

INTEGRATING AGRICULTURE IN NATIONAL ADAPATION PLANS



CLIMATE CHANGE
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PRIORITIZING ADAPTATION OPTIONS IN AGRICULTURE GRENADA EXPERIENCE

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Safeguarding Livelihoods and Promoting Resilience Through National Adaptation Plans (NAP)

Grenada's Climate Change Profile

- Temperature increase 0.7-2.6°C by the 2060s,
- Decrease in annual rainfall (up to 41% by 2060)
- Changes in the frequency, intensity, spatial extent, duration of extreme weather events
- Increases in the frequency of days and nights considered 'hot'
- Sea level rise (est. up to 50cm by 2090)
- Change of ocean surface temperature

Examples for the agriculture sector:

- Nutmeg tree (agricultural back bone of Grenada) vulnerable to hurricanes due to shallow root system.
- High ocean temperatures affect fish stock – fish migration.
- High temperatures induce heat-stress to livestock, especially poultry
- Longer dry spells and overgrazing leading to land degradation
- Water scarcity, etc.



NAP Process

- Process led by the Environment Division with technical assistance by GIZ as part of the Integrated Climate Change Adaptation Strategies Programme (ICCAS)
- NAP plan to be ready by October 2016
- Funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) as part of its International Climate Initiative (IKI)
- ICCAS implementing agencies: The Environment Unit of the Ministry of Agriculture, Lands, Forestry, Fisheries and the Environment; GIZ and UNDP



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Federal Ministry
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NAP Context

Adaptation actions in different sectors were already discussed/ identified before the NAP process started:

- Grenada's First National Communication (second on the way)
- Climate change policy and action plan (2007-2011)
- Draft Comprehensive Disaster Management Plan
- National Action Plan to Combat Desertification and Drought
- National Action Plan for Biodiversity
- Climate Finance Readiness Action Plan
- Coastal Zone Policy and Roadmap
- Physical Development Plan
- Drought Plan
- National Agriculture Plan
- Protected Areas System Plan
- Water Action Plan for Climate Change Adaptation
- Resilience Plan for Greater Grenville area (local area plan currently developed)
- Mitigation Plan for Lower Sauteurs (local area plan)
- Rehabilitation Plan for Carriacou and Petite Martinique (local area plan)
- Etc., Etc.

(Potential) Mainstreaming Approaches

Approach	Example
1. Mainstreaming Cc into national development plans	National Growth and Poverty Reduction Plan 2014-2018 New, climate-proofed 15 year national development plan (2016-2030)
2. Structured climate risk screening for new government projects	Caribbean Online Risk and Adaptation Tool (CCORAL). Screening Integration of adaptation measures into selected new government projects
3. Integrate climate change into Environment Impact Assessments	Include CC assessment into all TORs for Environment Impact Assessments (as a standard requirement) (idea)
4. Integrating climate change as a cross-cutting topic into different ministries	Integration of climate change aspects into the Ministries' 3 year plans ("Corporate Plans") NAP process -> Priority actions (Ministry) -> 3 year plans/ annual work plans

Some lessons-learned so far:

- Explore different approaches/entry points for climate change mainstreaming – Not everything will work out in the long run! Don't put all your eggs in one basket 😊
- Climate action needs to end-up in individual workplans. They are connected to budgets (many rather abstract policies and plans are not automatically linked to budgets)
- **Ministry of Planning and Cabinet Office were important drivers for mainstreaming – convincing them is key!**
- Be pragmatic/ keep it simple: not everyone is a climate expert, therefore mainstreaming support should not be too technical and easy to grasp
- Political support for mainstreaming process can be strengthened by linking it with climate finance readiness efforts (mainstreaming structures in place as a favouring condition for getting access)

Challenges

- **Limited data available, which can make decision-making for certain sectors (infrastructure, housing, water, etc.) more difficult**
- Currently focus is a lot on **no-regret** options since capacity for more in-depth risk assessment is not available
- Continuous “on-the job” support required to support non-climate experts (“help desk” function)
- **Establishing a risk management ethic takes time - sharpening the “climate lens” takes time. For example: CCORAL is a useful risk assessment tool to achieve that but it doesn’t fly by itself!**

“Zooming in”

Prioritizing Adaptation Options in Agriculture Grenada Experience

Climate smart agriculture (CSA)

Climate-Smart Agriculture: *“Agriculture that sustainably increases productivity and incomes, adapts and builds resilience to climate change, reduces and/or removes greenhouse gases, where possible (FAO CSA Sourcebook)”*

In Grenada:

Focus on adaptation with some limited interventions with regard to mitigation (for example: mini-biogas systems for pig farmers, which have an adaptation co-benefit due to less river pollution). Examples of CSA practices: rain-water harvesting, composting, mulching, contour drains, biological pest control, shade houses, etc.



Challenge:

- No Vulnerability and Adaptation Assessment (VA) available for agricultural sector, however: we have to act now!
- A number of studies and plans exist already that speak to adaptation in that sector + focus a lot on “no-regret options”



Action taken:

- Climate change adaptation integrated into National Agriculture Plan
- Integration of CSA practices into the 3 year plan of the Ministry of Agriculture (2016-2018) and the Divisions workplans for 2016.
- Adaptation Plan for Agriculture Sector developed as part of the NAP (based on 18 existing documents from the Agriculture sector – pulling out all adaptation-related actions)

Let's “de-mystify” this!

Example 1: National Agriculture Plan

Own section on climate change - **Priority No 6:** “Increasing resilience to climate change and disasters and reducing adverse impact on the environment”

In addition, climate change issues are integrated into other sections of the plan, for example:

- **Action No. 2 for Nutmegs and Mace:** *“Promotion of agro-forestry practices to ensure that that nutmegs trees are protected by higher trees to be more resistant to strong winds (such as windbreaks and shelter belts, boundary planting etc.)”*
- **Action No. 2 Fruits** “Increase the use of Protected Agriculture to increase the consistency of supply and adapt to climate variability;
- **Action No. 10 Fruits:** *“Continue irrigation and water storage support for farmers to reduce drought risks and promote intercropping of fruit trees and vegetables to intercept water and fertilizer run-off and to protect soils against heavy rains.”*

Example 2: Mainstreaming CSA practices into the 3 year plan of the Ministry of Agriculture (2016-2018) and Division workplans in 2016.

Step 1: 3-year plan / pillar “Food Security”

STRATEGIC OBJECTIVES	INTERVENTIONS	OUTCOMES	PERFORMANCE INDICATOR
1.1. Strengthen services and enhance production technologies	Implement Farmer Field School (FFS) and applied research programme, <u>including Climate Smart Agriculture practices to ensure sustainability of production.</u>	Increased efficiency and consistency of production to satisfy the four dimensions of food and nutrition security: availability, accessibility, utilization and stability	Increase number of farmers trained in Farmer Field Schools annually Increase production of milk and meat annually

Step 2: Action Plan for 2016

Objective	Activity	Task	Responsibility
1.1 Strengthen services and enhance production technologies	Implement Farmer Field School Programme	Design Programme <u>which also to includes CSA practices</u>	Chief Agriculture Officer , Extension, Agronomy, Research, Pest Management Land Use <u>Support by GIZ-ICCAS</u>

Step 3: Workplan for the Agriculture Extension Service Division for 2016 (*still need to be finalized!*)

Strategic Objective: Establishment of a Demonstration Plot

Unit Objective(s)	Activities/Outputs	Responsible	Result Indicators/ Outcomes
To Demonstrate the production practices in cassava, Yams, carrots and composting.	Establish 4 demo. plots 1 carrot and 1 cassava	District Supervisors	1 demo plot of cassava (1/4 acre) 1 demo plot of carrot (1/4 acre) 1 demo plot with yams (1/4 acre) 1 demo composting site
<u>Identify farmers needs to implement CSA practices and could incorporate the use of RISE</u>	These practices could be rainwater harvesting, intercropping and soil conservation but it really depends on the farmers' needs. (still to be finalised)	(still to be finalised)	(still to be finalised)

Example 3: Climate Change Action Plan for Agriculture sector as part of NAP development

- Based on existing documents – pulling out all adaptation-related actions for the agriculture sector
- All identified actions/ recommendations were discussed and amended by 25 agriculture stakeholders (agronomy, livestock, planning, extension, research, land-use, farmers associations, community college etc.)
- Followed by prioritization process according to 5 criteria (defined by Environment Division)
- Top scores will go into NAP document

List of documents consulted (selection)

Review of Relevant Documents (This numbering system has been used to populate the 'Source' column in the measures table).	(+): relevant information (-): no relevant information
Government of Grenada. Corporate Plan. 2015-2017. Ministry of Agriculture, Lands, Forestry, Fisheries and the Environment. (2015).	Reviewed (+)
Grenada National Agricultural Plan. Final Report. (2015).	Reviewed (+)
Grenada Food and Nutrition Security Policy, 2013. (2013).	Reviewed (+)
Climate Change Adaptation in Grenada: Water Resources, Coastal Ecosystems and Renewable Energy. (2012).	Reviewed (+)
DRAFT Comprehensive Disaster Management Policy and Strategy, 2015-2019. (2014).	Reviewed (+)
Aligned National Action Programme for Grenada's Commitment under the United Nations Convention to Combat Desertification and Drought. State of Grenada. (2015)	Reviewed (+)
Fifth National Report to the Convention on Biodiversity. GRENADA. (2014).	Reviewed (+)
Grenada Zero Hunger Challenge Initiative (GZHCI). Framework Document for Plan of Action 2015 – 2019. (2015).	Reviewed (+)
Good Agricultural Practices for Climate Risk Management in Grenada. Summary Report. (2008).	Reviewed (+)
Grenada Food and Nutrition Security Plan of Action 2013 – 2018. Action Plan to Implement the Grenada Food and Nutrition Security Policy. (2013).	Reviewed (+)
Protecting our Coastline: Coastal Zone Management in Grenada. A brief from the Integrated Climate Change Adaptation Strategies (ICCAS) Programme.	Reviewed (+)

Prioritization criteria

Adapt. meas. code	Criterion 1: To what extent does this measure focus on implementation at the community level?	Criterion 2: What is the possibility of this measure being funded by capital budget over the next 5 years	Criterion 3: To what extent can this measure be feasibly implemented within five years, according to available human, technical, institutional, legal, administrative, etc. resources?	Criterion 4: How urgent is the proposed measure given the current climatic-impacts, vulnerabilities and risks where delaying action would lead to increased costs at a later stage?	Criterion 5: To what extent is this measure transformative?
Scoring system	3: It is a community – based measure.	3: Highly likely	3: Highly feasible. Resources available.	3: Very urgent and highly demanded by agriculture stakeholders,	3: Potential for replicating/ upscaling, for knowledge & learning, and contributes to enabling environment
	2: To a moderate extent	2: Potentially	2: Moderately feasible. Moderate resource gaps could be sourced externally	2: Moderately urgent : it addresses moderate current climatic impacts, &/or a challenge where delaying action would lead to increased costs	2: Potential for replicating/ upscaling, for knowledge & learning, and/or contribution to enabling environment
	1: To a limited extent	1: Unlikely	1: Limited feasibility. Major resource gaps would be costly to resource externally	1: to a limited extent,: it addresses minor climatic impacts and/or delaying action would not lead to increased costs	1: Limited potential for types of transformation described above
	0: No relevance for community-based implementation.	0: Not likely	0: Unfeasible	0: Not at all	0: No potential for replicating/ upscaling, for knowledge & learning, and/or contribution to enabling environment.

Examples of Highly Ranked Measures

- From old (but still relevant!) National Climate Change Policy and Action Plan (2007-201): Commissioning of technical vulnerability analyses to research the CC impact on survival and productivity of current crop varieties and consideration of alternative varieties.
- Establish CSA demo sites highlighting different technologies/ techniques
- Information on insurance options + new risk transfer instruments/ Promote existing insurance systems (coupon insurance Index based)
- Engage groups of farmers to work together in developing Rain-water harvesting ponds
- Institutionalize watershed management via “Ridge to Reef”
- Resource Mobilization: 1 proposal for agriculture sector for Green Climate Fund (or other relevant funds)
- *Etc. (final list to be completed soon as part of NAP)*

To learn more about Grenada's approach

Grenada: NAP for climate-resilient decision-making
(published by BMUB)

https://www.international-climate-initiative.com/fileadmin/Dokumente/landingpages/CB03_Building_capacity_for_NAPs.pdf

Grenada's Approach to Initiating Integration of Adaptation Planning across Sectors (published by IISD)

<http://www.napglobalnetwork.org/wp-content/uploads/2016/06/sNAPshot-Grenada-June2016-Letter-1.pdf>



THANK YOU FOR YOUR ATTENTION!

*If you have any questions or comments,
please do not hesitate to contact us or like “ICCAS Project” on*



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