

Community-Based Adaptation Project

“A Bottom Up Approach to Building Systemic Resilience to Climate Change”

The Science of Climate Change and Climate Change
Vulnerability and Adaptation

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Background: GEF SGP

- Launched in 1992, GEF SGP has been working with communities around the world to combat the most critical environmental and developmental problems while enhancing people's well-being and livelihood.
- The GEF provides grants for projects related to biodiversity, climate change, international waters, land degradation, climate change (mitigation,) chemicals and capacity building.
- Funded by the Global Environment Facility (GEF) as a corporate programme, implemented by the United Nations Development Programme (UNDP) and executed by the United Nations Office for Project Services (UNOPS).

GEF SGP Jamaica

- Jamaica became a member-country in 2003, but started operations in June 2005 with an active National Steering Committee (NSC).
- With presence in approximately 13 of our 14 parishes, the programme has to date committed grants totaling over US\$1.8 million to over 70 non-governmental organizations and community-based organisations.
- Registered CSOs/CBOs can access grants of up to a maximum of USD50,000 with 1:1 matching co-financing (kind and cash)

The GEF also serves as financial mechanism for the following conventions:

- Convention on Biological Diversity (CBD)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Stockholm Convention on Persistent Organic Pollutants (POPs)
- UN Convention to Combat Desertification (UNCCD)

Background: CBA

- Five-year (2008-2012) funded mainly by the GEF and implemented by UNDP through the GEF SGP.
- The United Nations Volunteers (UNV) programme is a key partner with GEF SGP to enhance community mobilization, ensure inclusive participation, as well as to facilitate capacity building of (NGOs) and (CBOs).
- Implemented in 9 out of 10 pilot countries: Bolivia, Guatemala, Jamaica, Kazakhstan, Morocco, Namibia, Niger, Samoa, Vietnam.

CBA Objective and Indicators

Objective - To integrate CC risks into sustainable community management of natural resources by strengthening the resilience of communities addressing climate change impacts and to generate knowledge and lessons for replication and upscaling.

Attainment of this objective is measured by three impact indicators.

1. The number of measures that address the additional risks posed by climate change deployed as part of sustainable resource management activities
2. Percentage of area concern in which climate change risk management activities, in the context of sustainable resource management are implemented
3. Number of local and national level policies adjusted as a result of lessons from CBA projects.

Sectoral Focus

- The CBA seeks to address a number of these challenges at the local level through both capacity building initiatives and improved natural resource management.
- The CBA works closely with current adaptation interventions of the 2nd national communication of the UNFCCC to utilize the most current and accurate information to guide adaptation priorities and options.
- CBA is focusing on the priorities identified in the initial and second national communications to the UNFCCC – the coastal zone (coral reef monitoring) and agriculture sector.

Overview of CBA Portfolio/Projects

Country Allocation - US\$266,220*

Six (6) projects implemented aimed at addressing climate change threats that are happening now and expected in the future.

1. Jamaica Conservation Development Trust – US\$ 50,000
2. Caribbean Coastal Area Management - US\$50,000
3. Bunkers Hill – US\$47,000
4. Glengoffe CDS - US\$42,000
5. Climate Studies Group - US\$20,500
6. Portland Environment Protection Agency – US\$43,895

*includes capacity building

Jamaica Conservation and Development Trust (JCDDT)

“Reducing Climate Change-Driven Erosion and Landslide Risks through Sustainable Agriculture for Safer Slopes”

Objective: To increase the capacity of the targeted farming communities on the slopes of the Blue Mountains to adapt to climate change.

Activities include:

Implementation of sustainable agricultural practices reduce the vulnerability of the community(s) to climate change-driven increases in soil erosion

- 40 farmers involved in the use of vegetative barriers on farms – pineapples used to reduce soil erosion
- Green house constructed, community members trained in; cost effective soil conservation techniques, organic farming, green house technology, conflict management, leadership 100 acres of land sustainably managed



Glengoffe CDC

“Glengoffe Climate Change Adaptation Project”

Objective: To reduce the risks of land slides and flooding from heavy precipitation and lessening the effects of extreme drought conditions on crop production.

Activities include:

Contour farming, re-forestation, fruit trees production, drought mitigation and extensive training.

- 3 acres of land planted with agricultural crops
- 2,900 trees planted
- 30 persons trained in leadership, compost heaping and proper farming techniques
- 19 acres of land cleared for planting
- Installation of water irrigation system
- 7 compost heaps built on 7 farms

Climate Studies Group (CSG)



“Tell It – Disseminating Caribbean Climate Change Science and Stories”

Objective: To capture the stories on climate change and adaptation measures of three existing CBA projects to where results will be disseminated to wider stakeholder Group.

Activities include:

- Installation of three weather Stations;
- Training of Communities on Climate
- Change impacts and their implications and the
- Creation of a video - *“Time to Adapt”*

Bunkers Hill CDC

“Land and Preservation Measures to Combat Climate Change Pressures in Cockpit Country's Martha Brae Watershed”

Objective: To stabilize and reinforce river bank slopes to protect against the loss of agricultural lands from the threat of climate change-driven increase in flood risk, due to stronger hurricanes and higher-intensity rainfall.

Activities include:

- Construction of Gabion Basket and bridge repair
- Sensitization of residents on the effects and methods of flooding/erosion abatement to respond to climate change impacts



Portland Environment Protection Agency

"Climate Change Adaptation in the Communities of Moore Town & Bellevue, Rio Grande Watershed"

Objective: To educate and inform community stakeholders about the impacts of climate change risks and the specific actions community members can take to adapt to these impacts.

Activities include:

- Reforestation to include
- Public awareness workshops in schools and communities
- Establishment of 10 demonstration plots exhibiting the practical and economic benefits of alley cropping and other proper farming practices.

Caribbean Coastal Area Management Foundation (CCAM)



“Increasing Community Adaptation and Ecosystem Resilience to Climate Change in Portland Bight “

Objective: To embark of an educational drive to engage stakeholders in the communities to work together to take action to minimise risks and reduce impacts associated with climate change.

Activities include:

- Development of an Educational Programme to engage stakeholders communities around the Fish Sanctuaries
- Community monitoring of environmental change, disaster impacts, beaches, forests and mangroves.
- Rainwater harvesting



Effective Management of Protected Areas

PBPA help Jamaica adapt to climate change by effective management of protected areas is one of the most effective ways.

Mitigation –Carbon Storage

Protection of natural ecosystems (especially mangroves) prevents the loss of carbon that is already in the vegetation and soils – this will help reduce carbon emissions as such no further removal of mangroves or wetlands or old growth forests.

Adaptation – Protection and provision of ecosystem services

Maintain ecosystem integrity, buffer local climate and reduce risks and impacts from extreme climatic events such as storms, droughts and sea-level rise. maintain essential ecosystem services that help people cope with changes caused by climate change e.g. in water supplies, fisheries, incidence of disease and agricultural productivity

CCAM's Focus

Trying to work through the full range of governance types to encourage more stakeholders to become involved in managing protected areas as part of community climate response strategies.

Working with NEPA and Fisheries Division to ensure that ecosystems and the services that they provide within protected areas are recognised and not degraded or lost through illegal use and mismanagement

Increasing the level of protection for carbon stores within protected areas by restoring mangroves and selected forests.

Funding: GEF Strategic Priority on Adaptation (SPA)

Recognizing that small communities are often the most severely affected, yet the least equipped to deal with the impacts of climate change, the Global Environment Facility (GEF) council proposed that 10% of the resources under the Strategic Priority on Adaptation (SPA) be channeled to community-based activities through the mechanism of the GEF Small Grants Programme. With GEF CBA project coming to a close December 2012, funding from AusAID is now available.

SPA-funded CBA Projects are:

- Community-driven
- Generate global environmental benefits
- Address climate change risks

The CBA project will operate where these three priorities exist

How to Access Grants

Grants are made directly to community-based organizations (CBOs) and non-governmental organizations (NGOs) in recognition of the key role they play as a resource and constituency for environment and development concerns. The maximum grant amount per project is US\$50,000.

Eligibility requirements

All project proposals submitted to the Secretariat need to demonstrate:

- How the proposed project proposal meets the GEF SGP criteria by articulating how project objectives and activities would have an impact in the SGP areas of work -GEF focal areas-.
- How they are aligned to the targets and objectives of the Country Programme Strategy(CPS).

Graph of the Application Process

The project proponent - a national CBO or NGO- contacts the SGP National Coordinator to receive project application guidelines and forms.



With assistance from the National Coordinator the proponent prepares a brief project concept paper and submits this to the coordinator.



The national coordinator reviews and pre-screens the concept paper according to see if it meets the GEF SGP criteria and other criteria adopted by the NSC for activities in that country and explain in the Country Programme Strategy (CPS).



If the project is judged eligible, the project proponent prepares a project proposal; in some cases, this step may be supported by a planning grant.



Completed project proposals are submitted by the National Coordinator to the NSC.



The NSC reviews the proposal and either accepts it, rejects it, or returns it to the proposer with a request that further work be done on formulating and refining the project data.



Approved proposals enter the national SGP work programme. SGP grants are usually paid in three installments: an up-front payment to initiate the project; a mid-term payment upon receipt of a satisfactory progress report; and a final payment on receipt of a satisfactory project completion and final report.

Project Development Process

During the planning phase, the proponent:

- Conduct initial awareness-raising activities on climate change
- Scope the project and plan activities (with the community, in the case of NGOs)
- Conduct the Vulnerability Reduction Assessment (VRA) session
- Set targets for the IAS indicators
- Add more details to the concept (workplan, budget, TORs for experts (if necessary))
- Write the formal proposal (between 6-8 weeks)

Project Development Process cont'd.

Approval by the National Steering Committee (NSC)

Based on substantive questions.

- Is the project well-designed and address a real climate change risk?
- Is the project community-driven – does it display community ownership?
- Does the project fit with the Country Programme Strategy (CPS)?
- How can this project be leveraged for national adaptation goals or contribute to the country portfolio?
- Is co-financing is in place for non-adaptation activities
- Is the planning phase activities complete

Global Environmental Benefits

The GEF SPA has a unique focus on climate change risk management in the context of natural resource management:

- Increasing the resilience of ecosystems/natural resources threatened by climate change risks
- Achieving global environmental benefits (sustainable in the face of climate change risks) in the context of adaptation initiatives

UNDP CBA projects focus on:

Communities dependent on natural resources threatened by climate change

Projects that reduce a climate change risk through sustainable natural resource management

Examples:

- Managing ecosystems to maintain ecosystem services threatened by climate change pressures (e.g.: water, fisheries, pollination, etc) through new Natural Resource Management (NRM) practices
- Livelihood diversification away from resources which can no longer be sustainably exploited
- Landslide risk reduction through afforestation
- Reducing cc-driven desertification through improved agricultural or pastoral practices
- Reducing cc-driven salinization risks through alternative irrigation practices

Examples of GEFable Projects

Focal Areas – *for CBA projects*

Biodiversity

Conservation and sustainable use of:

- Habitat for IUCN “Red Listed” species
- Habitat for migratory species
- Habitat for endemic species
- Areas recognized as “hot spots”
- Indigenous agro-biodiversity

Land Degradation

- Restoration of degraded land, organic farming
- Reforestation or measures to stem deforestation
- Soil conservation, fire management
- Policy: land tenure reform for sustainable management

Monitoring and Evaluation Tools: Impact Assessment System (IAS)

UNDP Adaptation Policy Framework

Adaptation is a **process** by which individuals, communities, and countries seek to cope with the consequences of climate change, including variability. How do we practically measure the progress of community initiatives in facilitating an *adjustment or process*?

Biodiversity

- Number of globally significant species protected by project
- Number of innovations or new technologies developed or applied
- Hectares of globally significant biodiversity area protected or sustainably managed.
- Number of local policies informed in the biodiversity focal area
- Number of national policies informed in the biodiversity focal area

Land Degradation

- Hectares of degraded land restored
- Hectares of land sustainably managed by project
- Tons of soil erosion prevented
- Number of innovations or new technologies developed/applied
- Number of local policies informed in the LD focal area
- Number of national policies informed in the LD focal area

Vulnerability Reduction Assessment (VRA)

The VRA is a perception-based approach, guided by local contexts taking into account community considerations and project development framework. It is a form of **Participatory Impact Assessment** with the following aims:

1. To measure community perceptions of climate change risk and adaptive capacity
2. To assist with project development/management and to use M&E to make projects responsive to community priorities
3. To measure impact vis à vis long-term climate change adaptation, not just one-off impact on present development challenges
4. To capture qualitative information for development of knowledge products and adaptive project management
5. To form a system of common-unit indicators which can be aggregated across a diverse portfolio of CBA projects

How does the VRA Work?

The VRA is composed of **four indicators**, based on the UNDP Adaptation Policy Framework approach.

These four indicators become **four questions** – tailored to the community and posed in community meetings before, during and after project implementation.

VRA meetings yield **quantitative and qualitative** data:

- Useful in aggregating and assessing programmatic impact
- Useful in guiding project design and management
- Useful in capturing lessons learned

Structure of the VRA

Adaptation Policy Framework	VRA Indicators	VRA Questions - Community facing increasing drought risks	Logic
Assessing current Vulnerability	Vulnerability of livelihood/welfare to existing climate variability	Example: What happens when there is drought? How does this affect you and your community	Addresses present climate-related development issues often the main climate concern of the community
Assessing future climate risks	Vulnerability of livelihood/welfare to developing climate change risks	Example: What would happen if drought was twice as frequent? How would this affect you and your community	Once present context of variability has been discussed, this question focuses the community on their perceptions of likely impacts of climate change
Formulating an adaptation strategy	Magnitude of barriers (institutional, policy, technology, financial etc) barriers to adaptation	Example: What stands in the way of adaptation to increasing drought? What means do you and your community have to manage events occurring more frequently?	This question will qualify the above question and focus it onto the needs of the community in successful adapting. The question will identify policy barriers, forming useful lessons for the country
Continuing the adaptation process	Ability and willingness of the community to sustain the project intervention	Example: Rate your confidence that the (project activity) will continue after the project period	This question measures project sustainability and community buy-in to the project intervention.

The H-Form

- Most common tool used in conducting VRA - it allows for participatory evaluation.
- H-Form develops a numerical score for a given question and qualitative information giving the rationale behind the score.
- A flipchart is normally used (individual participants or a single chart used by the facilitator)

Key Point to Note

Numerical values are important, likewise the qualitative information which provides an important record of stakeholder perspectives and opinions. This data should guide project design and serve as a building block for project reporting and development. In summary the H-Form allows for baseline data gathering.

Sample H-Form

<p>Reasons for negative response</p> <p>Reason <input type="text"/></p> <p>Reason <input type="text"/></p> <p>Reason <input type="text"/></p>	<p>Question written here</p> <p>Unfavourable score Favourable score</p> <p>Very Bad Bad Moderate Good Very Good</p> <p>1 2 3 4 5</p> <p>How could this score be improved?</p> <p>Comment <input type="text"/></p> <p>Comment <input type="text"/></p>	<p>Reasons for positive response</p> <p>Reason <input type="text"/></p> <p>Reason <input type="text"/></p> <p>Reason <input type="text"/></p>
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How to Implement VRA

- Establish who will run the VRA meeting – go for a knowledgeable facilitator to explain the process to community group
- Establish who will be responsible for collecting VRA data
- Have a discussion on what climate change is and its impact - this allows for feedback from community members – done before posing questions
- Structure of questions – take into account levels of education, literacy pre-existing knowledge, and the history of climate impacts.
- Questions should be answered on a scale of 1-5 with guiding text
- Establish approximate timing of VRA sessions
- Ensure to record the results on the H-Form

How does the VRA work in Practice?

Negative Responses and Challenges

Reasons why it has significant impacts

Community is highly dependent on subsistence crop production

Recent economic changes have reduced savings

It causes erosion, which makes farming harder in good years

What happens when there is drought? How bad is this for you and your community

2.5 (76/30)

8	5	11	5	1	=(30)
V/Bad	Bad	Mod	Good	VG	
1	2	3	4	5	

Ways of Improving the Situation

How could this score be improved?

Make agriculture less susceptible to drought through irrigation

Make lands less susceptible to erosion through agroforestry

Re-establish livestock herds. This would improve livelihoods and have cultural significance.

Create jobs for young people to improve household revenue and stabilise society.

Positive Responses and Mitigating Factors

Reasons why the impacts are less significant

Many persons are less reliant on agriculture than they once were

Some new wells have been dug in the area, but it is not enough.

Rainfall is not as low as it has been, but it falls more erratically.

Calculating the Final VRA Score

VRA meetings are held 3 times over the course of the project:

- At the beginning
- Once or twice over the course of implementation
- At the end of the project

VRA score for one meeting is comprised of the scores for each of the questions, **averaged**

By the end of the project, VRA **should be higher**, reflecting improved adaptive capacity.

Indicator	Score
1. Vulnerability to existing climate hazards	3
2. Vulnerability to projected climate change risks	2
3. Magnitude of barriers to adaptation	4
4. Sustainability of the project intervention	5
Final VRA Score	3.5

Key Points to Note

- Training on how to use the tool is essential preferably have an external person lead the process
- Process can be very time consuming –keep it short to maintain interest of participants (60 – 90 minutes). Group size should not be too large
- Best to retain the same group of persons throughout the project cycle– this allows for more consistent and accurate data
- Responses given by different demographic groups should be noted as individual perceptions of their ability to adapt is tied to their socio-economic background and gender. Have an excellent note taker.
- The H-form should be prepared in advance - takes at least two persons to facilitate properly
- Project activities and benefits in reducing the group's vulnerability must be clearly explained to participants
- Have key stakeholders present to hear the discussion but not to be counted

Issues/Challenges

- Mobilising community members for meetings
- Group composition tends to change over time, for each assessment, climate change discussion has to be conducted to update the group.
- The impacts of climate change are seen and felt, but articulating the science to groups with limited capacity is challenging – affects how individuals respond to the questions
- Sometimes community group members are not vocal – this can influence scores
- VRA #2 will not always show any conceivable difference so it is a little frustrating (depending on activity i.e. tree planting)

VRA Session in Progress



References

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Thank You!