programs

Knowing when there's no other way but plan B

How environmental policy, education, and technology can link visions to outcomes in creating a RESILIENT society

<http://www.theglobalfacility.org/publications/GEF-5-Technical-11-2-3-08.pdf>



Policy, Education, Technology

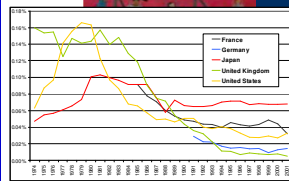
Disaster Prevention for Schools
Guidance for Education Sector Decision-Makers

Consultation version, November 2011

INEE

MINIMUM STANDARDS
FOR EDUCATION:
Preparedness, Response, Recovery

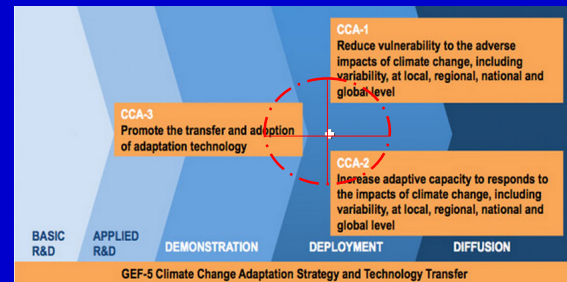
Public energy R&D investments as a share of GDP
- Double public energy R&D (\$10bn to £20bn)
- Increase deployment support 2-5 times from current \$37bn.
- Share technologies with developing countries



http://www.steventonweb.net/files/2344_DfESchoolssem.pdf http://www.inee.org/uploads/documents/Inee_Minimum_Standards_2010_eng.pdf

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Policy, Education & Technology



CLIMATE CHANGE Programs must have clear VISION

http://www.theglobalfacility.org/publications/Technology_Transfer

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Working Together
Saving Tomorrow Today
28 November - 9 December 2011

Climate change: there is no plan B
Time is almost up. It is critical we secure a legally binding approach on climate change in Durban.
"Arnold Toynbee warned that technology was giving us the power to destroy ourselves."

John Ashton
guardian.co.uk, Monday 14 November 2011 20:30 GMT
Article history

Environment
Durban climate change conference 2011 - Kyoto protocol - Climate change - Climate change scepticism - Global climate talks

Science
Climate change

World news
United Nations
Durban climate change conference 2011 - Kyoto protocol - Climate change

Environment
Durban climate change conference 2011 - Kyoto protocol - Climate change

A voluntary framework will not be enough to keep us within the 2C limit of manageable climate change. Photograph: Toru Hanai/Reuters

CLIMATE CHANGE Programs must have decisive VISION

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Bali Action Plan

UNITED NATIONS

SHARED VISION

Global emissions reduction pathway and key principles of future action to confront climate change.

UNFCCC Framework Convention on Climate Change

Mitigation	Adaptation	Finance	Technology
- Binding emission reduction targets for rich (Annex I) countries	Globally increased efforts to adapt the world to climate change, especially in developing countries	Search for new financial resources to help developing countries both to mitigate and to adapt	Increased co-operation for the uptake and wide diffusion of clean technologies.

CLIMATE CHANGE Programs must have shared VISION

COP 13: Dec. 3-15, 2007, 10,000 participants, including representatives of over 180 countries.
Conference of the Parties (COP)



Oxfam, PHIL 2009

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PROJECT & Development Theory

- a **Project** [or program or policy] is an **Intervention**
- **Intervention** is aimed at **changing** state of things for the better

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All INTERVENTIONS have a THEORY

~how Change will transform state of things toward a desired state

'THEORY OF CHANGE'

it is the **Logic of Intervention!**

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POLICY, PROGRAM, PROJECT OR INITIATIVE = Intervention → CHANGE

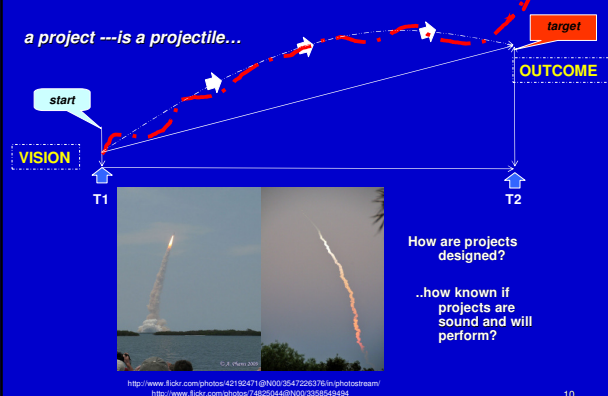
CHANGE IS:

- ❖ **MEASURABLE**
- ❖ **POSITIVE OR NEGATIVE**
- ❖ a **Health Program; an Educational Course; a Climate Change Project; an Environmental Policy = all for CHANGE!**

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THE PROJECT

a project ---is a projectile...



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Development Theory

Traditional Intervention components



OUTPUTS =
'Deliverables' or
'Products' of
ACTIVITIES

Results or OUTCOMES

- ❖ short term - **Effects**
- ❖ intermediate - **Outcomes**
- ❖ long term - **Impacts**
- ❖ **RESULTS/OUTCOMES** are what give real benefits

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OUTCOMES should be linked to GOALS

National GOALS of a Country:

- ❖ **Self sufficiency**
- ❖ **Increased level of safety**
- ❖ **Increased resiliency to natural & man-made disasters**
- ❖ **Increased employment**
- ❖ **Social order**
- ❖ **Improved well-being**
- ❖ **Gender equality**
- ❖ **Environmental sustainability**
- ❖ **and ultimately, Better quality of life**

VISION-MISSION-GOAL-TARGET

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THE PROJECT VISION, GOAL OR TARGET shall lead to OUTCOME

- **VISION or GOAL** is an integral part of implementation of project [or policy or program]
- **VISION or GOAL** shall not serve as hollow rhetoric

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VISION - GOAL in STRATEGIC PLANNING

Vision : ...

Mission : ...

Goal:

Objectives: a., b., c.

BHAG

- unifying focal point
- catalyst for team spirit
- stimulus for corporate progress
- rallying cry

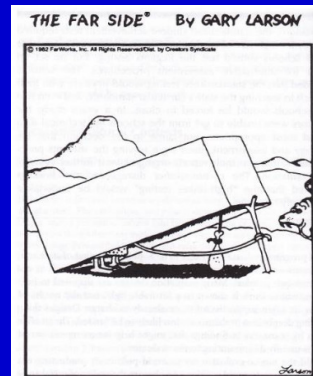
Do you remember BHAG?
The Big, Halry, Audacious GOAL!
James Collins & Jerry Porras Stanford U, 1996

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- **DESIGNING & IMPLEMENTING PROJECTS** are NOT ENOUGH

- **PERFORMANCE & SUCCESS of PROJECTS** must be **Measured!**

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"Shhhh, Zogl!... Here come one now!"

"Is it the RIGHT one, Konk?" ...

INNOVATION =

- New
- Different
- **IMPROVEMENT**

'Most innovations are failures, but the ultimate failure is failure to innovate'

Adaptation from: Gary Larson, FarWorks Inc., Creators Syndicate, 1982

The NEED for Mechanism to Measure Performance

"HOW DO WE KNOW WHEN WE GET THERE?"

THINK OF THIS

- If a Manager can not **MEASURE**, he can not **MANAGE...**

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THINK OF THIS

- If you cannot measure results, you can not tell success from failure
- If you do not recognize success when you see one, you are probably rewarding failure

Adapted from Osborne & Gaebler, 1992

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- Striking a balance between short term **OUTCOMES** and long term **VISIONS** involves understanding the very nature of Projects/ Programs.
- If **Resiliency** of society is the overall **VISION** or **Goal**, then **PROJECTS** or **Programs** shall measure performance based on the **achievement** of **RESILIENCY** as the **OUTCOME**.

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RESILIENCY through Project-Based Learning

- Basic to achieving **Resiliency** is the understanding of what it really is.
- How can communities be **Resilient** through Education?
- What makes a **Resilient** society?
- And how do we know whether **Resiliency** is being achieved?

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RESILIENCE is characterized by “reduced probability of system failure, reduced consequences due to failure, and reduced time to system restoration.”

RESILIENCY of society is achieved and [will become sustainable] if people translate **LEARNING** to **PRACTICE** – a very much desired **OUTCOME**.

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Understanding **RESILIENCY**



1



2



3

■ CHANGED CONDITION/S?

■ REVERSAL?

■ REBOUND?

■ LATENT OPPORTUNITY?

■ RESTORATION?

http://imagesearch.yahoo.com/search/images?_id=www-images&imgid=20184248&imgsize=1000x1000

<http://www.11-1800flowers.com/product.do?PageCode=19758&dataset=19208&cat=210241>

http://image.shutterstock.com/display.asp_with_image=500895/500895_1562888155_Lrg&src=product&src=www.shutterstock.com/224.jpg

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■ **POLICY, EDUCATION, and TECHNOLOGY** shall link **VISIONS** to **OUTCOMES**

...in the way **THEORY** shall be linked to **PRACTICE**

... in the way **LEARNING** should be linked to **PRACTICE**, as well

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OUTCOMES link **LEARNING** to **PRACTICE**


- ❖ Achievement of **OUTCOMES** relies on the process of **CHANGE** that involves **KASP: Knowledge, Attitude [Awareness], Skills and Practice**.
- ❖ Positive change can take place if the people involved can **LEARN Knowledge**, raise **Awareness**, undergo the desired **Attitude** transformation, develop **Skills** and put into **PRACTICE**.

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DEMONSTRATION:

How POLICY, EDUCATION and TECHNOLOGY can link VISIONS to OUTCOMES...

**Linking
LEARNING to PRACTICE!**



PROGRAM
Community Based Disaster Risk Reduction, Cambodia

IPDET 2008 Environment Group: Ahmad Habbani, Caroline Deslois, Isabelle Breinaud, Kishanti Dhammeral, Nick Ireland, Meena Bhandari, K.R. Ashok.

Acknowledgement given to all friends and colleagues, authors of these models, for sharing valuable inputs and making this lecture material possible, 2008.

**Program
VISION - GOAL**

In 3 selected provinces Oxfam aims to work with local partners and communities to:

Develop a culture of safety and resilience that includes village level disaster preparedness, mitigation, protection and adaptation to the effects of socio-natural hazards (floods and drought).

Program Characteristics

- 3 year programme
- EU Funded – 2 Million Euros
- CBDRR model based on pilot programme
- 20,000 men, women and children (4,000 HH), 20 villages, in 3 provinces.
- Managed from Phnom Penh with 3 POs, 3 NCDM trainees and 3 local Partner organisations in field.

Acknowledgement given to all friends and colleagues, authors of these models, for sharing valuable inputs and making this lecture material possible, 2008.

Logic Model of the Program

INPUTS	ACTIVITIES	OUTPUTS	EFFECTS & OUTCOMES	IMPACTS
Technical advisors Construction materials and tools Cash Agricultural inputs Livelihood assets Water filters Water pumps Training modules DRR model IEC materials	Community mobilization Training on DP Construction Retrofitting Digging of canals Tree planting Provision of assets CFW Training on agricultural extension Construction of water points Distribution of filters Awareness raising on filters Organization of water committees	Preparedness plans Evacuation shelters People trained in DP Channels constructed Houses raised Trees established CFW days Bicycles used for IG Loans without interest Crops harvested Water points constructed Raised water points Filters in correct use	Increased awareness on CBDRR preparedness among communities Increased preparedness/ Existence of effective protection [CBDRR plans implementation] Increased access to resilient potable water systems Reduced incidence of water borne diseases	Reduced economic vulnerability and food insecurity Increased resilience of communities to socio-natural disasters

Acknowledgement given to all friends and colleagues, authors of these models, for sharing valuable inputs and making this lecture material possible, 2008.

**CAMBODIA CBDRR PROGRAM
Key Evaluation Questions**

Questions on OUTCOMES

- How are communities better prepared as a result of the Program?
- How successful was the Program in improving mitigation infrastructures?
- How successful was the project in reducing the economic vulnerability of target communities?
- Has the Program resulted in increased access to potable water?
- To what extent was the necessary physical and economic environment in place to support the Program?
- Is there evidence of environmentally- responsible behavioural change and practice as a result of the Program?
- Other Q**
Have there been unintended consequences as a result of the Program?

Acknowledgement given to all friends and colleagues, authors of these models, for sharing valuable inputs and making this lecture material possible, 2008.

CAMBODIA CBDRR: Design Matrix Sample

Question	1. How are communities better prepared for disaster as a result of the project?
Sub-Question	Are individual households better prepared for disaster as a result of project?
Type of Q	Cause and Effect
Measures & Indicators	% of household representative who can list 4 steps of the evacuation system
Target & Standard	Indicator = 65% of household representative who can list the 4 steps of the evacuation system
Baseline Data	Yes – 0% of household representative who can list the 4 steps of the evacuation system
Design	Quasi experimental - Before and After O ₁ X O ₂
Data Sources	Household representative (adult)
Sample	Proportional Random Sampling -(90% confidence level - 3% error margin)
Data Collection Instruments	Interviewer administered survey Focus Group Discussion / informal interview/ Case study
Data Analysis	Quantitative: Frequency count, compare to standards. Qualitative: Content analysis
Comment	Graphic

Acknowledgement given to all friends and colleagues, authors of these models, for sharing valuable inputs and making this lecture material possible, 2008.

CAMBODIA CBDRR: Design Matrix Sample

Question	5. To what extent was the necessary physical and economic environment in place to support the Program?
Sub-Question	How effective were the DRR plans in providing safe/convenient facilities?
Type of Q	Descriptive/Normative
Measures & Indicators	1. # of rated cases of DRR implemented plans, 2. % level of compliance with accepted standards
Target & Standard	1. 10 cases 2. 95% level of compliance
Baseline Data	Nil
Design	One Shot
Data Sources	Key Informants, communities, people under Programme
Sample	Snowball sample
Data Collection Instruments	One- to One Interviews, Observation, Transect
Data Analysis	Quantitative: Frequency count, compare to standards. Qualitative: Content analysis
Comment	Graphic

Acknowledgement given to all friends and colleagues, authors of these models, for sharing valuable inputs and making this lecture material possible, 2008.

M&E Design Matrix Sample CAMBODIA CBDRR Program					
QUESTION	SUB-QUESTION	TYPE	Measures & Indicators	Target	Baseline
6. Is there evidence of environmentally-responsible behavioural change and practice as a result of the program?	What is the number of cases of environmentally-responsible practices among people, communities, before and after the Program; and in contrast to the comparison group, before and after?	C&E	Quasi-Experimental Census of all Programme communities and a sample of comparison providers	Yes	Yes
	After Program completion, do Program administrators believe that it has made a difference in trainees' behaviour & practices?	C&E	Survey: yearly	Yes	Yes
	Compared to before the Program what is the evidence of increased activities & practices identified as environmentally-responsible?	C&E	FGD -randomly selected trainees/ techno-voc providers	Yes	Yes

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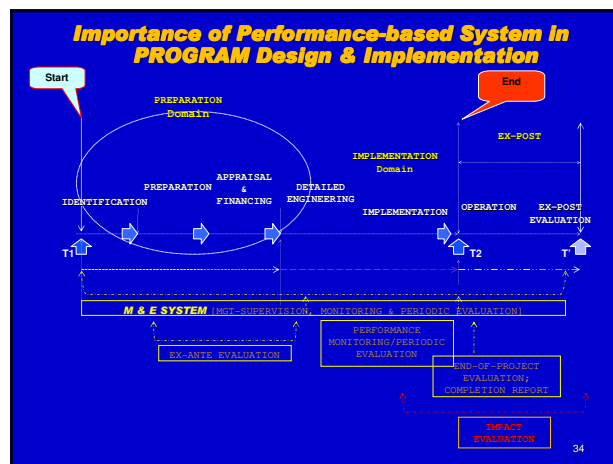
M&E Framework – CBDRR									
Program aims	Indicator	Type of indicator	Data needed	Base line data	Target	Data sources	Freq. data collection, methods tools	In charge/ data collect	Dissemination strategy
Vision/Goal	% villagers saying they feel safer from calamities	Impact	-Extent villagers saying they feel safer from calamities -Reported incidents: deaths	(Yes)	-10% Increase 1 st yr -10% decrease 3 rd yr	Civil Defense data/ records Community reports	Yearly Desk R 1-shot survey Quasi-E Time series Case S FGD	HO-M&E section Community field teams	Annual report Impact assessment report
Intermediate result	% damaged crops % destroyed houses		-Reported amt of damage -Extent of destruction on hang	(Yes)	---	Civil Defense data/ Community reports, Field reports/ records	Yearly Desk R Case S FGD	HO-M&E section Community field teams	Annual report Impact assessment report

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M&E Framework – CBDRR									
Program aims	Indicator	Type of indicator	Data needed	Base line data	Target	Data sources	Freq. data collection, methods tools	In charge/ data collect	Dissemination strategy
Immediate result	# of programs/ policies formulated/ improved related to DRR	Effect	Cases of program policies formulated/ improved related to DRR	(Yes)	12 % increase 1 st year	Civil Defense data/ records Community reports	Regularly Record retrieval Case S FGD	HO-M&E section Community field team	Annual report Board of Directors meeting
Existence of supportive CBDRR policies, plans	% increase in awareness level on CBDRR among people, communities		Extent of rise in awareness level	(Yes)	12 % increase 1 st year	Field reports/ records	Transect	Community field team	Annual report
Outputs	# staff/ personnel, communities trained on CBDRR	Output	Extent of training provided	(0)	55 training sessions 1 st yr	Record retrieval KII	Yearly	HO-M&E section Community field teams	Annual report Board of Directors meeting

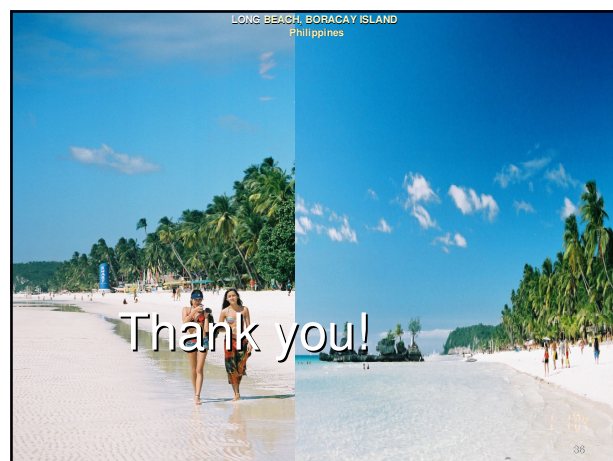
Acknowledgement given to all friends and colleagues, authors of these models, for sharing valuable inputs and making this lecture material possible, 2008



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CONCLUSIONS /Lessons Learned	
❖ Balance between short term OUTCOMES and long term VISIONS depends on how policies, programs or projects are designed.	
❖ Establishing a sound measure of performance of environmental programs will enable achievement of RESILIENCY as realized OUTCOME .	
❖ POLICY, EDUCATION and TECHNOLOGY tied into results-oriented programs can link VISION to OUTCOME towards a RESILIENT society.	

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