

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



Policy, Education, Technology

Disaster Prevention for Schools
Guidance for Education Sector Decision-Makers

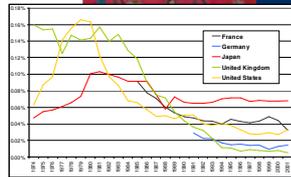
Consultation version, November 2011



MINIMUM STANDARDS FOR EDUCATION:

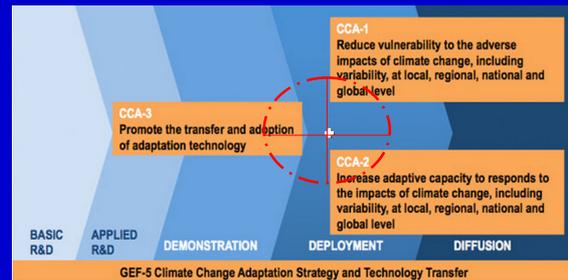
Preparedness, Response, Recovery

- 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.oxfamintash.net/files/7344_DPforSchools.pdf http://www.inee.org/loads/documents/store/Minimum_Standards_Stern_Economic_Review_on_the_Economics_of_Climate_Change_2007_2010_eng.pdf

Policy, Education & Technology



CLIMATE CHANGE Programs must have clear VISION

http://www.thegef.org/pdf/Technology_Transfer

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

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

CLIMATE CHANGE Programs must have decisive VISION

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

<http://www.guardian.co.uk/comment/2011/nov/14/climate-change-really-no-plan-b?INTCMP=ILCNE11113432>

Bali Action Plan



SHARED VISION

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



Mitigation Adaptation Finance Technology

- Mitigation**: Binding emission reduction targets for rich (Annex I) countries supported by rich countries.
- Adaptation**: Globally increased efforts to adapt the world to climate change, especially in developing countries.
- Finance**: Search for new financial resources to help developing countries both to mitigate and to adapt.
- Technology**: 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

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

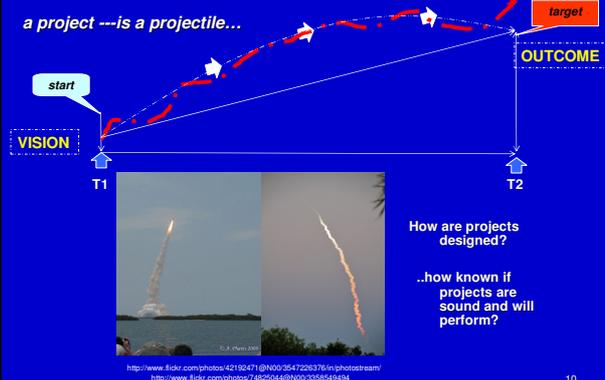
CHANGE IS:

- ❖ **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, Hairy, Audacious GOAL!**
James Collins & Jerry Porras Stanford U, 1996

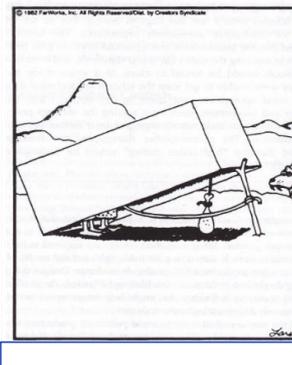
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■ **DESIGNING & IMPLEMENTING PROJECTS are NOT ENOUGH**

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

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THE FAR SIDE By GARY LARSON



"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 CONDITIONIS?**

■ **REVERSAL?**

■ **REBOUND?**

■ **LATENT OPPORTUNITY?**

■ **RESTORATION?**

http://images.search.yahoo.com/search/images?_id=www-images&fr=fr-1

http://www.1800flowers.com/product.do?baseCode=18758&dataset=12028&cm_id=110281

http://image.shutterstock.com/display.gpl?with_logo=00895-00895-120288155-11&pk_searched=www-images&dataset=120281

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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 Habibani, Caroline Deslois, Isabelle Brennaud, Kishanti Dhammaraj, 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 Characteristics

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).

- 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.

SAMPLE

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

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

SAMPLE

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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

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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

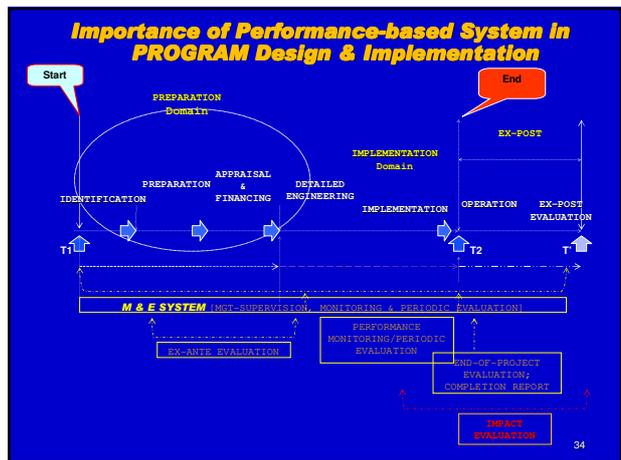
Program aims	Indicator	Type of indicator	Data needed	Baseline data	Target	Data sources	Freq. data collection, methods, tools	In charge/ data collect	Dissemination strategy
Vision/Goal Increased resilience of communities to socio-natural disasters	% villagers saying they feel safer from calamities % decrease in casualties % unaffected Hh	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 Field reports/ records	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 Reduced economic vulnerability and food insecurity	% damaged crops % destroyed houses	Outcome	-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	Baseline data	Target	Data sources	Freq. data collection, methods, tools	In charge/ data collect	Dissemination strategy
Immediate result Existence of supportive CBDRR policies, plans Increased awareness on CBDRR among people, communities	# of programs/policies formulated/improved related to DRR % increase in awareness level on CBDRR Extent of rise in awareness level	Effect	Cases of program policies formulated/improved related to DRR Extent of rise in awareness level	(Yes)	12% increase 1 st year	Civil Defense data/ records Community reports Case S FGD Field reports/ records	Regularly Record retrieval Case S FGD Transect	HO-M&E section Community field team	Annual report Board of Directors meeting
Outputs Trainings provided to communities	# 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

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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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