



National Adaptation Programmes of Action

03 The NAPA process

Mozaharul Alam describes the National Adaptation Programmes of Action process in the Asia and Pacific region

08 The Sudanese NAPA

Sumaya Ahmed ZakiEldeen and *Nagmeldin Goutbi Elhassan* describe the process of preparing the Sudanese NAPA

14 NAPAs: priorities to policies

Bubu Pateh Jallow and *Thomas Downing* describe five challenges faced by the NAPA teams

19 Lessons learned in Africa

Balgis Osman-Elasha and *Thomas Downing* describe the lessons learned from preparing NAPAs in eastern and southern Africa

7 News

13 Conferences

22 Interview: Boni Biagini

25 Climate reaches a higher level

28 Mainstreaming adaptation

Cover photo: Cambodia

© John Soussan/SEI



Angola: repatriation of refugees 2004

Photo: © Peter Holdsworth/EC/ECHO

The NAPA process

Mozaharul Alam describes the next steps needed under the National Adaptation Programmes of Action (NAPA) process in the Asia and Pacific region

In 2001, the seventh session of the Conference of the Parties (COP7) to the United Nations Framework Convention on Climate Change (UNFCCC) decided that all Least Developed Countries (LDCs) under the UNFCCC would prepare a National Adaptation Programme of Action (NAPA). The NAPA would identify immediate and urgent needs for adaptation to climate change. Urgency and immediacy were defined by explaining that further delay in implementation would increase vulnerability or increase adaptation costs at a later stage. NAPAs also recognized the need for action-oriented activities, which should be country-driven, flexible and based on national circumstances.

Responses to the UNFCCC decision

One challenge involved defining immediate and urgent climate change adaptation needs; most countries could only consider what was urgent and immediate in the context of exist-

ing climate related problems, which would be likely to increase in the future thus aggravating impacts. Defining the time needed to implement adaptation activities was also a difficult task. Kiribati, for example, defined a three to five year time span as 'immediate'.

LDC governments have enthusiastically embraced the NAPA process. Out of 15 LDCs

MAIN POINTS

- **Mozaharul Alam describes** how LDCs have responded to the challenge of preparing NAPAs.

- **He describes** the funds available for implementing the urgent and immediate adaptation needs identified in the NAPAs and explains their woeful

inadequacy.

- **Key next steps are described**, including NAPA project implementation, shared lesson learning, linking with development activities and accelerating the NAPA process in LDCs yet to complete them.

in the Asia and Pacific region (ten in Asia and five in the Pacific region), six have already submitted their NAPAs. Amongst these 15 LDCs, five are Small Island Developing States, some of which have low-lying coastal areas or islands, and four are landlocked countries. All NAPA documents present immediate and urgent national needs in a simple format, easily understood both by policy-level decision-makers and by the general public, as suggested in the annotated NAPA guidelines.

These generic guidelines were prepared by the LDC Expert Group, and helped the LDCs prepare their NAPAs, primarily using existing information. They include the following steps: synthesis of available information; participatory assessment of vulnerability to current climate variability and extreme events and of areas where risks would increase due to climate change; and identification of key adaptation measures as well as criteria for prioritizing activities. Based on

these steps, each NAPA identified a list of priority projects, which were elaborated using the prescribed format and which included short profiles of projects and/or activities needed to address urgent and immediate adaptation needs. Sectoral working groups, a task force based approach, and an inclusive multi-disciplinary team were all key features of the preparation process.

The key deficiency of NAPAs is that they do not prepare full project design documents, which would allow access to Global Environment Facility-operated funds. Other development organizations also need full project design documents to fund adaptation activities or projects. The methodology described in the annotated guidelines is, therefore, deficient in this respect. Other LDCs still

preparing their NAPAs can learn from this and ensure that they prepare full project design documents for at least two or three of their most important projects or activities. This would allow them to access funds for implementation and avoid further delays. The Bangladesh NAPA, for example, proposes that additional resources are required to prepare full project documentation before implementation occurs.

In general, the NAPAs identify 'no regret' projects as urgent and immediate adaptation to climate change needs. Such projects involve capacity building, training, awareness raising, education and developing tools to mainstream adaptation into infrastructure projects. Projects relating to implementation primarily focus on reducing disaster

risks and increasing the robustness of infrastructure. The NAPAs recognize the need to mainstream or integrate adaptation into sectoral planning; convincing top-level decision-makers of this is crucial.

Adequacy of existing funding

The UNFCCC and its Kyoto Protocol have created three funds to support adaptation activities: the Special Climate Change Fund, the LDC Fund and the Adaptation Fund. The LDC Fund is dedicated to the LDCs and contains about US\$115 million for implementing adaptation activities. Operational modalities and guidelines for disbursing funds so that adaptation projects developed under the NAPAs can be implemented have been finalized. Currently, several adaptation projects are in the pipeline for funding under the LDC Fund. These address climate change problems in coastal zones, disaster risk management, food security, water resource management, health and ecosystems. LDCs have the right access to other funds under the UNFCCC and the Kyoto Protocol but it is important to note that competition to access these other funds will be much higher because they can support a wider range of countries and activities. The Special Climate Change Fund, for example, will support transfer of technology and economic diversification along with adaptation.

The Adaptation Fund is intended to fund concrete adaptation projects and pro-

PREPARING THE BANGLADESH NAPA

The Bangladesh NAPA preparation process organized four regional stakeholder consultation workshops in the northwest, southwest, northeast and southeast regions. Drought is a recurrent phenomenon in the northwest region and is likely to increase with climate change. The southwest and southeast regions are coastal and suffer from problems relating to salinity and freshwater availability. Saltwater intrusion is expected to increase and freshwater availability is expected to decrease in these areas, particularly in the dry season. The northeast region has low hills and flatter areas prone to flash floods. The regional consultation work-

shops a) identified existing problems related to climate variability, climate extremes and climate change, and ranked them, b) identified existing coping strategies and measures, c) collected suggestions for improving these existing measures, and d) identified new measures and ideas to address anticipated changes in the intensity and extent of existing problems. Ranking was conducted using the following criteria: security of lives, support to livelihoods, poverty reduction, sustainable development promotion, support to national and community development, gender sensitivity, and synergies with other multilateral environment agreements.

grammes in developing countries that are particularly vulnerable to the adverse effects of climate change. Funding is provided by a two per cent levy on proceeds from Clean Development Mechanism projects (excluding those undertaken in LDCs), and other sources. The amount of funding available under the Adaptation Fund will, therefore, depend on the volume of Certified Emission Reduction credits purchased through the Clean Development Mechanism and the market value of those Certified Emission Reduction credits. Institutional arrangements for operating the Adaptation Fund under the Kyoto Protocol are under discussion and are expected to be finalized at the thirteenth session of the Conference of the Parties (COP13) in December 2007.

Estimates from the World Bank Investment Framework and Oxfam suggest that the cost of adaptation for developing countries will be tens of billions of dollars. Current and predicted future availability of funding from the financial mechanisms described above will, therefore, be inadequate under the current modalities. These funds will remain important, but a substantial scale up of available funding is required. This requires a global undertaking - agreed under the UNFCCC - to ensure adequate and predictable funds are made available for adaptation. This could be achieved with mandatory contributions from developed countries, which are primarily responsible for the problem of climate change.



Fishermen, Bangladesh

Photo: © John Soussan/SEI

Next steps

Implementing the immediate and urgent climate change adaptation activities identified in the NAPAs is now the most pressing issue for the LDCs. As explicit in the NAPA, any delay in this implementation will increase vulnerability or lead to significant cost increases at a later stage. As explained above, this requires the preparation of project implementation documentation to access funds

from the Global Environment Facility and other agencies.

It is also important to note that adaptation is context specific. Activities conducted in some areas may, therefore, not be effective elsewhere. Despite this, sharing lessons learned will help with the implementation of similar adaptation projects and activities that increase the resilience of natural and human systems in different areas. Using a

'learning by doing' approach to implementing adaptation activities will help those LDCs still preparing their NAPA who will be implementing adaptation projects at later stage.

Adaptation measures and development activities are closely linked, and climate change and development communities are gradually accepting this fact. The participation of development organizations in activities undertaken to address climate change impacts is, therefore, indispensable. A number of development partners have already started screening their development portfolios in

Many Asian and Pacific LDCs have identified projects and activities with a timeframe of three to five years to meet their immediate and urgent adaptation needs. But while progress in formulating and implementing adaptation activities under the NAPA is slowly being made, the challenge of taking urgent and immediate action to meet LDC adaptation needs remains.

More than half the LDCs are still preparing their NAPAs, even though the process started at the international level in 2001. Parties to the UNFCCC should agree that by

“the challenge of taking urgent and immediate action to meet LDC adaptation needs remains”

the context of climate change and identifying possible measures to protect their investments or support adaptation to climate change. Engaging finance and planning ministries in discussions with development partners would help widen the scope of work of development organizations beyond portfolio screening, and support the implementation of activities identified in the NAPA.

Funding for implementing adaptation activities and projects identified under NAPAs, which relate to awareness, training and education, can be justified under Article 6 of the UNFCCC. These projects provide additional opportunities to attract funds from development organizations.

the next Subsidiary Bodies Meeting in Bonn in 2008, all Parties should have completed their NAPA. This would make implementing agencies then take the appropriate steps. Implementation is the only way to meet the primary objective of the NAPAs - meeting urgent and immediate adaptation needs. A decision at the next Conference of the Parties in Bali in December 2007 on a timeframe for implementation should be agreed. Implementation of at least one adaptation project in each LDC should also have begun by this time. This would help raise funds for adaptation and also help build the capacity of implementing agencies. ■

ABOUT THE AUTHOR



● **Mozaharul Alam** is a research fellow at the Bangladesh Centre for Advanced Studies, specializing in impacts, adaptation and vulnerability to climate change. He

was also National Project Coordinator for the Bangladesh NAPA.

CONTACT

● **Mozaharul Alam**, BCAS, House no. 10 (3rd floor), Road no. 16/A, Gulshan-1, Dhaka 1212, Bangladesh.

Fax: +880-2 8851417

Email: mozaharul.alam@bcas.net

FURTHER INFORMATION

● **On the Web:** The Bangladesh and other national NAPAs submitted to date can be downloaded here: http://unfccc.int/national_reports/napa/items/2719.php.

CHINA EMISSIONS

The Chinese government has stressed that efforts are underway to define carbon emissions goals, despite their notable absence in the first national programme to curb greenhouse gas emissions released recently.

"We're exploring a new path of development. We won't let *per-capita* emissions reach a high level and then go down," said Wan Gang, science and technology minister. "The specific techniques and methods for converting [the target of a 20 per cent improvement in energy efficiency by 2010] into carbon dioxide emissions are being studied," he continued.

Read more:
www.tiempocyberclimate.org/newswatch/archive/arweek070624.htm

INDIAN FLOODS

The worst monsoon season in 25 years is affecting parts of the Indian sub-continent. In India, 84 people have been killed in the state of Gujarat and 50 have died in the state of Maharashtra.

Three hundred and fifty villages are underwater in the Amravati district. "Crops and almost three feet high soil have been washed off from farms. This means that farmers can resume agricultural work only after four months. Some land in fact has been rendered barren," reported Madhukar Namdev Rao Gumble of the Apeksha Society.

Read more:
www.tiempocyberclimate.org/newswatch/archive/arweek070715.htm

TREE PLANTING

Prime Minister Manmohan Singh has announced that India is to re-plant 15 million acres of deforested land to combat global warming.

He has set a November deadline for the creation of a comprehensive road-map for energy efficiency and sustainable development. Speaking at the first meeting of India's Council on Climate Change, he said that the programme would formally launch on India's 60th Independence Day, August 15th.

Read more:
www.tiempocyberclimate.org/newswatch/archive/arweek070805.htm

TUVALU THREAT

Tavau Teii, deputy prime minister of Tuvalu, has called for urgent action to combat global warming before his nation sinks beneath the waves.

"The alternative is to turn ourselves into fish and live under water," he said. "All countries must make an effort to reduce their emissions before it is too late for countries like Tuvalu." Damage to coral reefs is threatening fish stocks. Underground fresh water supplies, at risk from drought, are being contaminated by seawater. Annual spring tides appear to be getting higher, increasing coastal erosion, and cyclones are becoming more ferocious.

Read more:
www.tiempocyberclimate.org/newswatch/archive/arweek070923.htm

AFRICAN FLOODS

1.5 million people have been affected by floods that have swept across Africa since the summer months.

In what has been described as the worst flooding for decades, there have been 250 fatalities and 600,000 people have been displaced. The affected area extends from Senegal in the west to Ethiopia and Kenya in the east, with Uganda, Ghana and Togo particularly badly affected. In northern Ghana, the White Volta River burst its banks.

Read more:
www.tiempocyberclimate.org/newswatch/archive/arweek070930.htm

The Sudanese NAPA

Sumaya Ahmed ZakiEldeen and Nagmeldin Goutbi Elhassan describe the process of preparing the Sudanese NAPA, the findings and the lessons learned

Sudan is a Least Developed Country (LDC) and the largest country in Africa. Its total area is over 250 million hectares, much of which is arid or desert land. Throughout much of Sudan, water resources are limited, soil fertility is low and drought is common. A range of human pressures exacerbate these underlying conditions, making Sudan highly vulnerable to climatic shocks. Without taking adaptive measures, this vulnerability will increase in the face of future climate change.

The United Nations Framework Convention on Climate Change (UNFCCC) recognizes the specific needs and special situation of the LDCs. Decision five of the seventh Conference of the Parties to the UNFCCC also acknowledges that LDCs do not have the means to deal with problems associated with adaptation to climate change. It established an LDC work programme including the preparation of

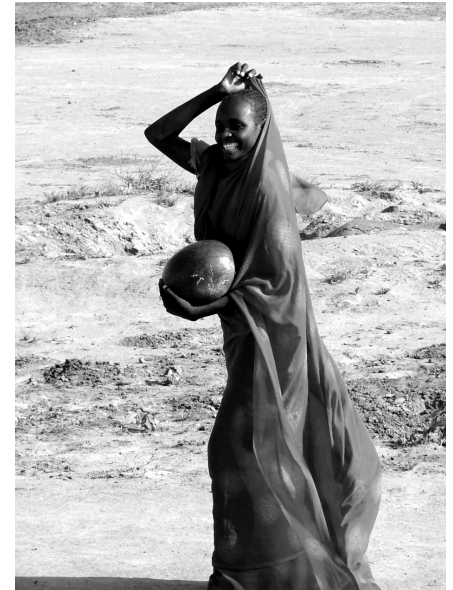
National Adaptation Programmes of Action (NAPAs) and other supporting activities.

Preparing the Sudanese NAPA

The Sudanese NAPA based its activities on the annotated guidelines for the preparation of NAPAs. It adopted a 'bottom-up' approach and used workshops, questionnaires

MAIN POINTS

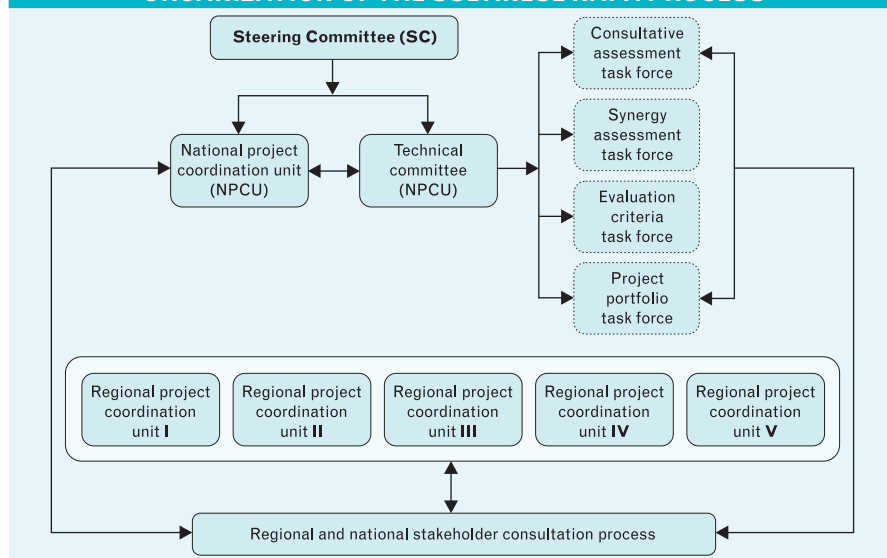
- **The authors explain** how the Sudanese NAPA adopted a 'bottom-up' approach using workshops, questionnaires and meetings involving a wide range of stakeholders.
- **Information sharing** empowered stakeholders to identify and prioritize adaptation options, make regional environmental plans and improve communication and negotiation with local governments.
- **Traditional rain-fed farmers and pastoralists** are amongst the most vulnerable to climate risks.



Sudanese woman

Photo: © Morne van Wyk/SAPS

ORGANIZATION OF THE SUDANESE NAPA PROCESS



and meetings as tools for communication and consultation. Its primary objective was to communicate to the international community the priority activities that address Sudan's urgent needs for adapting to the adverse impacts of climate change.

Five representative ecological zones were selected for the NAPA exercise in Sudan: desert, semi-desert, woodlands savannah (clay), woodland savannah (sand) and flooded areas. These were selected to capture most of the vulnerabilities characterizing this vast country. Selection was based on experience from preparing the Sudanese First National Communication

(FNC), which provided a good framework for exploring vulnerable sectors, ecosystems and communities. The FNC argued that Sudan faced serious climate-related challenges in the areas of agriculture and food security, water resources and human health. Accordingly these sectors were also selected and targeted by the Sudanese NAPA.

Training and capacity building under the NAPA process meant that many specialized expert groups were formed at both the national level and in each zone. These groups were tasked with synthesizing available information, organizing the consultation workshops

and preparing reports for each of the five zones as well as the final NAPA document. In addition, they used the information gathered to formulate environmental strategies for each of the ecological zones.

Participatory and consultation exercises

Consultation for the Sudanese NAPA was intense and genuine. It involved three workshops in each of the five selected zones and two national workshops at the beginning and end of the NAPA process. The national workshops brought together key stakeholders from the five ecological zones. The workshops aimed to assess vulnerability and adaptation options, and stakeholder participation and consultation was an integral part of each. They also helped raise awareness about climate change issues.

Hundreds of people were involved in each workshop, and interests represented included farmers, herders, national and international non-government organizations, government officials, students, employees, community-based organizations, native administration representatives (omdahs or sheikhs), researchers, university professors, women's societies and local organizations. The diversity of stakeholder involvement guaranteed wide coverage of a variety of different fields thus ensuring broad coverage of the resulting vulnerability assessment and proposed adaptation options. Participants were encouraged to talk openly about their vulnerability to envi-

THE FIVE ECOLOGICAL ZONES SELECTED FOR THE SUDANESE NAPA



ronmental threats. They then successfully addressed what adaptation options were needed to reduce that vulnerability, and eventually they were able to rank and prioritize their chosen adaptation options using very simple scientific ranking and weighting methodologies.

Vulnerable groups in urgent need of adaptation

The NAPA process revealed that traditional rain-fed farmers and pastoralists are amongst the most vulnerable to climate risks. During past climatic shocks, such as drought, there is ample evidence to show that the shocks lead

to a chain of events in these groups including large-scale human suffering from hunger, the death of livestock herds, forced migration away from rural areas, the disintegration of community and the discontinuity of human habitation. Flooding also causes widespread damage when properties are destroyed and livestock herds perish. Rain-fed farmers and pastoralists are typically the least able to cope with climatic shocks in Sudan. This is due primarily to a combination of their extreme poverty as well as highly limited household income-generating activities. The combination of climatic shocks and other specific non-climatic factors (see upper box, page 11) increases the vulnerability of these rural communities.

Vulnerability is significant in virtually all rural parts of Sudan, but there are some areas where it is particularly severe. The NAPA assessed the communities and/or sub-regions that might be acutely vulnerable to climatic shocks in each of the five ecological zones studied. The consultation process confirmed widespread interest in the introduction of measures to improve agricultural production (see lower box, page 11), conserve water resources and inhibit the spread of disease.

The stakeholder consultations discussed various types of projects that people thought could decrease vulnerability to climate variability and extreme events. Overall, 32 major adaptation projects across the five ecological zones were identified. The final ranking exercise prioritized these, and the box (page 12)

KEY NON-CLIMATIC FACTORS CONTRIBUTING TO THE VULNERABILITY OF RURAL COMMUNITIES IN SUDAN

- Severe poverty levels
- Lack of income diversity
- Lack of agricultural inputs
- Mismanagement of resources
- Over-cultivation of land
- Fragile land or water resources
- Poor soil fertility
- Deforestation
- Conflict over natural resources
- Poor extension services
- Displacement of communities
- Poor sanitation or health services

describes the five highest priority adaptation projects for Sudan.

Key lessons learned from the NAPA process

The NAPA exercise in Sudan clearly showed that information sharing helps empower stakeholders. When well informed, stakeholders will be able assess critical vulnerability issues, propose solutions (adaptation options) and make plans (regional environmental strategies). Communication and negotiation between stakeholders and their local governments also improved decision-making processes.

The Sudanese NAPA closely followed the guidelines drawn up by the LDC Expert Group, but the flexibility provided by these guidelines to allow for country driven methodologies proved beneficial to decision-making processes. The NAPA worked in five different ecological zones, and each one demonstrated different perceptions and ways of thinking. Accordingly, while people took decisions based on general consensus in certain areas, in others they followed

multi-criteria analysis using weighted criteria, which were specific to each region. Most areas, however, used ranking methods, where projects in each zone were assessed and ranked according to the vulnerability of areas where proposed projects were to be implemented.

The NAPA generated a wealth of information, particularly with regard to indigenous knowledge. Much of this could be used for activities that follow the NAPA as well as for

other adaptation and development activities such as regional strategies and development plans.

Mainstreaming occurred quite naturally in the NAPA process for a number of reasons.

- The process built capacities and effectively shared information on climate change vulnerability and adaptation.
- The process also clearly identified the non-climatic factors that exacerbate climate change impacts.
- The NAPA brought together appropriate stakeholders to ensure that fair representation of almost all groups occurred. Information exchange between these stakeholders occurred in a top-down, bottom-up and same-level manner, so decisions taken at each step of the process on key vulnerabilities and ranked adaptation options were satisfactory and

KEY AGRICULTURAL ADAPTATION MEASURES IN THE FIVE ECOLOGICAL ZONES

- Community-based forest and rangeland management and rehabilitation
- Replacing household goat herds with sheep herds to reduce pressure on fragile rangelands
- Reducing pressure on local forests by using mud brick building designs and alternative energy sources
- Land use conversion from agriculture to livestock farming
- Strengthening agricultural and veterinary extension services, including demonstration
- Introducing drought-resistant seed varieties, poultry and fish production
- Afforestation of areas denuded of trees for building construction and firewood
- Drought early warning systems for disaster preparedness
- Agricultural extension services to strengthen the capacity of small-scale farmers
- Protecting and/or rehabilitating rangelands, including shelterbelt construction to reduce windstorm impacts

THE FIVE HIGHEST PRIORITY ADAPTATION PROJECTS FOR SUDAN

- Enhancing resilience to increasing rainfall variability through rangeland rehabilitation and water harvesting in the Butana area of Gedarf State
- Reducing the vulnerability of communities in drought-prone areas of southern Darfur State through improved water harvesting practices
- Improving sustainable agricultural practices

es under increasing heat stress in the River Nile State

- Environmental conservation and biodiversity restoration in northern Kordofan State as a mechanism to protect rangeland under conditions of increasing climate variability
- Strategies to adapt to drought-induced water shortages in highly vulnerable areas of Central Equatorial State

highly trusted. It was quite clear that if stakeholders (groups, individuals, organizations, committees) acquired the right type of information, they could easily decide the best outcomes for themselves.

- During the NAPA process, the information shared on the national institutional and policy framework regarding the environment, and the breakout group consultations that took place, influenced the establishment, activation and upgrading of some of the states' Environmental Councils.
- Some proposed NAPA activities were considered and implemented as part of ongoing local programmes, plans and strategies (such as the five-year agricultural sector development strategy of some states).

One major success of the NAPA process was identifying the limitations of policies and institutional frameworks. In each zone, participants

came up with practical recommendations for policy and institutional reform.

People from different parts of the country and in their different capacities are still closely and keenly tracking follow-up activities to the NAPA. Upon completion, the NAPA document was endorsed by the Council of Ministers. This gave it great official support. NAPA follow-up projects are currently being prepared. They will cover the five highest priorities (in five zones) and help with integrating the NAPA into national development activities. ■

ABOUT THE AUTHORS



● **Sumaya Ahmed ZakiEldeen** is an assistant professor at the Institute of Environmental Studies, University of Khartoum, and an executive committee member of the Sudanese Environment Conservation Society.



● **Nagmeldin Goutbi Elhassan** is a researcher in the Climate Change Unit of the Higher Council for Environment and Natural Resources in Sudan.

CONTACT

● **Sumaya Ahmed ZakiEldeen**, Institute of Environmental Studies, Khartoum University, PO Box 321, Khartoum, Sudan.

Email: zakiels@yahoo.com

● **Nagmeldin Goutbi Elhassan**, Climate Change Unit, Higher Council for Environment and Natural Resources, PO Box 10488, Khartoum, Sudan.

Fax: +249-183-787617

Email: goutbi@yahoo.com

FURTHER INFORMATION

● **On the Web:** Sudan's NAPA can be downloaded here: http://unfccc.int/national_reports/napa/items/2719.php.

CONFERENCES

International Conference on Agriculture, Education & Environment

**Nueva Ecija, Philippines:
04-11-2007 to 07-11-2007**

Conference is a regular event hosted by the Asia Pacific Association of Educators in Agriculture and Environment. Working theme of this year's event is "Preparing for the Future: Rethinking Higher Agriculture Education and Environment in the Asia Pacific".

Details: Conference Secretariat, APE-AEN, PO Box 35012, UPLB Post Office College, Laguna 4031, Philippines. Fax: +63-49-5368028.

*Email: apeace_080597@yahoo.com
On the Web: apeace080597.blogspot.com/2007/04/3rd-international-conference.html*

Impacts of Extreme Weather & Climate on Socio-economic Development in Africa

**Akure, Nigeria:
11-11-2007 to 15-11-2007**

Conference aims to bring together seasoned researchers from around the world who have been working on African weather and climate and the impacts of extreme weather and climate events for a focused, informed and in-depth discussion on these issues. Sessions will address impacts on agriculture, water resources, health, tourism, transportation and mitigation and adaptive strategies.

Details: Jerome A Omotosho, Nigerian Meteorological Society, P.M.B.

*1215, Oshodi, Lagos Nigeria.
Fax: +234-1-4526904.*

On the Web: www.nmets.org/conference/index.html

4th Polish Conference on Urban Climate & Bioclimate

**Lodz, Poland:
29-11-2007 to 01-12-2007**

Conference will be in both Polish and English and will be held at the University of Lodz Conference Centre. Main topics for discussion are: structure of the urban boundary layer; bioclimate of towns; climatic performance of urban green areas; spatial variability of meteorological parameters on urban areas; building climates; cities and global climate changes; and urban climate and planning.

Details: Krzysztof Fortuniak, Department of Meteorology and Climatology, University of Lodz, Narutowicza 88, 09-139 Lodz, Poland.

*Fax: +48-42-6655951.
Email: kfortun@uni.lodz.pl
On the Web: www.geo.uni.lodz.pl/~meteol/index_a.html*

13th Conference of the Parties to the UNFCCC & 3rd Meeting of the Parties to the Kyoto Protocol

**Bali, Indonesia:
03-12-2007 to 14-12-2007**

Will continue the annual process of dialogue and debate over the commitments made and failures to meet targets within the UNFCCC process.

The post-Kyoto agreement will be dominating the agenda.

Details: UNFCCC Secretariat, PO Box 260124, D-53153 Bonn, Germany. Fax: +49-228-8151999

*Email: secretariat@unfccc.int
Web: unfccc.int*

2007 International Congress of Environmental Research

**Bhopal, India:
28-12-2007 to 30-12-2007**

Working theme is "Environmental Analysis, Research and Management". Topics for presentations and discussion include: science technology and environment; law and environment; development and environment; and community participation in environmental management, amongst other issues.

*Details: International Congress, Govt. Geetanjali Girls PG College, PGBT Campus, Berasia Rd, Bhopal 462038, India. Fax: +91-755-2735266.
Email: info@icer07.org*

On the Web: www.icer07.org/Default.asp

World Sustainable Energy Days

**Wels, Austria:
05-03-2008 to 07-03-2008**

The World Sustainable Energy Days 2008 will begin with Renewable Heating and Cooling and the European Pellets Forum. The European Energy Efficiency Conference will run from the 6th to the 7th alongside the Electricity Efficiency Conference and Energy Efficient Procurement

seminar. The seminar on Future Energy Technologies will be held on the 5th March. There will also be poster presentations and the choice of technical site visits to different projects.

Details: Christiane Egger, Conference Director, O.Oe. Energiesparverband, Landstrasse 45, A-4020 Linz, Austria. Fax: +43-732-772014383.

*Email: office@esv.or.at
On the Web: www.esv.or.at or www.wsed.at*

3rd International Symposium on Environment

**Athens, Greece:
22-05-2008 to 25-05-2008**

Intended to act as a forum for all scholars, researchers and students in all disciplines pertaining to environmental issues. Aims to bring together a wide range of participants to discuss and network on latest research, studies and findings. Conference proceedings will be published in a special edition. Will also include the option of an archeological tour on the evening of the 24th May.

*Details: Gregory Patanikos, Athens Institute for Education and Research, 8 Valaoritou Street, Kolonaki, 10671 Athens, Greece. Fax: +30-210-3634209. Email: gtp@atiner.gr
On the Web: www.atiner.gr/docs/Environment.htm*

EVENTS

NAPAs: priorities to policies

Bubu Pateh Jallow and Thomas Downing describe five challenges faced by the NAPA teams and the international climate policy community

National Adaptation Programmes of Action (NAPAs) were initiated with Decision 28/CP.7 as part of the Marrakesh Accords of 2001. This lays out a complementary approach, building on existing development plans and programmes. So, what have we learned in over five years of the NAPA process? We suggest the NAPA teams and international climate policy community face five challenges.

Challenge 1: Identify a priority sector, region, population and climate threat

Some 45 of the 50 Least Developed Countries (LDCs) have undertaken NAPA processes, and as of mid September 2007, some 21 LDCs have submitted their NAPA reports to the United Nations Framework Convention on Climate Change (UNFCCC). The multi-disciplinary NAPA teams used a variety of

methods to capture current social, economic and environmental vulnerability to existing climatic stresses and future risks. Additional guidance material and support workshops introduced livelihood-based approaches, vulnerability screening, spatial analysis and participatory methods. All of the NAPAs have clearly identified priority risks. Given the

MAIN POINTS

● **The authors describe** five key steps for the NAPA process: identifying urgent needs and priorities in LDC countries; identifying priority projects for action; learning by doing - implementing adaptation projects; mainstreaming adap-

tation planning; and, climate adaptation beyond local and national action.

● **Whilst most** LDCs have started NAPAs and can identify urgent needs, progress in the other areas is slow.

mandate for NAPAs to identify urgent needs, this is not surprising.

The primary concern of NAPAs is current climatic risks and observed trends. Disaster risk reduction (for example, drought coping strategies), coastal erosion and storm protection, and early warning systems are common responses.

Beyond current climatic conditions and risks, climate change will bring wholly new climatic conditions in some places. For instance, sea-level rise will increase salinity in some coastal aquifers, and warmer conditions will allow crop cultivation at higher altitudes. Glacial lake outburst floods are a hazard that would not be serious in the absence of rapid glacial melting. These are conditions that have not been experienced in certain places before, although there is adaptation experience elsewhere.

Climate change might also lead to a jump to new climatic regimes. For instance, a pro-

longed period of desiccation, perhaps associated with a change in the El Niño Southern Oscillation, would render agricultural coping strategies ineffective and require a large-scale switch to non-farm economic activities or migration. Such regional catastrophic changes are difficult to anticipate.

A remaining challenge is the link between current climatic risks and longer-term climate change. To reduce climate vulnerability, urgent action is required and justified. Because the LDCs will experience additional climate burdens over the coming decades, further monitoring, assessment and development of robust strategies and policies is needed.

Challenge 2: Identify a priority project for funding by a donor

The NAPA projects typically identify several adaptation projects, in some cases more than ten. The Global Environment Facility (GEF) has provided support to transform projects from this initial menu into fundable projects. Translating the NAPA profile into a project document requires additional planning and assessment, notably when defining the project baseline and conforming to donor rules (such as providing matching funds and demonstrating ‘additionality’ under the GEF).

Some ten countries have now submitted a priority project for funding by the GEF (see table on page 16). This process has taken longer than expected, in part because the GEF



Mozambique - after cyclone Favio

Photo: © François Goemans/EC/ECHO

has had to mobilize funds and develop guidance, and in part due to the general nature of many of the NAPA profiles. In addition, other projects may have been submitted to bilateral donors for funding or may be seeking funding from national resources.

Challenge 3: Learning by doing: implementing projects

The NAPA process is seen as an ongoing planning process that raises awareness amongst national and often local stakeholders. It is too early to assess the extent of learning from the NAPA process, or from initial adaptation projects. As yet, there has been no independ-

ent review of the NAPAs or of the outcomes of adaptation projects. Stocktaking in the NAPAs is ongoing, led by the LDC Expert Group. Interviews with NAPA teams have drawn some conclusions. The GEF project, Adaptation Learning Mechanism, seeks to accelerate adaptation experience. The website www.wikiADAPT.org intends to foster open community documentation of good practice and lessons learned.

A database of NAPA profiles suggests that few proposed projects are regional, focus on financial coping mechanisms (such as disaster insurance or micro-finance) or seek to reform poor institutional and regulatory

PRIORITY PROJECTS SUBMITTED FOR GLOBAL ENVIRONMENT FACILITY FUNDING

COUNTRY	PROJECT TITLE	OBJECTIVE	GEF (\$)	PROJ .TOTAL (\$)
Bangladesh	Strengthening adaptive capacities to address climate change threats on sustainable development strategies for coastal communities in Bangladesh	To improve resilience of coastal populations, settlements and ecosystems in areas exposed to coastal hazards	3,000,000	9,080,000
Bhutan	Reducing climate change-induced risks and vulnerabilities from glacial lake outburst floods in the Punakha-Wangdi and Chamkhar Valleys	To reduce climate change-induced risks and vulnerabilities from glacial lake outbursts in the Punakha-Wangdi Valley and Chamkhar Valley	3,987,555	7,723,779
Cambodia	Building capacities to integrate water resources planning into agricultural development	To enhance adaptive capacity, at the national, institutional and local levels, to climate change-induced changes in water resources availability for the agricultural sector in Cambodia	1,850,000	3,800,000
Djibouti	Reducing impacts on and vulnerability of productive coastal systems in Djibouti	To reduce Djibouti's vulnerability to climate change along its coastal zone. The project will strengthen Djibouti's capacity to promote sustainable development and climate-proof its integrated coastal zone management	2,000,000	3,950,000
Eritrea	Integrating climate change risks into community-based livestock management in the northwestern lowlands of Eritrea	To enhance the adaptive capacity of livestock production systems in the Kerkebet area	3,000,000	6,400,000
Malawi	Climate Adaptation for Rural Livelihoods and Agriculture (CARLA)	To improve resilience to current climate variability and future climate change by developing and implementing cost effective adaptation strategies, policies and measures that will improve agricultural production and rural livelihoods	3,000,000	27,305,000
Mauritania	Reducing vulnerability of arid oasian zones to climate change and variability through improved watershed management	To address urgent issues through improved environmental management and to show how climate change information and improved data on water can be used to enhance resource management and decision making at several levels, including technical, policy and community level demand side management. These issues will be replicable in other oasian environments, which are particularly fragile ecosystems. This is key to the country's development as Mauritania is perennially water deficient and mismanagement of water supplies will further hamper its development	1,630,000	3,030,000
Niger	Implementing NAPA priority interventions to build the resilience and adaptive capacity of the agricultural sector to climate change in Niger	To implement urgent and priority interventions that will promote enhanced adaptive capacity of the agricultural sector to address the additional risks posed by climate change	1,900,000	5,950,000
Samoa	Integrated Climate Change Adaptation in Samoa (ICCAS)	To increase the resilience and adaptive capacity of Samoa to the threat of climate change, through targeted adaptation interventions in four thematic areas: (i) health; (ii) agriculture and food security; (iii) ecosystem management; and (iv) early warning systems	2,000,000	4,000,000
Sudan	Implementing NAPA priority interventions to build resilience in the agriculture and water sectors to the adverse impacts of climate change in Sudan	To implement an urgent set of measures that will minimize and reverse the food insecurity and enhance the adaptive capacity of small-scale farmers and pastoralists resulting from climate change, including variability, through (i) water resources management, (ii) rain-fed agricultural production, and (iii) rangeland productivity. In addition, the project aims to promote the mainstreaming of short-term climate risks into policy and planning frameworks, enhance institutional capacity building, and implement a monitoring and evaluation system	3,000,000	6,000,000

management of natural resources or social and economic development. This is not surprising since the NAPA mandate is country-driven and stresses urgent needs. This has led mostly to sectoral or community-based actions.

Some agencies have suggested that other developing countries follow the NAPA example. But while adaptation planning is an essential complement to development prac-

and transport). In this context, ‘mainstreaming’ refers to integration of the objectives, policies, strategies or measures outlined within a NAPA such that they become part of national and regional development policies, processes and budgets at all levels and at all stages. This should be done so that NAPA issues complement or advance the broader objectives of poverty reduction and sustainable development.

“NAPA issues complement the broader objectives of poverty reduction and sustainable development”

tice, lessons learned in the NAPA process should be collected before assuming that guidance and approaches for LDCs readily translate to other countries. The international funding and context for adaptation has progressed and these developments should be taken on board.

Challenge 4: Mainstream climate adaptation through national policy and strategy

NAPAs are intended to build upon and become mainstreamed into and integrated with existing national development plans. Such plans include poverty reduction strategies (for example, Poverty Reduction Strategy Papers), sustainable development strategies, national conservation strategies, disaster preparedness or management plans and sectoral plans (such as for agriculture, forestry

Poverty Reduction Strategy Papers, sustainable development strategies, national conservation strategies and sectoral development plans are the most important plans for a country’s development. Careful analysis of these documents will enable NAPA preparation teams to identify projects, programmes and measures that support the achievement, or overcome any deficiencies, of current national development goals. Such analysis can also ensure that activities recommended within a NAPA complement and do not duplicate plans already initiated.

Developing mechanisms, methods and examples of how national adaptation policies and strategies develop is necessary. Engaging stakeholders, bringing robust science to policy debates and strengthening institutional and legal capacities for ongoing assessment and adaptation planning are important chal-

lenges beyond the immediate urgent need to implement NAPA projects.

Mainstreaming NAPAs into national development processes requires that a variety of barriers, many of which also challenge efforts to engage in sustainable development, must be overcome. One way to overcome these barriers is to create an enabling environment to facilitate the integration of NAPAs and long-term climate change adaptation activities into national planning processes. Areas in which activities may be undertaken to facilitate the creation of this enabling environment include education and awareness raising, capacity development, and development of appropriate institutional structures and policy and planning frameworks.

Challenge 5: Address climate adaptation beyond national action

Some aspects of climate adaptation surpass national action. The most obvious case is transboundary water resources management, such as for the Nile and Niger Rivers in Africa. Regional planning and foresight, such as the African Union’s ClimDev programme, will be essential. Many adaptation actions have common elements, so learning from distant places faced with common stresses may promote solidarity and common purpose, as well as good practice. Sectoral and trade organizations should be encouraged to develop practical guidance, but also standards of acceptable planning and implementation of climate adaptation, supported by

'REPORT CARD' OF PROGRESS IN MEETING CHALLENGES FOR CLIMATE ADAPTATION

CHALLENGE	MEASURE OF SUCCESS	PROGRESS
Identify urgent needs and priorities in LDC countries	All LDCs submit high quality NAPA documents that identify agreed vulnerabilities	75 per cent: most LDCs have started NAPAs and are able to identify urgent needs
Identify priority projects for urgent action	All LDCs that undertake a NAPA process submit high quality projects for implementation	25 per cent: some countries have developed projects from initial profiles and these are now in the GEF pipeline
Learning by doing: implementing adaptation projects	All submitted projects are successfully implemented; reviews of good practice achieved	10 per cent: early stage of implementation; few if any independent reviews; substantial capacity is planned
Mainstream adaptation planning	All countries have effective institutional mechanisms for developing climate adaptation policy and strategy and good practice in integrating climate adaptation into relevant planning processes	10 per cent: some 30 countries (not only LDCs) have established national programmes
Climate adaptation beyond local and national action	Regional and international mechanisms through investment banks, transboundary resource management organizations, finance and risk management	10 per cent: high awareness at many levels, but not yet translated into institutional capacity

data sets, methods, working examples and audit procedures.

Finance is a clear case of international action. This can be for supporting disaster risk reduction, such as the purchase of drought insurance for Ethiopia by the World Food Programme, or for multi-scale activities extending from targeted vulnerable households to national and international risk pooling. These examples are all being tested, although none are fully operational on a widespread scale. All look forward to increased climate resilience beyond the initial 'learning by doing' of the NAPA projects.

In conclusion, the NAPA process is increasingly recognized as a means of identifying urgent adaptation needs, building stakeholder

awareness and supporting an initial round of adaptation projects. Lessons learned regarding the need for technical backstopping, supporting an ongoing planning process, and linking current to future climatic conditions are being documented. Some five years after the NAPA process was initiated, however, there is still a long way to go. A 'report card' of the above NAPA challenges benchmarks progress so far (above). Clearly, much remains to be done in terms of implementing adaptation projects, and constraints regarding funding, institutional development and broader strategies that help vulnerable communities to 'adapt well' to climate change are well-known. ■

ABOUT THE AUTHORS



● **Bubupateh Jallow** is chair of the Least Developed Countries Expert Group.



● **Thomas E Downing** is director of the Stockholm Environment Institute, Oxford, United Kingdom.

CONTACT

● **Bubupateh Jallow**, Department of Water Resources, 7, Marina Parade, Banjul, The Gambia.

Fax: +220-225 009

Email: bubujallow@hotmail.com

● **Thomas E Downing**, Suite 193, 266 Banbury Rd, Oxford, OX2 7DL, United Kingdom.

Fax: +44-1865-421898

Email: tom.downing@sei.se

FURTHER INFORMATION

● **On the Web:** See www.unfccc.int/adaptation/napas/items/2679.php for more information on NAPAs.

Lessons learned in Africa

Balgis Osman-Elasha and Thomas Downing describe the lessons learned from preparing NAPAs in eastern and southern Africa

This article focuses specifically on the lessons learnt by National Adaptation Programmes of Action (NAPA) teams in eastern and southern Africa. It assesses what has been learnt from this international effort to identify urgent adaptation needs and begin implementing priority climate adaptation projects. Evidence is drawn from discussions with NAPA experts and teams, and focuses mainly on strengths and weaknesses of the

NAPA process, and constraints to achieving NAPA objectives. The article also identifies current opportunities and future prospects for implementing the NAPA recommendations.

During the Intergovernmental Panel on Climate Change Lead Authors meeting for Working Group II, held in Cape Town in Sep-

tember 2006, a dialogue was held with participants from Botswana, the United Kingdom, Germany, Kenya, Mexico, the Netherlands, South Africa and Sudan. Responding to questions on the main strengths of the NAPA process, there was general agreement about the important role the process played in creating a wider awareness and a sense of ownership amongst various stakeholder groups at different levels, from policy-makers down to the general public at the village level. This was largely attributed to the following NAPA characteristics, described in the order identified by the NAPA teams:

MAIN POINTS

- **The authors explain** how preparing NAPAs in eastern and southern Africa has raised awareness, built capacity and created a sense of ownership amongst many stakeholders.
- **Some issues and project types, howev-**

er, were not included, and institutional barriers were a key constraint.

- **The need now is** to secure funding for implementing NAPA projects, which must be rooted in existing development knowledge.

- emphasis on participatory processes;
- consideration of both vulnerability and adaptation to climate change;
- investigation of climate variability as well as climate change;
- a bottom-up approach; and,
- capacity building and awareness raising.



Democratic Republic of the Congo

Photo: © François Goemans/EC/ECHO

"The NAPA is about taking immediate actions to address urgent needs – we don't need to waste more time in improving the document and should present those country-driven projects for funding as soon as possible" Boni Biagini, Senior Climate Change Specialist, Programme Manager, Global Environment Facility

The NAPA teams agreed that the steps leading to the formulation of the NAPA worked well, particularly in terms of identifying stakeholders, focusing on the most vulnerable groups in different sectors or regions, involving planners and policy-makers and providing platforms for discussion and consultation. The data collection process has also been successful, and the employment of a variety of methods to formulate the NAPAs was identified as a key success factor. These methods included literature surveys of previous studies and assessments, direct interviews and meetings, and the use of Global Information Systems, remote sensing technology and other forms of data analysis.

The use of national workshops ensured the involvement of a wide range of stakeholders across the country, particularly policy-makers, funding agencies and international organizations. Second to the national workshops were local-level workshops, which were used as platforms for discussion and exchange of ideas amongst local stakehold-

ers. They involved local stakeholder groups and were usually organized at the level of the state or locality. These workshops proved to be an effective means of communication and knowledge transfer. They also raised local community awareness about the potential impacts of climate change and the need for adaptation. Thirdly was the use of individual and group interviews with selected key stakeholders. These stakeholders were usually the

"One of the most important achievements of the NAPA is the awareness created at all levels particularly among local people, as it has enabled us to conduct more than 15 workshops covering five ecological regions in five different states" Ismail Elgizouli, NAPA Coordinator, Sudan

most influential and knowledgeable people at the community level, for instance, local leaders, teachers, midwives and extension officers.

Institutional barriers were a key constraint to the NAPA process, delaying execution of some of the activities. For instance, bureaucratic structures in some institutions hindered the free exchange of information amongst the different NAPA team members. Other constraints included:

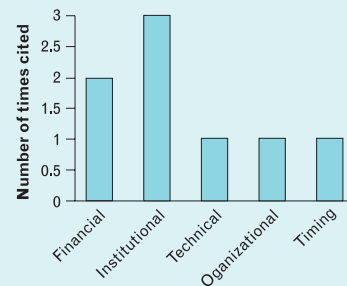
- communication problems between the central offices and states;
- a lack of sufficient local-level technical ca-

capacity needed to play an active role in the assessment process; and,

- insufficient financial resources and time, especially for large countries like Sudan and Ethiopia.

NAPA priorities reflect country-driven criteria and existing national planning frameworks, as well as a primary focus on climatic risks. Some issues and project types were not included. Adaptation as a right, based on equitable sharing of the global climate change burden, and the notion of an 'adaptation deficit' in developing countries, are not prominent in the NAPA proposals. Broader sustainable development issues are implicit in some respects, for example, where the focus is on poverty reduction and stakeholder engagement. But actions for reducing conflict, implementing institutional and structural reforms and empowering disadvantaged communities are not widely reflected in the NAPAs.

WEAKNESSES OR CONSTRAINTS TO THE NAPA PROCESS



The NAPA teams were in general agreement about the need to maintain the momentum created by the NAPA process. Time is an important component of adaptation activities. The main concern stressed by all NAPA teams was the vital and urgent need to secure funding for the implementation phase.

One potential constraint is the need by most countries for additional technical and

"It is important not to raise too much expectation from the NAPA and to view it as one ring in a chain of measures that are required and should be implemented in order to achieve real adaptation" Isabelle Niang Diop, Lecturer, University of Dakar, Senegal

financial assistance to develop the concept notes and project profiles into full projects. Another concern expressed by the NAPA teams relates to how best to ensure that NAPA projects get mainstreamed into national development plans and strategies.

The consultation and continuous dialogue between scientists and other stakeholders proved to be an efficient way to raise awareness and build capacity amongst a wide range of stakeholders. Adaptation actions need to be taken at all levels (vertically and horizontally) and should provide room to involve all relevant stakeholders. Africa possesses a wealth of local knowledge relevant to adaptation that could significantly con-

tribute to reducing vulnerability if properly utilized. Any planning for adaptation must be firmly rooted in this development knowledge in terms of what works, and where and when it works. Approaching climate change adaptation as a discrete planning process, segmented into a variety of activities, is likely to be less effective than building a broad understanding of the issue and taking action involving multiple stakeholders. Learning by doing, social learning, community-based adaptation and participatory assessment are relevant frameworks in which to take this forward.

Our most important conclusion is that the NAPAs, as a process, should not be viewed solely as end products in themselves. In many countries (but perhaps not all as yet), the NAPAs have been effective in raising awareness at least amongst national stakeholders. They have also put climate change adaptation on the development agenda. The NAPAs should be seen as an essential step in developing the adaptation capacity of LDCs. Moreover, NAPAs have provided the means and tools required by the LDCs to present and negotiate country-driven action programmes. We believe there is ample justification for continuing the NAPA processes in LDCs, as ongoing exercises to develop climate adaptation actions, strategies and policies. The form and administration of each NAPA may, however, need adjusting. This is an issue for further research. ■

ABOUT THE AUTHORS



● **Balgis Osman-Elasha** is a senior researcher at the Climate Change Unit in the Higher Council for Environment and Natural Resources, Khartoum, Sudan.



● **Thomas E Downing** is director of the Stockholm Environment Institute, Oxford, United Kingdom.

CONTACT

● **Balgis Osman-Elasha**, Climate Change Unit in the Higher Council for Environment and Natural Resources, PO Box 10488, Khartoum, Sudan.

Fax: +249-183-787617

Email: balgis@yahoo.com

● **Thomas E Downing**, Suite 193, 266 Banbury Rd, Oxford, OX2 7DL, United Kingdom.

Fax: +44-1865-421898

Email: tom.downing@sei.se

ACKNOWLEDGEMENT

● This article is based on a report commissioned by the European Capacity Building Initiative. Permission to reproduce material from that report is gratefully acknowledged. The original report is available at www.eurocapacity.org/downloads/ecbi_NAPA_PA_Project_2007.pdf.

Tiempo interview: Boni Biagini

Boni Biagini reflects on the **National Adaptation Programme of Action (NAPA)** process to date from a **Global Environment Facility (GEF)** perspective

How many countries have submitted a project for funding and what is the status of their National Adaptation Programme of Action (NAPA) documents and project plans?

Among the 49 Least Developed Countries (LDCs), 46 have received funding to prepare their NAPAs and 20 have already delivered their NAPA reports. With respect to NAPA implementation (actual measures as opposed to vulnerability assessments), ten countries (see the table on page 16) have submitted projects which have all been approved for the preparation stage, and initial funding from the LDC Fund (LDCF) has begun. All projects are implementing concrete action measures on the ground and demonstrate a wide range of adaptation interventions. To meet the adaptation needs of the LDCs, the GEF has overhauled the way it manages its projects. For example, no Resources Allocation Framework (RAF) is applied, no demonstration of

'incremental cost' is required and no 'global benefits' must be demonstrated. Such rules would not be appropriate for the LDCF and for projects that integrate adaptation measures into development actions, such as those submitted under the LDCF. The GEF has also streamlined the project approval system to allow LDCs to access LDCF funds faster.

MAIN POINTS

- **Boni Biagini explains** how the GEF is supporting the NAPA process and the current funding situation.
- **She highlights** what lessons have been learned in making the link from global negotiated mandates to local, effective action, and

describes what she foresees beyond the NAPAs.

- **She discusses** what more is required to ensure the LDCs are not adversely affected by climate change and provides some examples of on the ground adaptation.



Boni Biagini

What does the funding situation look like at the moment?

The LDCF now contains over US\$150 million, and additional pledges are expected. This means that for the first round of NAPA implementation to help make LDCs less vulnerable to climate change, funds are available

to each LDC to finance adaptation on a full cost basis. Although we know that US\$150 million is not enough to meet the demand for adaptation, we expect it will allow the LDCs to pioneer adaptation action worldwide. It is a noteworthy first step that countries will be able to build on, even though we understand more resources will be needed. To that end, the GEF is mobilizing funds for adaptation on an ongoing basis and we are satisfied with the initial donor response. Considering that the LDCF is a voluntary fund and that when we started there was limited information on what adaptation projects would mean on the ground, the initial financial contributions showed the willingness of donors to commit their support to adaptation and their awareness that immediate action is needed. Now that the LDCs and the GEF have shown good results, the feedback is very positive and the flow of money to the LDCs continues to grow.

The NAPAs are international instruments; what have you learned in making the link from global negotiated mandates to local, effective action?

I believe that it is very important that the LDCF was established in the context of the Climate Convention because it was developed in collaboration with the LDCs as Parties and, therefore, responds directly to their needs. It was also important to develop the main operational criteria as Convention guidance

from day one. That is where the international context is important. Once the fund has been established and the resources have been mobilized, the NAPAs move from theory to practice with national adaptation projects on the ground, and project implementation must be done at a local level. This is a key step forward, because the majority of work on adaptation so far has been based on academic studies and assessments. But now it is time for adaptation action. The LDCs are implementing this programme to become less vulnerable to the adverse effects of climate change through projects under the LDCF. We are learning every day about the challenges of integrating adaptation measures into development and what adaptation is really all about, and we are making progress. We have no time to spare.

What do you foresee beyond the NAPAs? What more is required to ensure the LDCs are not adversely affected by climate change?

Well, first of all the NAPA is a process, so beyond the early projects I can see further development within the LDCF context. This process will evolve; I do not think that it is just a round of isolated projects. I think we will learn a lot from these first projects. It is ground-breaking work in the adaptation field. As climate change affects all the core development sectors, such as agriculture, water, health and disaster risk management, the more adaptation action we can imple-

ment, the more we can learn how to confront climate change impacts. We will raise more money, do more projects and continue to work together with the LDCs so that the effects of climate change are reduced. For me it is important that people realize the applied nature of the LDCF projects. We are not just studying and assessing. We are trying to fix the problem. The time for adaptation action is now.

But what is adaptation on the ground? Can you give me an example?

There are dozens of examples but let me rely on two for our readers: our projects in Bhutan and Malawi. In Bhutan, temperature increases are causing a rapid meltdown from Himalayan glaciers, leading to an unsustainable level of water in many glacial melt lakes. As these glacial melt lakes reach critical thresholds, they may collapse causing catastrophic flash floods damaging Bhutan's densely populated valleys. If this happens, massive loss of life and huge economic impacts would result. The LDCF project in Bhutan will reduce the risks of such catastrophic impacts, both through improving Early Warning Systems and increasing the national capacity for disaster management should significant melting prove unavoidable, but also by physical interventions to lower the water levels of particularly dangerous glacial melt lakes.

Another example is the LDCF project in Malawi, where increasing temperatures and



Malawi village

Photo: © John Soussan/SEI

decreasing rainfall are causing severe water shortages in a region dominated by rain-fed subsistence agriculture. The LDCF project there will promote a process in which agricultural production and rural livelihoods become more resilient to climate-induced water shortages. The primary part of this intervention will be the implementation of targeted local adaptation pilot measures, both to increase the resilience of particularly vulnerable communities and as a demonstration and learning platform on which to build future adaptation actions. Activities will in-

clude (amongst others): crop diversification, improved cropping sequences, conservation tillage, irrigation from Lake Malawi, and improved water management techniques. Also, the project will aim to create a political and institutional environment for climate risk management at local, regional and national levels, through targeted capacity building and legislative action. For example, it will train farmers, agricultural extension staff and officials. ■

ABOUT THE AUTHOR



● **Boni Biagini** is cluster coordinator for climate change, adaptation, at the Global Environment Facility, based in the United States.

CONTACT

● **Boni Biagini**, The Global Environment Facility, 1818 H Street, NW, MSN G 6-602, Washington, DC 20433, United States.

Fax: +1-202-5223240

Email: bbiagini@thegef.org

FURTHER INFORMATION

● **On the Web:** To learn more about Global Environment Facility activities that support climate change, visit www.gefweb.org/interior.aspx?id=16696#id=232.

ACKNOWLEDGEMENTS

● Thanks to Jessica Halliwell from the Stockholm Environment Institute for conducting this interview.

Climate reaches a higher level

UNFCCC

The latest round of negotiations regarding the future of the United Nations Framework Convention on Climate Change (UNFCCC), the Vienna Climate Change Talks 2007, took place at the end of August. Mick Kelly and Sarah Granich report

Parties agreed that the goal of global reductions in greenhouse gas emissions below 1990 levels of 25 to 40 percent by the year 2020, proposed by the Intergovernmental Panel on Climate Change, provides “useful initial parameters for the overall level of ambition of further emissions reductions.” Though some had hoped for a firmer endorsement, the IPCC recommendation is likely to act as a guide for future discussions.

UNFCCC Executive Secretary, Yvo de Boer, felt that the Vienna meeting had made significant progress. “Countries have been able to reassess the big picture of what is needed by identifying the key building blocks for an effective response to climate change,” he

said. “There is a consensus that the response needs to be global, with the involvement of all countries and that it needs to give equal importance to adaptation and mitigation.” Stephanie Tunmore of Greenpeace described the outcome as “a sign that climate negotiations are moving forward.”

There has certainly been some movement in the position taken by the Bush administration in the United States. George W Bush, United States President, has been directly involved in a series of initiatives in recent months aimed at staking a claim to leadership on the climate issue. Or, according to some commentators, undermining the United Nations climate negotiations.

In August, Greenpeace accused Australia and the United States of attempting to drive the Asia-Pacific Economic Cooperation (APEC) forum into an “anti-Kyoto” agenda. The accusation was based on a leaked outline of a statement on climate change to be released by APEC leaders at a summit that month in Sydney, Australia.

The draft statement advocated an “aspirational” goal for energy efficiency that would not translate into targets for individual APEC

economies and would not be legally binding or enforceable. “It’s a continuation of business as usual - coal and oil use,” said Catherine Fitzpatrick of Greenpeace Australia Pacific. “We’re in a really sad situation. We have two nations writing a declaration that is ‘made in the USA’ and covered in a thick coating of Australian coal dust,” she continued.

Technological approaches to the climate issue were to the forefront at the Sydney summit. “If you truly care about greenhouse gases, then you’ll support nuclear power,” Bush announced in the days before the APEC summit. “Nuclear is a dead end, high risk technology and the proposed research and development will not realize anything for decades. It represents a great missed opportunity for real action at APEC,” responded Dave Sweeney for the Australian Conservation Foundation.

“The world needs to slow, stop and then reverse the growth of global greenhouse gas emissions,” according to the Sydney Declaration, agreed by the APEC leaders. The Declaration sets a non-binding energy intensity target - an APEC-wide reduction

of at least 25 per cent from the 2005 level by the year 2030 - while acknowledging the historic responsibility of the wealthier nations for the climate problem. It also includes a commitment to increase regional forest cover by at least 50 million acres by 2020. The statement affirms that climate change negotiations should take place under the auspices of the United Nations. The fact that the statement was endorsed by APEC developing nations, including China, was seen as a major achievement.

In September, Bush hosted a conference in Washington DC to discuss his plan for a technology-based approach to the climate problem. "It is important that the United States is bringing together the group of major emitters to talk about the kind of reductions they can commit to," said Yvo de Boer, who heads the Secretariat of the UNFCCC. But, he continued, "what is even more important is the United States' indication that ultimately their intention is to bring this back to the United Nations process."

Environmentalists are concerned that Bush is, indeed, attempting to undermine the United Nations process. The meeting was held three days after a high-level event on climate change, convened by Ban Ki-moon, United Nations Secretary-General, in New York. Martin Khor of the Third World Network reckoned that the "clash of the two events is the latest sign that the United States President is planning to establish a global framework for dealing with climate change

that could be inside or outside of the United Nations system."

At his meeting in Washington, Bush called on "all the world's largest producers of greenhouse gas emissions, including developed and developing nations," to come together and "set a long-term goal for reducing" greenhouse emissions. "By next summer, we will convene a meeting of heads of state to finalize the goal and other elements of this approach, including a strong and transparent system for measuring our progress toward meeting the goal we set," he continued. "Only by doing the necessary work this year will it be possible to reach a global consensus at the United Nations in 2009."

There was scepticism regarding Bush's claim to leadership on the climate issue. "This is a total charade," said one delegate, speaking anonymously to the BBC, as Bush's meeting took place. "The president has said he will lead on climate change but he won't agree binding emissions, while other nations will. He says he will lead on technology but then he asks other countries to contribute funds, without saying how much he'll contribute himself. It's humiliating for him - a total humiliation."

"The time for doubt [over climate change] has passed," said Ban Ki-moon, as government leaders gathered earlier that week for the high-level event at the United Nations in New York. Ki-moon called for a new global commitment to cut greenhouse gas emissions. "We know enough to act," he said.

"If we don't act now, the impact of climate change will be devastating."

At the New York meeting, Lawrence Gonzi, Prime Minister of Malta, argued that a mechanism was needed to devise a global strategy on climate "in a more cohesive and concerted manner," avoiding the current fragmentation and paying particular attention to the needs of small island states. "It is imperative that all actors involved in climate risk reduction take a unified stand," he said.

Achim Steiner, head of the United Nations Environment Programme, welcomed the New York meeting as an example of the "unprecedented momentum of public and political pressure" on environmental issues. Citing the recent agreement on eliminating hydrochlorofluorocarbons as "just one more signal that shows that the United Nations is perfectly capable of convening international consensus if indeed Member States are willing to come to the table and work together," he said that "a qualitatively different political understanding" should now underpin the next stage of the climate negotiations, which will be held in December in Bali, Indonesia.

● **Further information:** Tiempo provides hourly coverage of climate news at www.tiempocyberclimate.org/newswatch. For further discussion of recent climate negotiating meetings, visit Earth Negotiations Bulletin at www.iisd.ca/process/climate_atm.htm.



Issue 65 October 2007
ISSN 0962-7030

Editorial team:

Saleemul Huq, Hannah Reid,
Sarah Granich, Mick Kelly,
Johan Kuylensstierna

Guest editor this issue:

Thomas E. Downing

Editorial office:

Tiempo, International Institute for Environment and Development, 3 Endsleigh St, London WC1H 0DD, UK.
Fax: +44 (0)20 7388 2826
Email: hannah.reid@iied.org and saleemul.huq@iied.org

Distribution: Tiempo is available free on request. Write to: Tiempo Editorial, PO Box 4260, Kamo, Whangarei 0141, New Zealand. Email: tiempo.editorial@gmail.com

Tiempo is published by: the International Institute for Environment and Development, and the Stockholm Environment Institute, with financial support from the Swedish International Development Co-operation Agency (Sida).

Production manager: Erik Willis

Layout: Richard Clay
Programme coordinator: Johan Kuylensstierna

Design: A4

Printed by: Bracken Hill Design

Mainstreaming adaptation

National Adaptation Programmes of Action (NAPAs) should complement and be integrated into existing national development plans, as explained under Challenge 4 on page 17. Effective 'mainstreaming' requires that NAPA policies and measures are integrated into national and regional development policies and processes. This requires cross-sectoral cooperation, interdisciplinary and multidisciplinary approaches and considerable political will. This requires efforts to: (1) engage other development sectors (particularly ministries and agencies responsible for national development) from the beginning and throughout the preparation and implementation process; (2) raise awareness from a scientific and socio-economic perspective of the implications of climate change for various sectors and groups within a country, to engage key stakeholders on this issue; (3) link adaptation efforts to

established policy-making processes; and (4) promote cross-sectoral and interdepartmental coordination, accountability and transparency in implementing NAPAs.

All the NAPA Teams are multi-sectoral and multidisciplinary with a varying number of key sectors. For example, the NAPA Project Steering Committee of The Gambia is chaired by a Permanent Secretary and includes Desertification and Biodiversity Convention Focal Points, the Global Environment Facility Focal Point, National Assembly and Civil Society. Comoros went further to establish a NAPA Island Committee, created to coordinate the NAPA process at the island level.

All NAPAs submitted so far relate to existing national plans and programmes. In selecting priority NAPA projects in Bhutan, one of the criteria was to assess whether the projects complemented country goals such as overcoming poverty, or enhancing adaptive capacity or

other multilateral environmental agreements. Key activities laid out in Mozambique's Poverty Reduction Strategy Paper include measures to manage its vulnerability to disasters and strengthen its capacity to respond to them. This resulted in disaster risk management and reduction being the highest priority in the Mozambique NAPA.

All NAPA teams conducted stakeholder consultations at regional and island levels to solicit perceptions about impacts and vulnerability to climate variability and change. Comoros evaluated vulnerability and adaptation using a sample of 1000 people. In Malawi, participatory rural appraisal methods were used during the consultations, and in Samoa, the community vulnerability and adaptation tool was the main approach used in the national consultation.

THE FINAL WORD

Bubu Pateh Jallow describes how efforts to mainstream adaptation are bearing fruit, in project design and in capacity to plan policies



Bubu Pateh Jallow is chair of the Least Developed Countries Expert Group.

Email: bubujallow@hotmail.com