ADAPTATION COMMITTEE

Institutional arrangements for national adaptation planning and implementation

2014 Thematic Report





United Nations Framework Convention on Climate Change



Survivors of typhoon Haiyan (Yolanda) plant vegetables, Philippines Front cover image: Rice fields in a hill tribe village, near Sapa, Viet Nam

FOREWORD

Adaptation is a fundamental challenge that all Parties to the United Nations Framework Convention on Climate Change (UNFCCC) face. How can resilience be built to cope with the impacts of climatic change that are happening now and that will continue into the future?

Leadership and understanding is required to build the courage, the confidence and the political space for accelerated adaptation action. Strengthened institutional arrangements at global, regional and national levels are vital for success and sustainability of this action.

Established in 2010 under the Cancun Agreements, the Adaptation Committee is promoting enhanced global action on adaptation. The Adaptation Committee is addressing ambition for and cooperation on adaptation by raising the profile of adaptation action and building coherence.

This report is part of a series of annual thematic reports prepared under the workplan of the Adaptation Committee to provide information on adaptation to Parties and the broader international adaptation community. The first report in this series, the 2013 thematic report *"The State of Adaptation under the United Nations Framework Convention on Climate Change"* provided a snapshot of the state of adaptation under the Convention, the institutional structures in place, and how adaptation has evolved since the Convention was founded in 1992.

The Adaptation Committee decided to focus the 2014 report on institutional arrangements for adaptation, considering their critical importance for adaptation planning and implementation. Institutional arrangements are, in fact, critical for any comprehensive adaptation action that countries are starting to embark on, such as in the context of the national adaptation plan (NAP) process.

The plethora of institutions and arrangements that have been set up worldwide to address the adaptation challenge in recent years have helped to raise awareness of adaptation and have initiated work at many different levels. However, these arrangements, and adaptation planning in general, are currently often patchwork and/or overlapping. There is a need to move towards more coherent and strategic adaptation planning and implementation. Institutions at all levels need to build on what already exists and learn from experience, while at the same time working towards more streamlined action. Appropriate arrangements must consider all levels of government, sectors and societal domains in an approach that manages competing priorities and demand for resources.

With this publication, the Adaptation Committee aims to raise awareness of current institutional arrangements that have been set up to support adaptation. The aim is to provide focus on the importance of improving institutional arrangements at all levels, so as to better manage future challenges posed by climate change within the multidimensional context of modern day socio-economic and developmental pressures.



Juan Hoffmaister Co-Chair of the Adaptation Committee



Christina Chan Co-Chair of the Adaptation Committee



View of Namenalala Island at the heart of Namena Marine Reserve, Fiji

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Farming in the Gorkha Region, Nepal

ABBREVIATIONS

AACA	Adaptation Actions for a Changing Arctic				
AC	Adaptation Committee				
ADP	Ad Hoc Working Group on the Durban Platform for Enhanced Action				
CARICOM	Caribbean Community				
CCCCC	Caribbean Community Climate Change Centre				
CSA	Climate Smart Agriculture				
CGE	Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention				
CTCN	Climate Technology Centre and Network				
СОР	Conference of the Parties				
DRM	Disaster risk management				
DRR	Disaster risk reduction				
FAO	Food and Agriculture Organization of the United Nations				
GCF	Green Climate Fund				
GEF	Global Environment Facility				
GFCS	Global Framework for Climate Services				
GGWI	Great Green Wall Initiative				
GWP	Global Water Partnership				
ICIMOD	International Centre for Integrated Mountain Development				
IFRC	International Federation of Red Cross and Red Crescent Societies				
IPCC	Intergovernmental Panel on Climate Change				
IPCC WGII	Intergovernmental Panel on Climate Change Working Group II				
IWRM	Integrated Water Resource Management				
LDC	Least Developed Country				
LEG	Least Developed Countries Expert Group				
L&D ExCom	Loss and Damage Executive Committee				
MDP	Mekong Delta Plan				
M&E	Monitoring and evaluation				
NAP	National Adaptation Plan				
NAP-GSP	NAP-Global Support Programme				
NAPA	National Adaptation Programme of Action				
NC	National Communication				
NCICD	Jakarta National Capital Integrated Coastal Development				
NGO	Non-governmental organization				
NWP	Nairobi work programme on impacts, vulnerability and adaptation to climate change				
OECD	Organisation for Economic Co-operation and Development				
PACC	Pacific Adaptation to Climate Change Project				
PPCR	Pilot Program for Climate Resilience				
PRAA	Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes				
PROVIA	Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation				
SPM	Summary for Policymakers				
SPREP	Secretariat of the Pacific Regional Environment Programme				
TEC	Technology Executive Committee				
TNA	Technology needs assessments				
UNDP	United Nations Development Programme				
UNEP	United Nations Environment Programme				
UNFCCC	United Nations Framework Convention on Climate Change				
UNISDR	United Nations Office for Disaster Risk Reduction				
USA	United States of America				
WACDEP	Global Water, Climate and Development Programme				
WHO	World Health Organization				
WMO	World Meteorological Organization				

I. INTRODUCTION

At the sixteenth session of the Conference of the Parties (COP) in Cancun, Mexico (2010), Parties to the United Nations Framework Convention on Climate Change (UNFCCC) recognized that adaptation must be addressed with the same priority as mitigation, and that enhancement of adaptation action and support requires appropriate institutional arrangements (Box 1).

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change Working Group II (IPCC WGII), *Climate Change 2014: Impacts, Adaptation, and Vulnerability*¹, states that institutions provide the enabling environment for implementing adaptation actions (chapter 14). It devotes several chapters to institutional arrangements including needs (chapter 14.2); the role of institutions as actors in adaptation (chapter 14.4); in planning and implementing adaptation (chapter 15.5); and in providing barriers and opportunities (chapter 16.3). The report finds that institutional weaknesses, lack of coordinated governance, and conflicting objectives among different actors can constrain adaptation. However, enhancing the awareness of individuals, organizations, and institutions on climate change vulnerability, impacts and adaptation can be a starting point to build individual and institutional capacity for planning and implementing adaptation.

Box 1. Provisions on Institutional Arrangements in the Cancun Adaptation Framework, Decision 1/CP.16 Part II²

Paragraph 14 invites all Parties to enhance action on adaptation under the Cancun Adaptation Framework, taking into account their common but differentiated responsibilities and respective capabilities, and specific national and regional development priorities, objectives and circumstances, by undertaking, inter alia, the following: ... (c) Strengthening institutional capacities and enabling environments for adaptation, including for climate-resilient development and vulnerability reduction; ...

Paragraph 32 invites all Parties to strengthen and, where necessary, establish and/or designate national-level institutional arrangements, with a view to enhancing work on the full range of adaptation actions, from planning to implementation.



Fishing boat in between icebergs, Disco Bay, Greenland

IPCC, 2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

²⁾ The Cancun Adaptation Framework (2010), FCCC/CP/2010/7/Add.1.

There is no single definition for institutional arrangements for adaptation and the term is used in many different forms and contexts. For the sake of this report, institutional arrangements are interpreted as those structures, approaches, practices or rules set in place by stakeholders at all levels to steer adaptation action including for: assessing impacts, vulnerability and risks; planning for adaptation; implementation of adaptation measures; and monitoring and evaluation of adaptation (see also Section III, Figure 1).

This thematic report draws on eight case studies as well as information from other sources to raise awareness of existing institutional arrangements that have been set up to support adaptation at different governance levels, identify the main challenges those institutions face, and highlight key lessons learned from their work that can be drawn upon to identify a set of concrete measures to enhance the effectiveness of institutional arrangements.

The report is structured as follows: Section II provides an overview of current institutional arrangements for adaptation, including challenges, and provides eight case studies that explore in more detail examples of institutional arrangements set up in different countries and regions to support national adaption to climate change. Section III looks at current and future challenges identified as described in section II and discusses measures that can be used to support the strengthening of institutional arrangements. Section IV concludes with the main messages from the report including recommendations.



Group work at the UNDP / UNEP National Adaptation Plan Global Support Programme (NAP-GSP) Africa Regional Training Workshop (Anglophone) in Addis Ababa, April 2014.

II. INSTITUTIONAL ARRANGEMENTS FOR SUPPORTING NATIONAL ADAPTATION ACTION

Under the UNFCCC, information on institutional arrangements for adaptation can be sourced through National Communications³ and National Adaptation Programmes of Action (NAPAs)⁴ by Least Developed Countries (LDCs). Information on institutional arrangements to support national adaptation action is also available from Parties and relevant organizations through submissions, technical papers and workshops, requested by the COP and its Subsidiary Bodies, and the Adaptation Committee (Box 2).

This section provides information on institutional arrangements, as communicated to the UNFCCC through the sources listed in Box 2, on current arrangements and challenges at national, regional and international levels. The descriptions in this section are further illustrated by case studies which focus on highlighting new and improved institutional arrangements set up for national level adaptation action.

Box 2. Submissions and relevant documents under the UNFCCC that include information on institutional arrangements in regards to adaptation to climate change, which served as sources for this report⁵

Nairobi work programme, under the SBSTA: Submissions on information on good practices in and lessons learned from national adaptation planning.

(For synthesis report see FCCC/SBSTA/2014/4)

NAPs, under the SBI: Submissions from United Nations organizations, specialized agencies and other relevant organizations, as well as bilateral and multilateral agencies to consider establishing or enhancing support programmes for the national adaptation plan process within their mandates, as appropriate, which could facilitate the provision of financial and technical support to developing country Parties that are not Least Developed Countries.

(For details see FCCC/SBI/2014/MISC.1)

Issues relating to agriculture under the SBSTA: Views from Parties and relevant organizations on the current state of scientific knowledge on how to enhance the adaptation of agriculture to climate change impacts while promoting rural development, sustainable development and productivity of agricultural systems and food security in all countries, particularly in developing countries, taking into account the diversity of the agricultural systems and the differences in scale as well as possible adaptation co-benefits. (For details see FCCC/SBSTA/2013/MISC.17)

Warsaw International Mechanism for Loss and Damage under the SBI/SBSTA: Technical report on gaps in existing institutional arrangements within and outside of the Convention to address loss and damage, including those related to slow onset events. The report provides a preliminary analysis of some of the general features of, and emerging trends and gaps in, existing institutional arrangements. (For full report see FCCC/TP/2013/12)

Durban Forum on Capacity-building under the SBI: Synthesis report on the implementation of the framework for capacity-building in developing countries. Table 1 of the document provides information on institutional capacity-building, including the strengthening or establishment, as appropriate, of national climate change secretariats or national focal points, some of which are relevant to adaptation. (For full report see FCCC/SBI/2014/2 and FCCC/SBI/2014/2/Add.1; see also online capacity building database http://unfccc.int/capacitybuilding/core/activities.html)

Adaptation Committee: Submissions from regional institutions and United Nations agencies supporting work on adaptation to communicate their current support for adaptation in developing countries. (For analysis report see AC/2014/7)

^{3) &}lt;http://unfccc.int/1408>

^{4) &}lt;http://unfccc.int/7567>

⁵⁾ Nairobi work programme submissions available from the UNFCCC Submissions portal http://www4.unfccc.int/submissions/SitePages/sessions.aspx



Women farmers preparing the ground to control erosion and capture rainwater, Burkina Faso

INSTITUTIONAL ARRANGEMENTS AT THE NATIONAL LEVEL

Existing institutional arrangements

Annex I (AI) Parties state in their National Communications that they are enhancing adaptation efforts, building on past and ongoing adaptation initiatives.⁶ Twenty four out of forty one AI Parties have developed or are developing national adaptation strategies and subsequent national adaptation frameworks. National adaptation frameworks are usually led by a designated national institution or agency or jointly by several governmental institutions. Measures to improve institutional arrangements for adaptation and development of legislation, establishment of scientific and advisory bodies, sharing of information and practices, awareness raising, training, engineering and infrastructural changes. A full summary of the ongoing work on adaptation practices identified in the National Communications is available in the UNFCCC synthesis report.⁷ AI Parties have also set up institutions to support adaptation strategies and respective capacity in developing countries and are increasingly mainstreaming adaptation into development cooperation efforts.

In non-Annex I (NAI) Parties, there is a great variety of institutional arrangements for adaptation which are referred to in some NAI National Communications.⁸ Many NAI Parties have created specific institutional frameworks dedicated to combating climate change. These include interministerial climate change coordination committees, technical working groups undertaking specific studies on inventories, mitigation, vulnerability and adaptation, and climate research centres coordinating national studies. The participation of stakeholders, including non-governmental organizations (NGOs), is recognized as an important means of ensuring continuity of climate change activities.⁹

The work of LDCs,¹⁰ including their national work on NAPAs and other adaptation work, has enabled the set up of institutional arrangements to plan and implement adaptation action. Examples of institutional structures include those for Bangladesh,¹¹ Cambodia,¹² Laos,¹³ Malawi,¹⁴ Mali¹⁵ and Yemen.¹⁶ An important good practice that leads to more effective coordination is the involvement in adaptation action of high-level government offices, and a clear mandate that distributes roles and responsibilities for different players at the national and sub-national levels. The Least Developed Countries Expert Group (LEG) continues to document good practice and progress made not just for planning but for setting up institutional arrangements and implementing NAPA projects.¹⁷ This work will be continued as NAPs become planned and implemented.¹⁸

^{6) &}lt;http://unfccc.int/7742>

⁷⁾ FCCC/SBI/2014/INF.20/Add.2. Compilation and synthesis of information in sixth national communications and first biennial reports from Parties included in Annex I to the Convention. Note by the secretariat. Addendum. Vulnerability and adaptation; research and systematic observation; and education, training and public awareness

^{8) &}lt;http://unfccc.int/2716>

 ⁹⁾ FCCC/SBI/2005/18/Add.1. Sixth compilation and synthesis of initial national communications from Parties not included in Annex I to the Convention. http://unfccc.int/resource/docs/2005/sbi/eng/18.pdf>

^{10) &}lt;http://unfccc.int/4583>

^{11) &}lt;http://unfccc.int/resource/docs/napa/ban02.pdf>

^{12) &}lt;http://www.camclimate.org.kh/index.php/policies/the-nccc-structure.html>

^{13) &}lt;http://www-gio.nies.go.jp/wgia/wg8/pdf/0-3_syamphone_segchandala.pdf>

^{14) &}lt;http://unfccc.int/files/adaptation/application/pdf/malawi_fred_kossam_session_3.pdf>

^{15) &}lt;http://mptf.undp.org/document/download/12430>

¹⁷⁾ Best practices and lessons learned in addressing adaptation in the least developed countries, Volume 2, LDC Expert Group 2012. See <http://unfccc.int/resource/docs/publications/ldc_publication_bbll_2012.pdf>

^{18) &}lt;http://unfccc.int/nap>

Challenges

As communicated by Parties, the knowledge gap on adaptation is one of the largest barriers to action. Insufficient individual understanding, knowledge and skills in institutions can prevent the achievement of higher level national priorities and goals. There is currently a scarcity of qualified personnel at the country level to serve as national consultants.

Despite progress made, mainstreaming of adaptation into development policies and strategies needs to be continued, particularly for key sectors such as water management, food security and disaster risk management.

Tools and approaches for adaptation must be fit for purpose at national and sub-national levels and/or the local socio-economic and cultural context. Developing countries often lack the information and instruments necessary to identify priority actions or the institutional capacity to implement them effectively. Different stakeholder groups require support so as to better understand the linkages between resilience and adaptive capacity.

Functioning monitoring and evaluation (M&E) frameworks should be built into the project design and be implemented. Monitoring often involves systematic collection of information on a pre-defined set of indicators that enables stakeholders to check whether an initiative is on track in achieving set objectives, this should include measuring impacts on policy change. A well designed M&E framework can reveal how social, economic, institutional and political factors support or impede adaptation. Often the full integration of adaptation into national development planning processes and documents requires longer than a few years which is often a challenge for demonstrating results to policy makers in the short term.

Illustrative examples

Examples of national institutional arrangements to support national adaptation action are provided in the following case studies. In all case studies, adaptation has been mainstreamed into decision making. Where necessary, institutional arrangements provided the opportunity for experts to support decision making, using different tools and approaches to plan and implement action. They offered the opportunity to support individual and stakeholder understanding.



Palmoil and rubber tree plantages are advancing towards the mangrove estuary south of Krabi, Thailand

CASE STUDY 1 INDONESIA: NATIONAL ACTION PLAN FOR CLIMATE CHANGE ADAPTATION

Country: Indonesia



Project goal

The main objective of the National Action Plan for Climate Change Adaptation (RAN-API) is the implementation of a development system that is sustainable and highly resilient to climate change impacts. RAN-API is crossdisciplinary for the short- and medium-terms, and provides direction for adaptation in the long term.

Overview

As the largest archipelago nation in the world, Indonesia is one of the countries that is most vulnerable to the negative impacts of climate change. Impacts include extended dry seasons, floods and increased frequency of extreme climatic events that affect community health and sources of living, degrade biodiversity, and cause instability of the economy.

RAN-API is part of Indonesia's national development framework. It contains the action plan for adaptation of priority sectors and cross-sectors in the short term (2013-2014), mainstreaming of the adaptation action plan into the National Medium-Term Development Plan (RPJMN) of 2015-2019 that will be formulated, and the long-term adaptation policy direction. It is also a reference for local government in devising a strategy action plan for regional climate change adaptation.



Planning

RAN-API was developed based on the "Strategy for Mainstreaming Adaptation into National Development Planning" which was built on scientific knowledge gained from a committee of local experts.

The plan includes how adaptation measures can be integrated into development policies and how monitoring and evaluation can be initiated.

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Implementation

The State Ministry for National Development Planning/ National Development Planning Agency (BAPPENAS) are responsible for implementation and monitoring and evaluation of the RAN-API, including dissemination to provincial governments.



Institutional arrangements

The RAN-API is expected to improve coordination between relevant ministries and institutions and enable involvement of other stakeholders, such as private, nongovernmental organizations, international cooperation agencies, universities and research institutes. BAPPENAS is in charge of formulating national development plans. In initiating the RAN-API, BAPPENAS formed a core group with the Ministry of Environment (MOE), the Agency for Meteorology, Climatology and Geophysics (BMKG) and the National Council on Climate Change (DNPI). It organized core group meetings with central ministries (agencies), approximately 30 provincial governments, universities and non-governmental organizations (NGOs), as well as meetings with authors (from Bogor Agricultural University and Bandung Institute of Technology) and young researchers.

Stakeholders

- The core group consisting of BAPPENAS, MOE, BMKG, and DNPI
- 20 central ministries (agencies)
- Approximately 30 provincial governments
- Non-governmental organizations (NGOs)
- Universities, authors (from Bogor Agricultural University and Bandung Institute of Technology) and young researchers
- Japan International Cooperation Agency (JICA),
 Asian Development Bank (ADB), and German Agency for International Cooperation (GIZ)

Support

Development of the RAN-API was through a series of meetings (core group meeting and other relevant meetings) over 2 years, financially and technically supported by JICA, with coordination among stakeholders in cooperation with ADB and GIZ.

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Lessons learned

Plan development was possible through good coordination among relevant ministries and institutions such as provincial governments, universities, NGOs, researchers and donors.

An adaptation funding mechanism was vital. This included climate change as a top priority for funding through the State Budget in accordance with the RPJMN 2010-2014 and the current year's development work plan. Other domestic sources of funding include the regional budget, government debt, private investment (banking and non-banking) and corporate social responsibility (CSR).

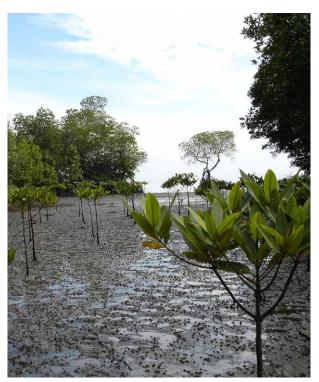
🖉 Next steps

BAPPENAS has started to promote implementation, monitoring and evaluation of the RAN-API, including dissemination to provincial governments.

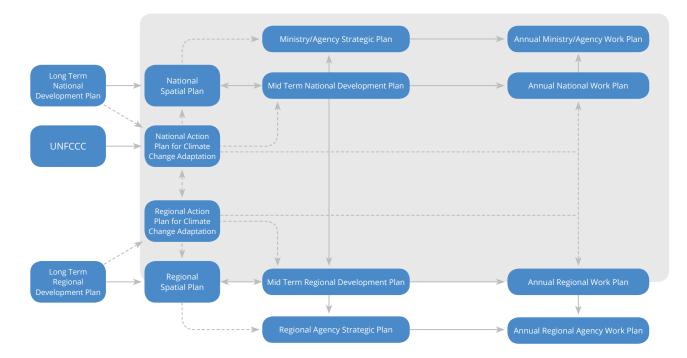


Replicability

The elements that may be replicated in other contexts include: (1) use of the existing national mechanism for development planning, implementation, monitoring and evaluation; (2) role of planning ministry/agency; (3) process and mechanism of stakeholder engagement.



Mangrove restoration by the Jaring Halus community in North Sumatra, Indonesia



Standing of RAN-API in the National Development Framework

http://www.greenclimateproject.org/home/en/publication?gid=5

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CASE STUDY 2 NETHERLANDS: NATIONAL COASTAL STRATEGY

Country: Netherlands



Project goal

The National Coastal Strategy (2015), part of the Delta Programme (DP 2015), provides a strategy for the sustainable and long-term safety of the coast up to 2050 with spatial and economic development in the coastal zone.



Overview

The Netherlands Delta Programme (DP 2015) has been developed to protect the Netherlands environment and economy against flooding and to ensure an adequate freshwater supply, now and in the future.

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Planning

As part of the DP, the National Coastal Strategy is an integrated solution developed from research, workshops, existing coastal strategies and coastal quality design studios to provide maps and visualised options.

Implementation

The implementation agenda for the strategy combines the (long term) pathways of strengthening the flood defences with the use of space in the area on, around and in the flood defences. The strategy concepts are a tool for dialogue among public and private parties gathered in a regional development programme.

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Institutional arrangements

Arrangements for the strategy included close collaboration between the coastal municipalities, coastal water boards, coastal provinces and the national government with input from civil society organizations, research institutions and the business community.

The regulatory framework for the sandy coast nourishment includes a notion on the coastal foundation and necessary nourishment volumes and updates on flood safety levels. There are reservation zones around the flood defences to guarantee that they are upgraded in the future.

The legal agreements on the Delta Programme have been laid down in the Delta Act on Water Safety and the Freshwater Supply. The Delta Act stipulates that a Delta Programme is to be drawn up every year.



Stakeholders

- Delta Commissioner, responsible for direction of the Delta Programme
- Different levels of government working together in a steering committee and in a process of co-creation
- Regional and international organizations
- Private sector contributing to workshops and design studios and in an advisory role
- Civil society contributing to workshops and design studios

Support

The business community will play a pivotal role in the water management of the future. The Delta Programme is already involving the market in the preparation of the strategies, such as by using market researchers in order to ensure that the plans will ultimately be feasible for companies and to utilise the innovative power of the market from the start.



Lessons learned

It is important that all stakeholders involved are able to cooperate directly in a dedicated set-up next to existing governance structures;

The appointment of an independent and responsible Commissioner - above all parties, including ministries - is pivotal for success;

Multi-annual financial arrangements (the Delta Fund), independent from changing political priorities, contribute to keeping and realizing the long term goals; Regular reporting to the government and parliament about progress and results is important to keep pace; Developing an integrated strategy with all stakeholders

creates a shared feeling of responsibility at regional and local stakeholder level and preparedness to work together on local interests for a better overall result.

Next steps

All of the authorities along the North Sea coast will collaborate on the comprehensive challenges more than they do now. The form that this takes will, where possible, build on existing collaborative arrangements along the coast and has the provisional working title "coastal community". This network of coastal authorities will be able to share experiences at local and interlocal level and along the whole coastline and make connections. In practice, it will mainly relate to issues concerning the integration of coastal safety and coastal development with regard to management and maintenance and areaspecific development.

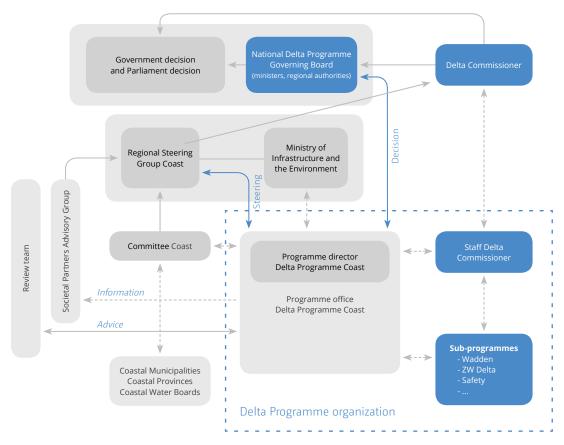
Replicability

It is a major challenge to keep the development of the coast as a whole in view. It is not only safety and economic development that must have their place, but also attractiveness, culture, nature conservation and efforts to make the sandy coast dynamic. The form of a coastal community is a useful organizational tool for doing all this and exchanging experiences. The Delta Programme approach has become an export product in itself. The Dutch Delta Approach is attracting major interest worldwide. Various countries have called upon the Dutch government and business community to help them implement the Delta Programme approach to address their own issues.



Dutch Wadden Sea, Netherlands

Institutional Structure



http://www.deltacommissaris.nl/english

https://deltaprogramma.pleio.nl/file/view/24225772/national-coastal-strategy-2013-delta-programme-coast

CASE STUDY 3 UNITED STATES OF AMERICA: REBUILD BY DESIGN - AN INITIATIVE OF THE HURRICANE SANDY REBUILDING TASK FORCE

Country: United States of America



Project goal

Rebuild by Design (2013-2014) is dedicated to creating innovative community- and policy-based solutions to protect U.S. cities that are most vulnerable to increasingly intense weather events and future uncertainties due to climate change.



Overview

The national approach to adaptation work comprises Presidential actions (executive orders) at the federal level, then states actions, cities and counties developing plans to support the national effort. This is a nested and, sometimes, decentralized approach to action.

In August 2013, the Hurricane Sandy Rebuilding Task Force, announced a Rebuilding Strategy with 69 specific recommendations to help communities prepare for extreme weather. One of those recommendations was the launch of the competition Rebuild by Design for the region exposed by superstorm Sandy.

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Planning

Rebuild By Design was a global competition to adapt the region's urban areas, infrastructures, coastal settlements, or ecological systems, to climate change. Following applications from 148 multidisciplinary teams representing forty nations, ten final teams were selected. These teams pursued their own research inquiries as a way to further develop their design projects.

Implementation

Teams carried out on-the-ground fieldwork and uncovered emerging practices in design and engineering. As part of this process, teams also developed processes for implementation: assembling political coalitions, researching finance opportunities, and exploring policies that affect their proposals.



Institutional arrangements

Rebuild by Design created a new framework for multiple public and private partners to tackle complex, urgent problems with design at the centre, through: Talent: Attracting world class talent in interdisciplinary teams and connecting them with local and regional talent for capacity building and cross cutting collaborations. The invited experts led frequent seminars; provided special advice to the teams; participated in the working groups; offered feedback on embryonic design ideas and on emerging analytic findings;

Process: Organizing a design-driven research process that was collaborative by nature and world class through its partners, developing an understanding first before aiming for solutions, and fixing the design development to regional understanding and to local coalitions to ensure cross stakeholder learning;

Funding: Combining public, philanthropic, and private sector resources and knowledge integrated with community participation to ensure efficient execution and build inclusive physical and social resilience opportunities;

Innovations: Producing innovative resiliency ideas that are catalysts for real infrastructure reform and that can be shared with people all over the world.

Stakeholders

- Design teams brought in a range of expertise including climate science, hydrology, engineering, policy and design
- Project partners, to support the design teams, assembled a Research Advisory Group made up of internationally-renowned scholars working on issues related to climate change, urban planning, engineering, sociology, public health, public policy, economics, law, and design
- Local communities were engaged as an integral part of the process



Support

From the outset, Rebuild by Design partners, public officials at the U.S. Department of Housing and Urban Development (HUD) and associated funders recognized that Rebuild by Design would not be a success unless there was substantial community buy-in on the designs and the entire process itself. Through an integrated and comprehensive community engagement process, Rebuild by Design sought to improve the resilience capacity of communities, not just through innovative design and planning, but also through critical involvement in the design making and planning processes. This interaction resulted in better designs, learning and capacity building amongst the teams and the communities involved, and a better understanding of the necessity for resilience.

All proposals competed for Community Development Block Grant Disaster Recovery (CDBG-DR) funds.

Lessons learned

The end goals of Rebuild by Design were rooted in a collective need to rebuild the region affected by Hurricane Sandy (in 2012), but are also much broader. Rebuild by Design demonstrated a new level of innovation in community engagement through new processes and formats, initiating a momentum towards a culture of resilience in the region, and garnering enthusiastic community support.

Next steps

HUD selected six proposals to be federally funded CDBG-DR funds, with a total investment of \$930m to the region.

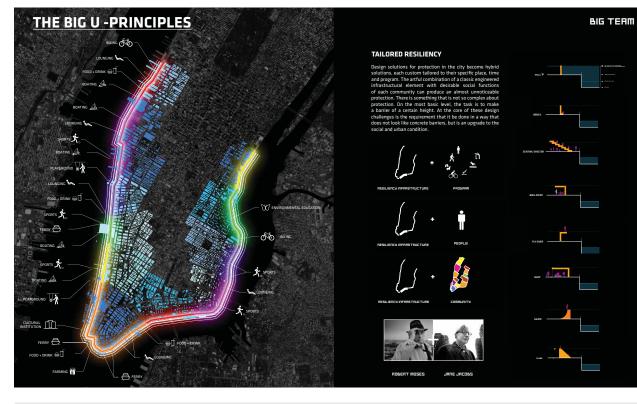
The familiarity with, awareness of, and commitment to resilience of ten communities has been significantly enhanced through their participation in developing the final projects for consideration by HUD and other potential funders. Thirty one additional proposals were developed that, although not chosen for funding, are potential interventions for local communities to pursue.

Replicability

Protocols are available for community engagement and collaborative approaches to resilience planning and design that can be replicated in other regions.

The innovations and learning of the competition process can inspire other actions for resilience across the world.

One of the winning proposals. The Big U is a protective system around Manhattan driven by the needs and concerns of its communities





http://www.rebuildbydesign.org

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CASE STUDY 4 VIET NAM: MEKONG DELTA PLAN

Country: Viet Nam



Project goal

The Mekong Delta Plan (MDP) (2013) aims to develop a long-term strategic vision towards a safe, prosperous and sustainable delta, including policy recommendations and ways of solutions.



Overview

The current social and economic developments in the Lower Mekong Basin are already putting immense pressures on land and water resources. These developments are highly uncertain and largely determined by autonomous drivers such as the global economy, economic and population growth of riparian countries, Viet Nam itself, and the development of Ho Chi Minh City. How these future developments unfold will shape the demands and vulnerabilities of the system. The impacts of climate change are an added pressure.

Planning

The Mekong Delta Plan, prepared from existing knowledge and an expert assessment¹⁹ of the current state of the delta, is a customized strategic vision including policy recommendations, based on natural characteristics and competitive advantages for the region (low-lying land, fertile soils, waterway network).



Implementation

A roadmap for implementation towards a Mekong Delta Programme from 2014 onwards has been developed, including the necessary institutional arrangements.

Institutional arrangements

The development of the Mekong Delta Plan required a willingness to address strategic socio-economic planning and spatial and water resources management in a collaborative and holistic way.

The MDP has no formal status in the Vietnamese administrative system other than providing strategic advice to the government of Viet Nam. It can support the government in developing and reviewing its socioeconomic development planning, spatial planning and sectoral master planning for the Mekong Delta as well as guide future decision making, legislation and investments in the Mekong Delta so as to provide an "enabling environment" by acting as incubator for innovation and sustainability, in close cooperation with the private sector.



Stakeholders

- Experts and specialists from different sectors with a bird's-eye view across the sectors
- Decision makers of local, provincial and national authorities
- Representatives from organizations for e.g. industry, fishery, transport, agri/aquaculture and water resources management
- International development partners (IFI's, multilateral- and bilateral donors)
- National Viet Nam government (MoNRE, MARD, MoC, MoT, MPI) and related provincial and municipal departments. Focal partners are MoNRE and MARD
- Research institutes for the Mekong Delta (SIWRP.
 SIWRR, MDI) and universities (Hanoi Water Resources University, Can Tho University)
- Private business in the Mekong Delta
- World Bank, ADB, UNDP, IUCN, IFAD and bilateral donors (Danida, GIZ, JICA, USAID, AUSAID, Netherlands)

Support

Although the Mekong Delta Plan is mainly the result of close cooperation between experts from Viet Nam and the Netherlands, it has now reached the point that it serves as a common framework for cooperation and investment planning by the international (donor) community as well as by the international financing institutes.



Lessons learned

It is recognized, as a consequence of the new institutional arrangements set up under the MDP, that the orientation of the existing government policies and the institutional framework for the agricultural sector in the delta must change.

A shift is needed for the agriculture sector from a focus on production towards a focus on added value, anticipating growing new crops and involving public-private partnerships for long term climate resilience and sustainable economic growth.



Next steps

Setting up a coordinating body at the interprovincial level would be essential and could facilitate effective funnelling of ODA resources and FDI within the delta. In close consultation with the Viet Nam National Mekong River Committee, the coordinating body could fulfill an active role in securing Viet Nam's national interests in the Mekong River Commission.



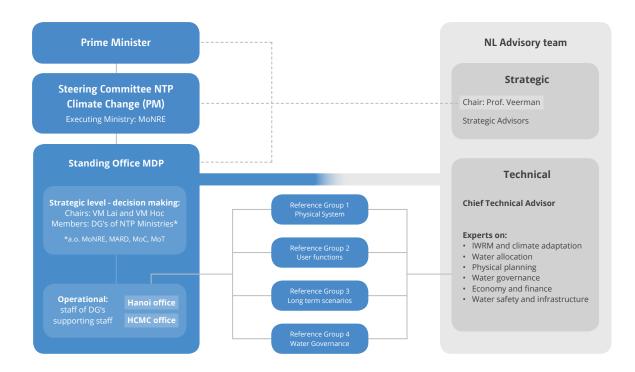
Replicability

The generic approach for developing a strategic vision through a state-of-the-basin analysis (including strengths, vulnerabilities and institutional setting) scenario-approach, policy framework and focus on shortterm low-regret measures can be made replicable for other delta areas.



Vietnam's Mekong Delta

MDP Institutional organization



www.mekongdeltaplan.com

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INSTITUTIONAL ARRANGEMENTS AT THE REGIONAL LEVEL

Existing institutional arrangements

Regional centres and initiatives play an important role in providing vital institutional support for dealing with cross-border issues and coordinating and supporting national adaptation activities, as identified by both developed and developing countries.

A wide range of methods and tools have been developed at the regional level by Parties and institutions to support national adaptation planning, including comprehensive risk management and adaptation decision-making frameworks, sectoral and integrated assessment models, knowledge platforms, and guidance documents and tools.²⁰ These are focussed on assessing current and future vulnerability and planning, identifying and appraising adaptation options. For example Clim-Dev Africa is strengthening the capacities of climate institutions to be able to generate and widely disseminate appropriate, useful and useable climate information to all levels.²¹ The Arctic Council project Adaptation actions for a changing arctic (AACA), 2014-2017, will enable more informed, timely and responsive policy and decision making in a rapidly changing Arctic. It will break new ground by integrating knowledge from many different fields of expertise, and across regions with large cultural diversity, multiple uses and users of local resources, providing ambitious development plans for the future.²²

Regional organizations are also providing institutional support for sub-national and community needs. For example, the International Centre for Integrated Mountain Development's (ICIMOD) Adaptation Learning Highways is a strategic process that fosters information and knowledge exchange between communities, scientists, and policy makers to inform the decision-making process and make it more inclusive.²³

Implementation at the national level has been strongly supported by the involvement of regional institutions, which can act to steer action as well as funnel technical support and finance. Some regional strategies include frameworks for adaptation action. For example the EU strategy on adaptation to climate change (adopted by the European Commission in 2013) provides an action framework that includes information on financial resources and capacities for action.²⁴



Belize reef, seagrasses and mangroves from above

22

²⁰⁾ See FCCC/SBSTA/2014/4 and submissions on information on good practices in and lessons learned from national adaptation planning, as referred to in Box 2 21) http://www.climdev-africa.ore

^{21) &}lt;nup://www.clinidev-allica.org>

 $[\]verb+22) < http://www.amap.no/adaptation-actions-for-a-changing-arctic-part-c>$

 ^{23) &}lt;http://unfccc.int/resource/docs/2014/smsn/igo/168.pdf>
 24) <http://ec.europa.eu/clima/policies/adaptation/what/documentation_en.htm>



Villagers in Molia, Niger

Challenges

Knowledge gaps at regional level need to be addressed, including on aspects of climate change impact and other changing environmental and socio-economic factors.

There is often limited capacity and understanding to deal with and prioritize areas of regional cooperation. This includes the limited recognition of the role of regional institutions at the international level and the challenge of a more integrated involvement.

Improvements in institutional arrangements need to be made so that governments can make use of regional partnerships and networks to streamline approaches to adaptation, development and resilience and access to funding.

Illustrative examples

The following case studies provide examples of regional initiatives to support national processes, including exchange of information and expertise to support planning and implementation. The regional support has opened up opportunities for addressing knowledge gaps and limited capacity so as to prioritize action. The projects build on institutional arrangements in place and optimize opportunities for streamlining approaches and action. The case studies are from the African Sahel, Andes, Caribbean and Pacific Islands.

CASE STUDY 5 AFRICAN SAHEL: GREAT GREEN WALL INITIATIVE (LA GRANDE MURAILLE VERTE)

Country: 12 African countries: Benin, Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Senegal and Sudan



Project goal

The Sahel and West Africa Programme of the Great Green Wall Initiative (SAWAP/GGWI), launched in 2011, aims to expand sustainable land and water management in targeted landscapes and in climate vulnerable areas.

Overview

The Great Green Wall Initiative itself is a transcontinental project, begun in 2007 by the African Union. It aims to tackle poverty and the degradation of soils in the Sahel-Saharan region, focusing on a strip of land of 15 km (9 mi) wide and 7,100 km (4,400 mi) long from Senegal to Djibouti, to expand sustainable land and water management in targeted landscapes and climate vulnerable areas.

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Planning

The plan is based on a collaborative, multi-sectoral approach involving synergy actions to fight against desertification, poverty and climate change. The approach targets the mosaic of production systems, protected areas, habitats, and natural assets that together form the region's rural landscape. This approach not only embraces ecosystem principles, but also the connectivity between the ecosystems.



Implementation

The programme will offer a menu of interrelated activities. The participant countries will formulate projects both at national and regional levels according to their particular conditions, previous experiences, identified priorities, and unique time frames.

M&E will take place at three levels: (i) project level, (ii) the higher program level, and (iii) the still higher level of general government capacity to monitor natural assets. Tools, documents, and practical information will be shared with the TerrAfrica's regional sustainable land management Knowledge Base.

Institutional arrangements

The programme's implementation is based on existing African institutional arrangements. The program will therefore not require, create, or result in parallel implementation structures. There will be two levels of implementation: regional and national execution.

Regional execution: The program will work under the TerrAfrica platform for coordination and cooperation activities at the regional level. Regional institutions and authorities, such as the African Union NEPAD Planning and Coordinating Agency AU/NPCA and the Pan-Africa Agency of the GGWI, will play a key role as partners for coordination and execution of regional projects and activities.

National execution: Each country will choose the agencies responsible for project implementation. In addition, extensive coordination will be established with other agencies working in the countries in similar initiatives such as the African Development Bank (AfDB), the International Fund for Agricultural Development (IFAD), and other UN agencies. Coordination committees at the national level will play an important role in advising individual projects to ensure they contribute to the common programme goal and are aligned with national priorities and plans.

Stakeholders

Because of its large scale, the programme will involve numerous stakeholders at regional, national, and local level. Key stakeholders already identified for the programme are:

- National governments
- AfDB, bilateral agencies (France, the European Commission, Norway, Netherlands, Germany, USA), and UN agencies (IFAD, UNEP, UNDP, FAO)
- NEPAD Planning and Coordinating Agency (AU/NPCA)
- Pan-African Agency of the GGWI: Regional research institutes and centres of excellence: (such as: OSS, CILSS, Agrhymet, African Centre of Meteorological Applications for Development (ACMAD), International Institute for Water and Environmental Engineering (2iE) and Rural Hub
- Regional economic communities: The RECs (including ECOWAS, CEN-SAD, the Common Market for Eastern and Southern Africa [COMESA], and IGAD)
- Regional IUCN (International Union of the Conservation of Nature)

- Local communities/organizations: Local communities will consist mainly of primary producers (men and women) including farmers, herdsmen, coalmen, gum, honey and resin harvesters, healers, hunters and wood carvers
- Local governments
- Private sector

Support

SAWAP is the World Bank and GEF's contribution to the Great Green Wall Initiative under TerrAfrica, an Africandriven global partnership programme. Six of SAWAP's 12 country investment operations have already been approved by the Board of Executive Directors of the World Bank, and the remaining projects are planned to be delivered 2014-2015. The grant for SAWAP includes \$80.4 million from the Global Environment Facility (GEF) Trust Fund, \$20.4 million from the Least Developed Countries Fund (LDCF), and \$4.6 million from the Special Climate Change Fund (SCCF). The programme builds on a series of World Bank investments amounting to \$1.8 billion in co-financing in the 12 countries. The World Bank will coordinate with the TerrAfrica partners on SAWAP.

The new project Building Resilience through Innovation, Communication and Knowledge Services (BRICKS) will provide operational, technical and knowledge services.



Lessons learned

The lessons learned will be part of the assessment of results and progress, which is detailed in the *Knowledge management and monitoring* section of the Adaptation Implementation Strategy.

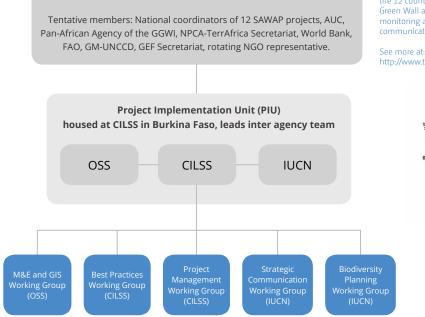
Next steps

Implementation of of the 12 country projects and BRICKS.



Replicability

These recommendations will be forthcoming as the projects progress.



BRICKS Advisory Committee

(annually rotating chairs among members)

Institutional structure

BRICKS operationalizes the vision of a Knowledge Bank, by networking the 12 country project teams and partners working on the Great Green Wall and by providing opportunities for south-south learning, monitoring and evaluation tools, geospatial services, and portfolio-wide communication.

http://www.terrafrica.org/great-green-wall/#sthash.032HnBBL.dpuf



http://www.terrafrica.org/great-green-wall/

http://www.thegef.org/gef/pubs/sahel-and-west-africa-program-support-great-green-wall-initiative http://www.youtube.com/watch?v=jI_nRHg-0l4 http://sawap.net/a-propos

TerrAfrica Secretariat / NPCA

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CASE STUDY 6 ANDES: ADAPTATION TO THE IMPACT OF RAPID GLACIER RETREAT IN THE TROPICAL ANDES

Country: Bolivia, Ecuador and Peru. Columbia included for the glacier monitoring component



Project goal

The broad objective of the Impacts of rapid glacier retreat in the tropical Andes project (PRAA) is to contribute to strengthening the resilience of local ecosystems and economies to the impacts of glacier retreat in the tropical Andes, through the implementation of specific pilot adaptation activities that illustrate the costs and benefits of adaptation.



Overview

99% of the tropical glaciers of the world are located in the Andes between Peru (71%), Bolivia (20%), Ecuador (4%) and Colombia-Venezuela (4%). Tropical glaciers in the Andes play an important role in water regulation acting as a buffer especially when rainfall is low or absent. The PRAA Project is intended to enhance the adaptation capacity of local communities and ecosystems to face the anticipated impacts of climate change and glacier retreat in the Andes.

Planning

The project generated information that contributed to defining adaptation strategies, integrated watershed plans, land use plans and identification of prioritized adaptation measures. This information included short term (2030-2050) and long-term (2100) climate change scenarios, agroclimatic impact maps and hydrological models considering glacier retreat.

Adaptation measures were selected jointly with the beneficiary communities in a participative process considering both technical-scientific information and local needs and priorities.

Implementation

The implementation of the adaptation measures was carried out by local strategic partners identified during the design phase. National and sub-national counterparts provided contributions in cash and in-kind to support the projects and, in some cases, raised additional funds for complementary adaptation actions.

Institutional arrangements

Several institutions were involved in the project preparation and execution. In response to the countries

request, the Andean Community was selected as the regional entity in charge of the funds management and coordination at regional level. The Executing Unit was located in the Secretariat of the Andean Community in Lima, Peru. This unit was comprised of a regional coordinator, a procurement specialist, a financial specialist and administrative support. The Steering Committee was responsible for approving the operational documents (operation plan, procurement plan, etc.) and for giving strategic guidance for the project execution. High level representatives of the Ministries of Environment were part of the Steering Committee.

Stakeholders

- World Bank

- Secretariat of the Andean Community (CAN): Regional coordination and funds execution
- Ministry of Environment and Water in Bolivia, Ministry of Environment in Ecuador, Ministry of Environment in Peru: National counterparts
- SENAMHI Bolivia, IDEAM Colombia, INAMHI Ecuador, SENAMHI Peru: Meteorological agencies in charge of climate change scenarios and glacier monitoring network
- Ministry of Agriculture in Peru: Executing partner
- CARE in Bolivia, Ecuador and Peru: Strategic partner
- EPSAS in Bolivia, EMAAP-Q in Ecuador, SEDAM Huancayo in Peru: Water utilities involved in the Project either as executing partners or information users
- Local governments: Batallas, Palca in Bolivia;
 Papallacta, Napo, Quijos in Ecuador; Santa Teresa and Huancayo in Peru: executing partners and beneficiaries
- Local communities, farmers, livestock breeders: Beneficiaries

Support

Grants: USD 7.49 million from SCCF-GEF + 860,000 from PHRD (Government of Japan) Other contributions from bilateral agencies and NGOS including FAO, NOAA, Meteorological research institute of Japan, CARE and others: USD 27.15 million (cash and in-kind)

Total: USD 35.15 million





Lessons learned

In the design of the project it is critical to take into account the financial resources and time needed for coordination, consultation, approvals, procurement processes, etc. due to the numerous stakeholders involved at regional, national and sub-national level.



Next steps

The project was finalized in March 2014. The World Bank is preparing a second phase based on the results of the PRAA.



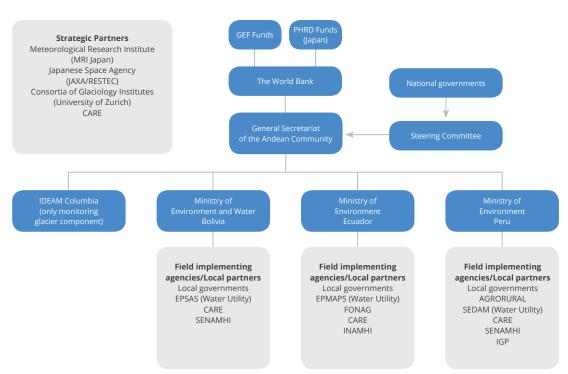
Replicability

This initiative is highly replicable to other regions with similar context: glacier retreat, limited water availability, necessity of watershed management, limited hydrometeorological observation, and local communities depending on natural resources (especially water) for subsistence.



Huaytapallana glacier, Peru

Institutional structure



PRAA Regional: http://www.worldbank.org/projects/P098248/adaptation-impact-rapid-glacier-retreat-tropical-andes?lang=en PRAA Peru:

http://www.glaciaresandinos.com/index.html

Ana Iju, Climate Change and Sustainability Division Inter-American Development Bank | anai@iadb.org

CASE STUDY 7 CARIBBEAN COMMUNITY: REGIONAL FRAMEWORK FOR ACHIEVING DEVELOPMENT RESILIENT TO CLIMATE CHANGE AND ITS IMPLEMENTATION PLAN

Country: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago. Associate members: Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Turks and Caicos Islands



Project goal

The Caribbean regional framework for achieving development resilient to climate change and its implementation plan (IP), 2011-2021, aims to increase the resilience of CARICOM Members to the adverse impacts of climate change.

Overview

Sustainable development in the Caribbean region is under severe threat from climate change and sea level rise. Of particular note is the increasing intensity of extreme weather events causing damage to the region's socioeconomic resource base.

The Caribbean Regional Framework provides a roadmap for action on climate change by CARICOM member states and regional organizations.

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Planning

The IP, developed by the Caribbean Community Climate Change Centre (CCCCC) as mandated by CARICOM, involves:

- Establishing how regional and country bodies will work together;
- Securing investment to support the plan;
- Proposing a monitoring and evaluation system;
- Obtaining buy-in from governments and relevant funders across the region.

Implementation

The 'three-ones' approach is an essential feature of the IP process. The IP recommends that the 'three-ones' approach is adopted at regional and national levels. It is based on the principle of establishing a sustainable resource mobilisation plan with three core elements:

- One plan that provides the framework for coordinated action by all partners. (Note 'One Plan' means one agreed set of shared and common goals and objectives which can be contained within various individual documents).
- One co-ordinating mechanism to manage the process. The IP recommends a single regional co-

ordinating mechanism and separate national co-ordinating mechanisms in each country.

 One monitoring and evaluation framework to measure progress, transparency and value for money.

Institutional arrangements

The IP was prepared following an extensive programme of in country discussions with over 140 stakeholders: politicians, government officials, regional agencies, NGOs, the private sector, donors and development banks. For the most part, these discussions were on a one-to-one basis or in small groups, followed by further engagement and focussed on identifying those actions stakeholders believed were required to be undertaken within the next 2 to 5 years.

The coordination of the IP, including linkages between the political and technical processes drivers, will be by a new coordinating body, the Coordinating Mechanism, which will report to the Heads of Government. The CCCCC will provide technical and secretarial support.

Each member country and each regional organization has different challenges, organizational processes and governance. The process developed by each government and regional organizations to mobilise resources should reflect this and work within, and build upon the effective governance and institutional arrangements that already exist.

Stakeholders

- Regional Stakeholders: CARICOM Heads of government, CARICOM ministries, CARICOM Mandated Regional Institutions, Caribbean Development Bank, CCCCC
- National Governments
- Private Sector
- Non-governmental and community based organizations and wider civil society
- International development community



Support

The CCCCC, with assistance from the Commonwealth secretariat, developed the Regional Framework for achieving Development Resilience to Climate Change. Financial assistance was from the Department for International Development (DFID) and the Climate Development Knowledge Network (CDKN).



Lessons learned

An effective institutional, administrative, and legislative environment is vital for effective and timely resiliencebuilding to manage the hazard risks associated with a changing climate.

Building resilience requires transformational change and an effective mobilisation of scarce resources. The scale of the challenges ahead requires an integrated approach across the region and within each of the member states to embed climate change and low carbon energy into all policy setting and decision-making.

A multifaceted system of public (from both national budgets and development assistance) and private finance is required to provide the incentives that are necessary to go beyond 'business as usual' in the Caribbean and to allow access to capital to build low carbon climate resilient economies. Member States, regional organizations and CARICOM Secretariat are already over-tasked and under-resourced. Delivering transformational change requires an approach that recognizes these constraints.

Next steps

A biannual review is proposed of both the Regional Framework and the Implementation Plan to ensure that they continue to provide the right focus for the required transformational changes. The CCCCC has a coordinating and delivery role in regards to M&E and will maintain a continuous dialogue with key stakeholders to ensure that the Regional Framework and the Implementation Plan accurately reflect the Caribbean's transformational needs. This on-going dialogue will ensure that the Regional Framework and the Implementation Plan remain 'live' documents.



Replicability

A memorandum of understanding has been set up with the Secretariat of the Pacific Regional Environment Programme (SPREP) to exchange information.

Strategies, programmes, plans and actions underway or planned in the Caribbean by national, regional and international stakeholders are all available online and are useful to other practitioners.

Institutional structure

The 'three ones' approach





Mangrove and human activity in South Bimini, Bahamas

http://www.caribbeanclimate.bz/ongoing-projects/2009-2021-regional-planning-for-climate-compatible-development-in-the-region.html

http://www.caribbeanclimate.bz/contact-us/contact-us.html

CASE STUDY 8 PACIFIC ISLANDS: PACIFIC ADAPTATION TO CLIMATE CHANGE PROGRAMME

Country: 14 Pacific Island Countries: Cook Islands, Federated States of Micronesia, Fiji, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu



Project goal

The goal of the Pacific Adaptation to Climate Change (PACC) Programme, 2009-2014, is to reduce vulnerability and to increase adaptive capacity to the adverse effects of climate change in three key climate-sensitive development sectors: coastal zone management, food security and food production, and water resources management.



Overview

The PACC programme is the largest climate change adaptation initiative in the region, with activities in 14 Pacific island countries and territories. The programme is building a coordinated approach to the climate change challenge through three main areas of activity: practical demonstrations of adaptation measures, mainstreaming climate risks into national development planning and activities, and sharing knowledge in order to build adaptive capacity.

Institutional arrangements

At the regional level, SPREP provides overall coordination and management. This includes training and support in cost–benefit analysis, gender integration, knowledge management, mainstreaming and M&E, as well as with procurement and linking countries to regional expertise when local capacity is limited.

At the national level, all of the 14 countries have a focal point, implementing agency and coordinator. A further important characteristic of the PACC country projects is also community engagement, participation and ownership.



Stakeholders

- Regional: SPREP
- National: Governments and Institutions
- Local: Focal points and island communities
- International: UNDP, GEF, Australian Aid, UNITAR



Countries identified their national priorities, and SPREP led on proposal development; donor negotiations; project reporting and monitoring and evaluation. SPREP further assisted countries in establishing management units and implementation plans, followed by financial and operational oversight.

The PACC programme is funded by the Global Environment Facility (GEF) and the Australian Government with support from the United Nations Institute for Training and Research (UNITAR) Climate Change Capacity Development (C₃D+).



Lessons learned

One of the main objectives of the PACC programme was to capture and document lessons learned "experiences" from adaptation efforts in the Pacific region. These are now available around key topics: mainstreaming climate change; cost–benefit analysis; gender; building resilient freshwater systems; reducing vulnerability of island coasts; and improving resilience of food production systems.

Importantly, it is shown in the Pacific that when island countries have the opportunity to develop and refine their priorities, and are provided the facilitation support for this from their regional agencies, country driven projects are put at the forefront.

Projects are founded on partnerships with government and non-government agencies, providing a key element for sustainability beyond the life of PACC.

Next steps

The programme is promoting replication and up-scaling of good practices and innovations, within countries and across countries as appropriate. The Australian Government has made an additional contribution to PACC, known as PACC+, which specifically supports replication and up-scaling.



Replicability

The legacy of the PACC programme is the capacity and knowledge that is available to other climate change practitioners in the region, and beyond, especially those developing new projects.

This includes the PACC Technical Report series aimed at climate change adaptation practitioners in the Pacific region and beyond, with the intention of sharing experiences and lessons learned.

Priority Area	Country	National Implementing Agency	Demonstration Project
Integrated Coastal zone management	Cook Islands	Ministry of Infrastructure and Planning	Climate-proofing Mangaia harbour
	Federated States of Micronesia (FSM)	Department of Infrastructure & Transpor- tation	Climate-proofing Kosrae's coastal road
	Samoa	Ministry of Natural Resources and Environ- ment	Community-based integrated coastal protection
	Vanuatu	Department of Environment and Conserva- tion, Ministry of Lands and Natural Resources	Enhancing resilience of coastal infrastructure and community assets
Food production and food security	Fiji	Land and Water Resource Management Division of the Ministry of Agriculture	Integrated approaches to improving crop resil- ience through addressing the problems of the drainage systems in lowland farming areas
	Palau	Palau Community College (Cooperative Research & Extension)	Land to sea approach to climate change adaptation
	Papua New Guinea	Department of Agriculture and Livestock (Land Use Division)	Drought-resilient crops and farming systems
	Solomon Islands	Ministry of Agriculture and Livestock (MAL)	Resilient atoll agriculture
Water resources management	Marshall Islands	Office of Environmental Planning and Policy Coordination	Improving water storage systems and facilities
	Nauru	Department of Commerce, Industry and Environment	Efficient management of the nation's water supply
	Niue	Department of Environment	Improving household water security
	Tokelau	Government of Tokelau	Water security at the household and commu- nity level
	Tonga	Ministry of Land, Environment, Climate Change & Natural Resource	Improving water systems and infrastructure at Hihifo
	Tuvalu	Public Works Department, Ministry of Natural Resources and Environment	Climate proofing water management plans for Lofeagai community

Priority areas, national implementing agencies and demonstration projects



Filming "Vital Roads" with Peanut Farmers (vimeo.com/38199894) on Epi Island, Vanuatu for UNDP PACC Project



http://www.sprep.org/pacc

http://www.sprep.org/pacc-publications/general-publications http://www.sprep.org/pacc/experiences

INSTITUTIONAL ARRANGEMENTS AT THE INTERNATIONAL LEVEL

Existing institutional arrangements

Institutional arrangements at the international level can provide three main areas of support for national adaptation action. They provide: 1) policy recommendations and/or advance the political agenda; 2) scientific information and guidance; and 3) financial, technical and capacity-building support.

Institutional arrangements for adaptation under the UNFCCC are described in detail in the 2013 thematic report of the Adaptation Committee.²⁵ Under the wider UN, a large number of organizations and agencies that are 'delivering as one UN', are working alongside the UNFCCC on increasing the capacity of developing country governments for adaptation.²⁶

Outside of the UN, a large range of international institutions are also supporting national adaptation planning and implementation. Box 2 provides references to detailed information on the work of many international organizations on all three areas of support. Particularly relevant are the recent submissions and the synthesis document under the Nairobi work programme, identifying good practices in and lessons learned from national adaptation planning.

An important contribution to the ongoing work to support the development of NAPs by LDCs and other developing countries is the work of the UNDP-UNEP NAP-Global Support Programme (NAP-GSP), funded by the GEF. Current in-country institutional support includes: developing NAP preparation strategies ("roadmaps"); stock-taking of existing initiatives and gap analysis; identification of entry points in existing planning processes; and capacity assessments of institutions for long-term adaptation planning.

With the appropriate support, NAPs provide the opportunity to further develop national institutional arrangements for planning and implementation and a flexible process for monitoring and evaluating institutional arrangements and their effectiveness.

Challenges

Promoting coherence and synergies between adaptation programmes and between institutions with responsibility for adaptation is very important, but requires respective resources.

Bringing coherence to the current institutions already in place to support adaptation and how these institutions can be supported to improve streamlining and coherence is a challenge that must be considered by Parties.

²⁵⁾ First Thematic Report of the Adaptation Committee The State of Adaptation under the United Nations Framework Convention on Climate Change (2013) http://unfccc.int/6997.php#AC, See Figure 1 for the institutional arrangements for adaptation within the UNFCCC

^{26) &}lt;http://www.un.org/climatechange/un-partners>

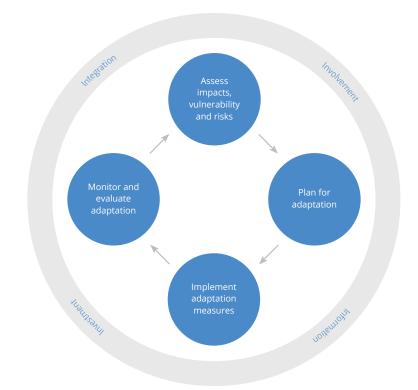


Arctic Environment Ministers meet in Ice Hotel in Jukkasjärvi, Sweden, February 2013

III. MEASURES TO ENHANCE ADAPTATION ACTION

Building on information from the previous section, including the case studies, the measures to enhance adaptation action can be effected through what could be called the four "I"s: Integration, Involvement, Information and Investment (Figure 1).





INTEGRATION

The case studies show that institutional arrangements play an indispensable role in facilitating the integration of adaptation into planning and implementation of development policies, strategies and projects. Adaptation cannot be approached as a one-size-fits-all. Each country has different risks, socio-economic situations and development goals; and priorities must be set due to the restrictions imposed by funding and other constraints, requiring individual entry points and forms of mainstreaming adaptation.

The possible institutional measures that can enhance the effectiveness of integration highlighted in the case studies include:

- Mainstreaming adaptation into institutional and sectoral strategies and policies at all levels (all case studies);
- Coordination mechanisms, which provide overarching guidance, and which can be led by a steering committee and supported by appropriate laws and regulations (all case studies);
- Integration across all relevant institutions and government departments (all case studies);

- Building flexibly on the institutions and arrangements already in place, including existing and/or new legislation, regulations, strategies, standards, planning tools, assessment frameworks, research and development programmes, technology, networks and working groups (all case studies);
- Providing for flexibility in the integration of adaptation into various sectors and future approaches, particularly due to the uncertainties and risks involved (all case studies);
- Policies and strategies for the coordination of adaptation implementation (all case studies, but bearing in mind that case studies 1 and 4 are still mainly in the planning phase).

INVOLVEMENT

Another important area where institutional arrangements play a decisive role is the involvement of relevant stakeholders. Institutional arrangements for adaptation should be set up in a way that facilitates the involvement of all relevant stakeholders at all stages. The exact range of stakeholders varies according to the adaptation initiative but can include: decision makers of local, provincial, national and regional authorities, NGOs, civil society groups, communities, experts from different sectors, experts from different participating institutions, academics, private business, and development partners.

The institutional measures that can enhance stakeholder involvement highlighted in the case studies include:

- Streamlining involvement of stakeholders for the most effective future impact of adaptation initiatives. Involvement must have clear roles for all involved. Steering groups can drive implementation and support strong linkages into key sectors. This could be done for example through a cross-government working group or a specialized task force (all case studies, but not yet fully realised in 1);
- Securing the central role of regional centres in supporting collaboration, including establishing management units and implementation plans, and providing financial and operational oversight (all regional case studies, 4-8);
- Applying and adjusting adaptation tools and approaches for national and sub-national level and/or the local socio-economic and cultural context, (e.g. through national training and research institutes) and building these up to ensure the widespread uptake of adaptation measures (all case studies);
- Collaborating with experts from other regions with similar experiences (case studies 1,3,4,6-8);
- Establishing and promoting local champions to lead initiatives, and facilitating South–South cooperation on the exchange of good practices, including institutional arrangements, donor coordination, and a results framework with clear monitoring and evaluation indicators (case studies 4-8).

INFORMATION

Institutional arrangements need to promote and facilitate the exchange of information, knowledge and experience and at the same time be supported through such exchange. A diversity of information and knowledge is available including past experience, scientific knowledge, local and indigenous knowledge, gender priorities and socio-economic development needs. Institutional arrangements need to play their role in facilitating access to these sources by all relevant stakeholders. Learning strategies are very strategic initiatives and should be up-scaled to all developing countries as an important part of evolving policy and institutional reforms to achieve low emission and climate resilient development.

The possible measures that can enhance the exchange of information highlighted in the case studies include:

- Sharing of knowledge and information to support the needs of stakeholders such as decision makers, including through education, training, learning from experts, reports, extensive discussion, facilitated engagement and participatory approaches (all case studies);
- Supporting pilot demonstrations to promote engagement at community level and help prove the effectiveness of measures (case studies 2, 3, 4-8);
- Collecting and sharing knowledge and supporting knowledge exchange to increase the knowledge base on challenges, gaps, approaches, tools, lessons learned, good practices, guidelines for engagement and collaboration with different communities. This can be done, for example, through platforms, geo-referenced electronic handbooks and knowledge exchange events such as fora, trainings, workshops and conferences (all case studies);
- Supporting information exchange on policy approaches, appropriate technologies, and sector and cross-sector approaches (all case studies);
- Regular monitoring and reporting of progress on adaptation is vital to enable assessment / flexibility and review the measures put in place, to ensure that they continue to provide focus and transformational changes (highlighted in the case studies 2, 4-8).

INVESTMENT

Institutional arrangements can be important drivers of investments as they bring together relevant ideas, guidance, stakeholders, information and resources.

The possible measures that can enhance investment highlighted in the case studies include:

- Moving the focus to implementation of adaptation (case studies 2, 3, 5-8). It is clear from the case studies that there is currently more focus on developing and setting up appropriate institutional arrangements to plan for adaptation and mainstream adaptation into planning with limited capacities for implementing action as yet (case studies 1 and 4);
- Streamlining institutional support can enable better focus and use of the available resources. A lead institute, for example at regional level, can help flexibility and support integration of funding at national level when available including from donors and international funding institutes (case studies 5-8);
- Supporting an enabling environment to allow the time for the range of stakeholders involved to meet, develop, implement, monitor and assess, and optimise priorities, strategies and actions (all case studies).



Children swimming in tidal pool, Tuvalu



IV. CONCLUSIONS

Adaptation needs to be a frontline policy for development in the face of climate change. Effective institutional arrangements are a requirement for adaptation planning and implementation. This report provides an overview of the range of institutional arrangements that support adaptation action at different levels and the challenges that institutions face globally to facilitate a move towards a more climate resilient world.

As the case studies show, appropriate institutional arrangements are the basis for long-lasting implementation of measures to build, operate, and maintain resilient communities.

A number of concrete measures to enhance adaptation action through institutions were identified, in the light of the case studies under the areas of integration, involvement, information, and investment. From the main findings in section III, the Adaptation Committee identified the following recommendations to improve institutional arrangements:

- Integration of adaptation across all relevant institutions and departments is critical and can be effectively supported by a strong coordination mechanism so as to ensure flexibility to tailor and accommodate adaptation in various sectors and with various stakeholders;
- Institutional arrangements should identify clear roles and responsibilities for the involvement of stakeholders at all policy levels. This includes streamlining resource use by having a lead institute at national and/or regional level; establishing local champions to lead the work on adaptation initiatives; engaging with experts, whether local or from other regions and countries with similar experiences, to offer opportunities for learning and supporting adaptation action;
- Institutional arrangements need to provide an environment that encourages and supports the exchange and sharing of information at all stages of the adaptation process. This must be stimulated and supported by the appropriate information base and relevant tools and training on all aspects, including approaches, technology and policy issues;
- More effective and coherent support of adaptation planning and implementation is possible if institutional arrangements ensure a focused investment and an enabling environment for stakeholders to optimise strategies.

The Adaptation Committee recognizes that national adaptation plans (NAPs) offer a promising platform for the establishment or strengthening of appropriate national institutional arrangements that can facilitate action on the recommendations identified above. Setting up or strengthening such arrangements over the coming years can enable countries to prepare themselves for full-scale implementation of adaptation.

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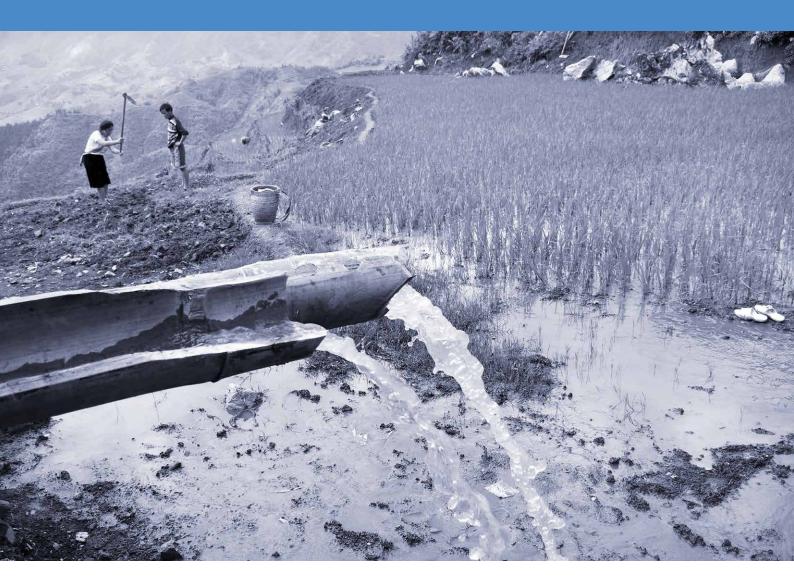
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