

## Globalization and International Environmental Governance to top Worlds' Environment Ministers Discussions in Nairobi for UNEP Governing Council

*The 25th session of the Governing Council / Global Ministerial Environment Forum (GC/GMEF) of the United Nations Environment Programme (UNEP) will be held from 16 to 20 February 2009 at the United Nations Office in Nairobi, Kenya. More than one hundred Environment Ministers are set to attend annual Governing Council meeting.*

This high-level meeting comes on the heels of an eventful year which saw further evidence of global warming, food shortages and the worst financial crisis in years. The ministers meet amid growing calls for a Global Green New Deal – a new approach to the economy that focuses on green growth and investments in natural and nature-based resources.

The discussions at the ministerial consultations will therefore be devoted to the emerging policy issues under the



United Nations Office in Nairobi

### CONTENTS

Globalization and International Environmental Governance to top Worlds' Environment Ministers Discussions in Nairobi for UNEP Governing Council	1
10th African Civil Society Consultations ahead of the 25th UNEP Governing Council: Restating the need for a stronger environmental governance	2
UNEP to Engage More Strategically in Africa	3
Climate Discussions In Poznan- What Prospects For Africa In The Post Kyoto Regime?	4
Congo Forests and Climate negotiations: A long journey towards Copenhagen	6
Climate Change Meeting in Algiers: African Youth for a Stronger Engagement	7
Inter-Agency Collaboration in Africa: Coordinated Multi-sectoral Response to the Food Crisis Challenge in Africa	8
Health and Environment: WHO and UNEP Chart the Way beyond the Libreville Declaration	11
Ozone and Climate Change- an Opportunity for African Journalists	13
UNEP and Kenya Pioneer Practical low cost Technologies for Wastewater Management in Mombasa	15

thought-provoking topics of “Globalization and the environment”, focusing on the theme of “Global crisis: national chaos?” and “International environmental governance and the United Nations reform”: international environmental governance: help or hindrance?”

These themes will provide environment ministers with the opportunity to discuss in a comprehensive manner how to meet the multiple environmental and development challenges of globalization at the country level and enable them to receive a comprehensive update on the recent developments in international environ-

mental governance so as to respond to the needs and priorities of countries.

The Governing Council constitutes the annual ministerial-level global environmental forum in which participants gather to review important and emerging policy issues in the field of the environment.

#### Details of issues on the table include:

- The green economy and green growth
- Climate change and the ongoing talks towards a new international agreement in Copenhagen in December 2009

- Mercury – ministers will discuss policy options for an international response to global mercury pollution
- The food crisis
- The Olympic Games and the environment
- An overview of the key environmental issues of the day including ecosystem management, resource efficiency and environmental governance.

There will be a number of pre-session events, namely, the tenth Global Civil Society Forum, which will be held in Nairobi

on Saturday, 14 February, and Sunday, 15 February, and the Forum of the Network of Women Ministers for the Environment, to be held on Sunday, 15 February. The GC/GMEF will continue to move towards climate neutrality in its 25th session. New initiatives to monitor and reduce significant impacts on the environment, such as greenhouse gas emissions, waste products and water usage will be implemented when “greening the GC” in Nairobi, Kenya.

These include offsetting for greenhouse gas emissions caused by UNEP sponsored

participants’ travel and stay, reducing the number of hard copies of all documents, maximum possible use of 100 per cent recycled paper for documentation, making increased use of recyclable materials and goods in the conference venue, in addition to providing relevant information and communications campaigns. Furthermore, a “green guide” will be made available on the UNEP website to provide delegates with information on how to assist in making the event more environmentally friendly.

## 10th African Civil Society Consultations ahead of the 25th UNEP Governing Council: Restating the need for a Stronger Environmental Governance

*By David Ombisi*

The 10th session of the African Civil Society consultative meeting took place from 10-11 November 2008 in Nairobi, Kenya. The meeting was organized by UNEP’s Regional Office for Africa (ROA), ahead of the 25th Session of the UNEP Governing Council/ Global Ministerial Environment Forum (GC/GMEF), that are taking place this February, at the UNEP Headquarters, in Nairobi.

Over the last three decades, UNEP has established strong linkages with civil society organizations and networks. As a result, UNEP has since 2002, been organizing regional civil society consultative meetings, in preparation for the annual Global Civil Society Forum (GCSF), held prior to the GC/GMEF. The overall objective of the meetings is to provide a platform for exchange and consultation around key environmental issues to be addressed during the GC/GMEF, and ultimately facilitate the input of civil societies into the GC/GMEF as well as other international fora in the field of Environment and International Environmental Governance.

During this consultative meeting, about 40 representatives of environmental



*African civil society meeting in Nairobi*

NGOs, trade unions, women groups, youth, research and academia, and indigenous communities from 20 countries gathered at the UNEP headquarters in Gigiri for the two day meeting, to deliberate on key environmental issues to be addressed by the Member States, and to facilitate Major Groups’ contribution to the GC/GMEF. The consultative meeting was also part of UNEP’s strategy of enhancing its collaboration with civil society through greater commitment and a more systematic approach to partnerships and dialogues.

When opening these consultations, the new Director for ROA, Mr. Mounkaila Goumandakoye, commended the long partnership between UNEP and the civil society and stressed on the critical need to enhance this cooperation in order to effectively address the ever increasing environmental challenges facing Africa particularly at a time when climate change and variability is emerging as another driving force behind some of the most serious challenges. UNEP considers civil society organizations as strategic allies and a very important source of

experience and knowledge regarding the development and implementation of local, national and regional strategies for sustainable development. He viewed the African Civil Society Forum as an opportunity for exchange of experiences and concrete proposals for the way forward.

The consultative meeting in Nairobi focused on the issue Globalization and the Environment, which will be the principal topic of the 25th Session of the GC/GMEF. This topic will provide the world's environment ministers with the opportunity to address in a comprehensive manner how: to meet multiple environmental and development challenges at the country level, and to capture the opportunities that might arise; and also how national and international environmental governance, including financing mechanisms, could better support such endeavors.

International Environmental Governance and United Nations Reform will be the second topic of the 25th Regular Session of the GC/GMEF. The world's environment ministers will have an opportunity to: obtain a comprehensive update on all of the recent IEG developments; reflect upon existing agreed global environmental goals, and the current response to meeting these goals; address IEG in the context of responding to the needs and priorities of countries; and consider the various discussions, processes and IEG options that are being addressed.



*Mr. Olivier Deleuze, Chief, major Groups and stakeholders Branch, UNEP and Mr. Mounkaila Goumandakoye, Director UNEP-ROA*

The UNEP Medium Term Strategy, which is the basis for the development of its programme of work for 2010-2011 focuses on six priority areas including climate Change; disasters and conflicts; ecosystem Management; environmental Governance; harmful Substances and Hazardous Waste and resource efficiency and sustainable consumption and production. The participants deliberated at length on these issues, including, the role of the civil society in the implementation of the programme of work. The participants made key recommendations with regard to the implementation of activities in each of these priority areas.

The participants also looked at issues related to poverty, as a key concern for Africa and beyond, that reduces the ability of peo-

ple to respond and adapt to environmental change, particularly with climate change emerging as another driving force behind many of these problems.

A major outcome of the meeting was a regional message addressing all of the above issues. The message will be presented at 10th Global Civil Society Forum (GCSF) and eventually to the 25th Session of UNEP's Governing Council and Global Ministerial Environment Forum (GC/GMEF) to be held in Nairobi in February 2009.

*For more information on the 25th session of the Governing Council / Global Ministerial Environment Forum (GC/GMEF) of the United Nations Environment Programme (UNEP) please visit: <http://www.unep.org/gc/gc25/>*

## UNEP to Engage More Strategically in Africa

The world faces unprecedented environmental change, which presents both challenges and opportunities for individuals, local communities and businesses and for international cooperation.

In order to secure the environmental conditions for prosperity, stability and equity, the United Nations systems needs to respond to current challenges in a manner that is commensurate with their scale and the nature of the opportunities. As the

environmental programme of the United Nations, UNEP is mandated to serve as a lead authority in articulating, facilitating and supporting a response to these environmental challenges and opportunities. At the same time a number of recent directional shifts are affecting the United Nations system itself. There is renewed emphasis on the future evolution of international environmental governance, including calls for greater coherence within the United Nations system, for harmonization of aid under a new architecture, for increased focus on the role of the private

sector, for national ownership of development programmes and for results-based management.

As a proactive response to these directional shifts, UNEP has developed its Medium-term Strategy for 2010–2013. This Strategy sets out the next phase in the evolution of UNEP as it becomes a more effective, efficient and results-focused entity, meeting the expectations of Governments and its stakeholders in responding to global environmental challenges and opportunities.

# Climate Discussions in Poznan- What Prospects for Africa in the Post Kyoto Regime?:

By Angele Luh-Sy

*The UN climate change conference which was held in Poznan, Poland kept on track the international process to conclude a new global climate agreement at the end of next year in Copenhagen. It took a series of decisions including work programmes for 2009 which will accelerate the negotiations. Parties also reached a solution to make operational the Kyoto Protocol's Adaptation Fund for developing countries.*

The fourth assessment report of the Intergovernmental Panel on Climate Change, revealed alarming prospects for Africa particularly as they relate to the social, economic and environmental impacts of climate change in Africa. While Africa has contributed the least to the increasing concentration of greenhouse gases in the atmosphere, it is the most vulnerable continent to the impacts of climate change and has the least capacity to adapt with projected costs estimated to reach at least 5-10 per cent of GDP. Climate change is emerging as a driving force behind many of the environmental problems plaguing Africa and is potentially a massive threat to human development. In some places it is already undermining efforts to reduce extreme poverty.

Aware of the vulnerability of their continent, African Group of Experts (Negotiators) met in Algiers from 19-20 November 2008 to frame an African Common Position to enable the region effectively participate in the post 2012 negotiations. The common position reached by the African Group of Negotiators was endorsed by African Ministers of Environment at the High Level Segment organized by the Government of Algeria.

In the run up to the 14th Conference of Parties in Poznan, Algeria proposed the establishment of a continental and international alliance for climate change in order to promote strong actions for adaptation, and vulnerability reduction. A Ministerial Task Force was also proposed to provide political support to negotiators, together with a three-year plan focusing on short-term projects dealing with energy efficiency, land degradation



*UN Secretary-General Ban Ki-moon (C) speaking to the UNFCCC Executive Secretary Yvo de Boer and Polish President Lech Kaczynski (R) in Poznan-*

and sustainable forest management. In addition, a regional initiative on adaptation and a climate change observatory for the continent will be set up according to the proposals made in the declaration. Before this meeting, the Twelfth Session of the African Ministerial Conference on the Environment (AMCEN) met in Johannesburg, South Africa in June 2008 and adopted the region's Roadmap to Copenhagen to build a shared vision and consensus on the complex issues of climate change and sustainable development, to the benefit of the continent. The session also proposed the development of a comprehensive framework of African Climate change programmes that will ensure coordination and coherence in the implementation and review of climate change initiatives and sustainable development plans in Africa at all levels.

This came as a follow-up to the adoption by the African Union of the Tunis Declaration and action plan and the decision

to determine the rationale and modalities for establishing an African panel on climate change, and in particular the Declaration on Climate Change and Development in Africa, in which the heads of State and Government requested the Commission of the African Union to consult with the African Ministerial Conference on the Environment with a view to establishing the necessary mechanisms to follow up on the implementation of the Declaration.

The consolidated comprehensive framework of African climate change programmes will be submitted for adoption to a special session of the African Ministerial Conference on the Environment in the margins of the summit of the African Union in June and July 2009.

Although Africa has a shared vision on adaptation and mitigation, progress in responding to climate change in Africa is far from sufficient. And the recognition

of this fact seems to trigger action and initiatives at all levels to ensure that Africa speaks with one voice in advancing the continent's interests in negotiations for the climate regime beyond 2012.

The critical challenge is to engage multi-lateral financial institutions and other development partners to take into account the special needs of Africa in the decision-making processes under international financing schemes, including, among others, adaptation funds, World Bank climate funds, African Development Bank funds and United Nations initiatives, and to streamline their procedures to improve access to finance.

### Were these concerns given due attention in Poznan?

Concretely, besides the issue of the funding, African countries would like to see the adoption of a protocol on adaptation that would address region's priorities such as desertification, land degradation control, the protection of biodiversity, agriculture and water resources. As far as mitigation is concerned, Africa believes that actions aimed at minimizing the consequences of deforestation and for-

est degradation should be considered in future positive incentive mechanisms for emission reduction taking into account the role of forested areas in the regulation of the global climate system. The equitable geographic distribution of projects that will benefit from the Clean Development Mechanisms (CDM), the promotion of learning-by-doing approach for capacity building and the establishment of an institutional framework to address all aspects of technology transfer are also very high on the expectations list.

The 14th Conference of Parties did not really make a significant move on these fronts. But all is not set. "Perhaps the meeting is not to come to final decisions," as the UN Secretary General Ban Ki-moon told Xinhua at a press conference in Poznan. Copenhagen is still another year from now. Poznan appears to have been a useful staging post on the way to the Copenhagen conference, when the world must conclude an ambitious new global climate agreement for the post-2012 period. The growing consensus, including on developing a shared vision for the new global agreement, is encouraging, but there is still a huge amount of work ahead.

In the meantime, Africa should come up with a stronger stand at a time when new studies by eminent scientists are warning that even the 2-degree threshold may not be safe enough to avoid "global disaster". To the rapidly worsening global financial situation may make things more challenging.

Marthinus van Schalkwyk, South Africa's Minister of Environmental affairs and Tourism, and President of the African Ministerial Conference on the Environment (AMCEN) said "Rather than coming forward with clear numbers and adopting a range for mid-term emission reduction targets in a timely manner, as previously agreed, some developed countries are still playing hide-and-seek with the climate."

It is therefore critically important for Africa to forge a consensus on ways of enhancing implementation of the Framework Convention on Climate Change and the Kyoto Protocol beyond Copenhagen, on the basis of the established principles of equity and common but differentiated responsibilities and respective capabilities.

## Regional Year-End Snapshot of the Clean Development Mechanism 2008

Hydro, Wind and other 'Traditional' renewables dominate but some geothermal, energy efficiency and home lighting projects coming through

Wind and geothermal power projects alongside ones promoting energy efficiency and even the preservation of onions are emerging across the globe courtesy of the United Nation-brokered carbon markets.

A year-end snapshot of the Clean Development Mechanism (CDM) of the Kyoto Protocol- the UN emission-reduction treaty-- shows that more than 4,200 projects are up and running, or in various phases of the pipeline.

Leading are medium and small-scale hydroelectric projects; followed by biomass energy, wind power and electricity from industrial waste heat.

However the CDM is also now triggering interest in a wider range of renewable energy projects. These include solar and geothermal power. One novel project is emerging from Niger where an estimated 60 per cent of the national onion crop can be lost, leading to methane emissions as the vegetables rot. The idea is to use solar dryers and other systems to preserve the onions so they do not rot in storage or on the way to market.

### Some Regional and National Highlights

While the number of registered or proposed projects in Africa remains small, the CDM is now being glimpsed across almost all countries albeit at a low level.

In 2004, only two countries across the entire Continent were accessing the CDM—Morocco and South Africa. In 2008, a large range of African countries now have projects up and running or in the pipeline. The country with the largest slice is South Africa with just under 30 registered or in the pipeline, followed by Egypt; 12 and Morocco with nine.

Renewable energy projects at close to 40 per cent top Africa's access to the CDM followed by a quarter of projects in the methane reduction area.

Nigeria is likely to generate the greatest financial flows from just four projects worth, if all are approved, some \$108 million annually under the \$20 assumption

# Congo Forests and Climate Negotiations: A long journey towards Copenhagen

By Serge Bounda

More than ever, the inclusion of forest ecosystems in the new Post-Kyoto climate regime as well as the establishment of a global funding mechanism which addresses deforestation and degradation will be at the heart of the next cycle of climate change negotiations which will culminate in December 2009 in Copenhagen. Indeed, deforestation accounts for one fifth of the global greenhouse gas emissions, which is higher than the world's transportation sector.

Since June 2009, and even before, UNEP has been in the forefront of the negotiation process in Africa within the UNFCCC framework. In June 2008 in Johannesburg, the 12th session of the African Ministerial Conference on Environment (AMCEN), mandated UNEP to facilitate and support the preparation of African negotiators towards the UNFCCC - COP 15. In response to this mandate, UNEP in close partnership with the Commission of Forest of Central Africa (COMIFAC) brought for the first time together Ministers of Environment and Ministers of Forests of Central Africa from 9 to 11 September 2008 in Bangui, Central African Republic.

The objective of the special session was to facilitate the adoption of a common political position on forests and climate towards the Copenhagen Summit in 2009. Eleven ministers from the region held fruitful deliberations and in attendance



UNEP and COMIFAC: a win-win partnership

were climate and forest experts from the region with representation from the Congo Basin Forest Partnership (CBFP), World Bank, World Agroforestry Centre (ICRAF), and the French and German governments.

The ministers and the COMIFAC secretariat welcomed the UNEP initiative and during their discussions, emphasis was on the need to establish a “win-win partnership” amongst those who have been preserving their forests and the international community. Through this meeting, the Ministers demonstrated their high level of engagement in preparing for the climate change negotiations as well as their political commitment to spare no effort in ensuring the inclusion of forests in the new Post-Kyoto climate regime.

The Ministerial session saw the signing and adoption of the “Bangui Ministerial Decla-

ration on the adoption of a common position for the new post-Kyoto 2012 climate regime”. Key decisions arrived at in the Bangui Declaration include:

- Creation of the regional group of central African negotiators under the umbrella of the Economic Commission of Central Africa States (ECCAS);
- Requesting UNEP to provide a logistical and strategic support to the group of ECCAS negotiators and ensuring their participation in the African High Level Panel in charge of defining the African's common position;
- Requesting the Congo Basin Forest Fund (CBFF) to support Central Africa towards Copenhagen Summit by facilitating in the preparation of the negotiators and financing REDD projects before the climate change Summit in Copenhagen in 2009.

The next critical step before Poznan (COP. 14) is the African Conference of Ministers in Charge of Environment on climate change for post 2012 which will be organized by the Algerian government in late November, where forest issues and mainly the Congo Basin forest ecosystem will be discussed comprehensively. There is no doubt that the future of the planet will depend on the capacity of our leaders to include forests in the new post-Kyoto climate regime. Exclusion of forests from the new post-Kyoto climate regime will certainly not achieve the goals of the international community in fighting climate change.



Ministers of Environment and Ministers of Forest in central Africa discussing in Bangui, CAR

## Climate Change Meeting in Algiers: African Youth for a Stronger Engagement

The African conference on climate change opened on Wednesday (November 19th) in Algiers with the participation of regional environment ministers. Attendees reaffirmed the need for African countries to adopt a unified position on climate change before the upcoming international climate summits in Poland and Copenhagen. In his opening speech, Algerian President Abdelaziz Bouteflika said climate change caused by the greenhouse effect is the major challenge for the world in the first half of 21st century.

In a speech to the African Ministerial Conference on the Environment in Algiers, Yvo de Boer said that an agreed outcome at Copenhagen must be more Africa-friendly and spur enabling support for the continent. He stressed that the international climate change process has the opportunity to move towards a self-financing climate compact that can generate such support for Africa and other developing countries, not least by expanding the carbon market. The Algiers Declaration on climate change, adopted November 19, 2008 by the Conference of African Ministers of the Environment, will serve as a platform for African countries to map out the way forward for future negotiations on climate with participating environment ministers agreeing on a united front to



*Tunza Youth Advisor, Mr. Adel Rahmani with delegates from Botswana (L) and Kenya*

take into December 2009 talks in Copenhagen on replacing the Kyoto Protocol, covering efforts to reduce greenhouse gas emissions.

Africa is also seeking a common position with the European Union going into climate-change negotiations next year, Algeria's environment minister, Mr. Cherif Rahmani said following a pan-African agreement.

The Tunza Youth Advisor for the Region Mr. Adel Rahmani attended the conference and interacted with the press, ministers and other delegates. His participation was part of the UNEP Regional Office for

Africa's commitment to ensuring youth representation at major regional environmental fora, within the UNEP-BAYER partnership. The meeting presented a unique opportunity to showcase Youth involvement in environmental activities in the region by raising the profile and visibility of the UNEP-linked Africa Youth Environment Network (AYEN) among governments and enable it to take a more active role in future meetings to ensure youth's participation in the negotiation of positions taken during such meetings in favor of a better engagement of young Africans in climate change strategies.

AYEN's presence was visible both at the meeting and particularly at the exhibition where UNEP's publications on environmental conservation, outreach and awareness were displayed. The exhibition attracted over 100 delegates representing NGOs, governments and press who took the opportunity to learn more about positive attitudes with regard to engagement of young people in environmental education through publications such as the Tunza youth magazine, Tunza children books and Ozzy-Ozone magazines and education packs for secondary schools which highlight the importance of protecting the Ozone layer. Also on display was the African Atlas of our changing environment which shows the state of the environment within the region.



*Tunza Youth Advisor, Mr. Adel Rahmani with delegates from the Algerian Ministry of Environment and Tourism at the UNEP stand.*

# Inter-Agency Collaboration in Africa: Coordinating Challenges

By Strike Mkandla

The 9th meeting of the Regional Coordination Mechanism (RCM) of the UN agencies and organizations working in support of the African Union (AU) and its coordination meeting of UN organizations working at the continental level was the first attended by

## ROA New Director Hits the Ground Running

Mr. Goumandakoye quickly got into the milieu and tempo of the process while leading the UNEP delegation to the RCM, consisting of Mr. Halifa Drammeh (Executive Director's Policy Advisor for Africa and current Chair of UN-Water/Africa), Mr. Strike Mkandla (Representative to AU, UNECA and Ethiopia) and Ms. Milha Desta (National Environmental Officer, Ethiopia). During the RCM, Mr. Alioune Badiane, Director for Africa and the Middle East at UN-HABITAT delivered the report of the Population, Environment and Urbanization Cluster as the organization's stewardship of the cluster comes to an end. This therefore marked a transition in which UNEP's regional Office for Africa will pilot the cluster as UNEP is poised to succeed as Convener/Coordinator.

## Mechanism changing gear: from consultation to coordination

The 9th RCM adopted the decision of the meeting held to review the mechanism, recommending that it change its designation from "consultation" to "coordination". This decision is in line with a revamped mandate proposed for ECA, which has been asked to become a strategic coordinator instead of just a convener of the mechanism. These changes have positioned the mechanism to respond to growing expectations for coordinated inter-agency work at the regional level, akin to the "One UN" process that is taking place at the country level.

The core theme of the 2008 RCM was 'Coordinated Multi-sectoral Response to the Food Crisis Challenge in Africa'. This occupied centre-stage on the first day, while the second day dealt with the climate



Mr. M. Goumandakoye, Director UNEP-ROA and UNEP's regional Advisor on Africa, Mr. Halifa Drammeh

change to Africa. The thematic session was organized to deal with a recent directive from the Central Executives Board (CEB) chaired by the Secretary-General Mr. Ban Ki-moon, that United Nations Regional Commissions should spearhead a coordinated UN response to climate change. In both the food security crisis and the menace of climate change, the RCM grappled with finding concrete responses to the challenges, crafting elements of an inter-agency agenda cutting across all the nine clusters in the mechanism.

## High-level AU and UN participation

For the second year running, the African meeting was chaired by the United Nations Deputy Secretary-General, Dr. Asha-Rose Migiro. For the first time the African Union Commission was represented by its Chairperson, H.E. Mr. Jean Ping, who was accompanied by several AU Commissioners and Directors. The Acting Chief Executive of NEPAD, H.E. Ambassador

Olukorede Willoughby also participated. Mr. Abdoulie Janneh, the UN Under Secretary General and Executive Secretary of the UN Economic Commission for Africa (ECA), was among the senior UN officials who included USG Mr. Haile Menkerios from the Department of Political Affairs, ASG Mr. Noureini Tidjani-Serpos (UNESCO), a representative from ESCAP, and Africa regional directors and high officials of several agencies (UNFPA, UN-Habitat, UNEP, ILO and others).

## Coherence and Alignment with AU and NEPAD programmes

The RCM originated in the aftermath of the UN General Assembly decision that the UN support to Africa should be through the continent's NEPAD programme. Subsequently, following the shift by the AU from preoccupation with a predominantly political agenda to a stronger development focus (in contrast to the predecessor Organization of African Unity), the AU Commission sought to build its ability



# Coordinated Multi-sectoral Response to the Food Crisis in Africa

*Mila & Rose Munyiva*

*The New Partnership for Africa's Development (NEPAD) programme, took place on the 21-22 October 2008 at the UN Conference Centre, Addis Ababa. This was the first meeting of the newly arrived Director of the UNEP Regional Office for Africa Mr. Mounkaila Goumandakoye.*

to coordinate and promote development planning. In a landmark agreement, the then respective institution leaders AUC Chairperson Prof. Alpha Konaré and UN Secretary General Kofi Annan signed on 16 November 2006 a declaration on "Enhancing UN-AU Cooperation: Framework for the Ten-Year Capacity Building Programme for the African Union". The RCM henceforth assumed this additional programmatic responsibility and the challenge of aligning its activities with the priorities of the AU parent body as well as developing the various NEPAD sector programmes.

In their remarks the principal speakers, while addressing this year's RCM themes, took up this issue of alignment of UN programmes with AU priorities. Mr. Abdoulaye Jannéh called for vigilance to ensure that the combined effect of the food, fuel and financial crisis does not derail the recent good economic performance in Africa.

In addition to the thematic focus of the meeting, he drew attention to three other issues that needed the meeting's engagement. The first was ensuring that the institutional make-up, especially the cluster system was meaningfully aligned to the priorities of the AU and could effectively promote the implementation of its Ten-Year Capacity Building Programme. The second was to do with how the system would operate to improve coherence and deliver on the Ten-Year Capacity Building Programme. Thirdly, he pointed out that the RCM Secretariat make-up should reflect the common ownership of all RCM members.

Dr. Jean Ping, the Chairperson of the AUC acknowledged with gratitude that the UN agencies had started aligning their thematic clusters with the programs and activities of the AU and its NEPAD programme. He urged the UN system to speed up the process and put more effort in coordinating

with the African Union Commission to ensure the finalization of the alignment exercise.

The AUC Chairperson also touched on what had seemed to many an intractable assignment, i.e. the integration of NEPAD into the structures of the African Union. Mr. Ping affirmed that the recommendations by the Algiers summit of NEPAD Heads of State and Government Implementation Committee (HSGIC), held in March 2007 and endorsed by the AU summit decision of January 2008, gave the necessary impetus to the previously slow integration of NEPAD. He assured the meeting that the integration process was now on track and poised for finalization.

In her keynote address to the RCM, Dr. Asha-Rose Migiro observed that the meeting was taking place at a time the world was facing a financial crisis of epic proportions that could affect the international development agenda.. She said the impact of this turmoil in the financial system, compounded by the food crisis and the effects of climate change, could very well derail the prospects of attaining the Millennium Development Goals (MDGs). She continued, 'Both climate change and food security compel us to address people's vulnerabilities. They are both integral parts of our efforts to achieve the Millennium Development Goals'. She said the Organization is only as relevant as it is able to deliver tangible results to people on the ground.

## Climate-related Actions at the Regional Level: UNEP in focal group

Climate change was always going to be an undercurrent in RCM discussions. As it turned out the issue assumed a higher profile when it emerged that the Secretary



*UN Deputy Secretary General Dr. Asha Rose Migiro, and Under Secretary General and UNECA Executive Secretary Dr. Jannéh Abdoulaye*

General Mr. Ban Ki-moon had directed regional economic commissions, of which ECA is one, to lead regional responses to the global threat. Following the Chief Executives Board (CEB) April 2008 session in Bern, the Secretary-General in a letter dated 30th May 2008 to the CEB on the burgeoning threat of climate change called for coordination frameworks at various levels and designated focal points that would be convening agencies, five focal areas and four cross-cutting areas. The proposed objectives of this initiative are to ensure planning and delivery of coherent and synergistic UN support to climate related policies and actions at the regional level, and at the country level in selected focus areas.

To facilitate RCM follow-up of the SG's directive, The UNEP delegation took a lead role in articulating the issues and in proposing the way forward. The UNEP presentation, by Mr. Strike Mkandla (UNEP Representative to the AU, ECA and Ethiopia) dwelt on 'African policy responses to climate change', while the ECA presentation, by Mr. Josu\_ Dion\_ (Director of the ECA Food Security and Sustainable Development Division) focussed on the potential contribution of the ECA/AU/ADB Climate Information for Development in Africa (ClimDev) Programme and the planned African Climate Policy Centre (ACPC). The AU Commissioner for Rural Economy and Agriculture, Ms. Rhoda-Peace Tumusiime, gave political support to AMCEN and other efforts to assist Africa in developing a coherent approach to climate change adaptation.

Even though Africa accounts for less than 3.8% of green house gas concentration in the atmosphere, it is among the most vulnerable to climate change on account of its low adaptive capacity. Fortunately, the UNEP presentation reported, Africa had risen to the climate change challenge through many forums. Most notably the 12th session of the African Ministerial Conference on the Environment (AMCEN) held in June 2008 in Johannesburg had already commenced the process of coordinating the efforts of various ministerial meetings and processes through development of a comprehensive framework of climate change programmes. AMCEN in its comprehensive Decision 2 that dealt with climate change had also started a process towards an African Common Position for the renegotiations of the Kyoto protocol beyond its 2012 lifespan.

Other key elements of the AMCEN decision were the training of African climate change negotiators, the proposal by AMCOST for the establishment of an African Panel on Climate Change (APCC), endorsement of ongoing initiatives such as ClimDev and ACPC, and an attachment of an indicative list of climate change decisions (by AU Summits, AMCOW, and ministerial bodies in energy, health, and forests, among others).

Mounkaila Goumandakoye and Halifa Drammeh contributed concrete proposals for designing an inter-agency roadmap for the implementation of the CEB directive on regional responses to climate change. As an outcome of the discussion, the RCM

tasked the cluster on Environment, Population and Urbanization is to come up with a proposal for a plan of action. The core suggestion adopted from the UNEP presentation was that all clusters needed to indicate measures for climate-proofing their sectors and to provide AMCEN with inputs for the Comprehensive Framework of Climate Change Programmes. It was agreed in line with the CEB directive that ECA would be the channel for reporting on follow-up of the directive, according to the time-lines that came with the directive.

### Global Food Crisis affects Africa

The impact of the global food crisis on Africa was a dominant theme in the first day of the RCM. The Food and Agriculture Organization (FAO) Senior Agricultural Policy Advisor Mr. Kidane speaking for the Agriculture, Food Security and Rural Development Cluster, made a presentation on the theme of the 9th RCM meeting. He said the root cause of the food crisis in Africa was decades of neglecting agriculture and development sectors. Hence agriculture remained under-funded and therefore underdeveloped. Further more he noted that, even after the African leaders had adopted and the development partners endorsed the NEPAD Comprehensive African Agriculture Development Programme (CAADP) initiative, and the African governments had agreed to spend 10% of budgetary resources on agriculture, the outcome of these commitments had not been encouraging and therefore agriculture remained in its dire state. The food crisis had underscored the need to accelerate CAADAP implementation at national and regional level and to strengthen the capacity of the AU, NEPAD and RECs. The key principles of the Comprehensive Framework for Action have already been adopted as a guiding principle for the RCM, while CAADAP remains the framework for food security and agriculture development in Africa.

Mr. Kidane also introduced the Initiative on Soaring Food Prices (ISFP), a framework for enhanced intra and inter-cluster cooperation. It was launched in December 2007 with the objective of twin track interventions on Social Safety and Productive Safety Nets. Other initiatives that



Delegations at the 9th RCM meeting in Addi Ababa

addressed the food crisis were the Chief Executives Board for coordination that met in Bern and deliberated and agreed on UN efforts to deal with the food crisis, as well as various events on advocacy and communication in support of responses to high food prices.

### Outcomes of the 9th RCM Meeting

The food crisis had brought agriculture to the forefront of the African agenda and therefore need was seen for all the clusters to formulate measures and to contribute towards an advocacy strategy to tackle the crisis.

The meeting welcomed the proposal to change the title “Regional Consultation Mechanism” to “Regional Coordination Mechanism”, and that “conveners” of the clusters should become “coordinators”. It was further agreed that while UNECA is the seat of Secretariat of the RCM, ownership of the regional mechanism is by all cluster members. In programme development, it was underscored that the inter-agency clusters should ensure realignment to the AU-NEPAD priorities in order for the RCM to be effective. It was noted that some clusters worked better in sub-clusters as shown by the UN-Water/Africa example that had captured the essence of the RCM and its cluster system.

The ECA reminded agencies that support is needed for effective operation of the Secretariat and got some positive response, with a commitment from UNFPA to second staff. The UNFPA's Regional Director for Africa, Mr. Bunmi Makinwa, made the commitment that was warmly received by participants.

*For a detailed report on the 9th RCM Meeting, including progress report from the RCM Secretariat and inter-agency clusters, please contact: Mr. Strike Mkandla, UNEP Representative to the AU, ECA and Ethiopia P.O. Box 3001, Addis Ababa, Ethiopia, Tel: +251 11 544 5402; Fax: +251 11 552 1633, E-mail: [unepoffice@uneca.org](mailto:unepoffice@uneca.org)*

## Health and Environment: WHO and UNEP chart the way beyond the Libreville Declaration

By ALS

*The Regional Director of WHO in the African region and The Regional Director of UNEP for Africa met recently in Nairobi to discuss the implementation of the Libreville Declaration and establish the WHO-UNEP Joint Task Team that will prepare the Second Inter-ministerial Conference on Health and Environment in Africa to be held in 2010.*



WHO-UNEP Joint Task Team

Africa's environmental assets offer opportunities for it to attain the objectives of the New Partnership for Africa's Development and to achieve the targets of the Millennium Development Goals to which it signed up at the turn of the century along with other regions. Yet this potential resource is seriously undermined by ill health and mismanagement of the continent's natural wealth resulting in considerable ecosystem degradation.

The current deterioration is based upon certain driving forces, both natural and man-made, such as persistent poverty; conflicts; pollution; over harvesting; and inadequate policies and efforts to address the problems. Patterns of disaster risk are changing. The critical ecosystems that support community resilience are being lost at an alarming rate due to changes in climate and our mismanagement of natural resources. As a result, Africa is currently off track to reach most targets of the Millennium Development Goals, both the health related ones and those associated to the environment.

Increasingly, a motivation is emerging on the part of African Governments to improve environmental conditions in order to protect the health and wellbeing of their people but Nowhere in Africa, the power of synergies between health and environment sectors has been used to its maximum potential.

The First African Inter-Ministerial Conference on Health and Environment in Africa was organized to unleash this potential power.

At their first Conference, African ministers of health and ministers of environment convened in Libreville, Gabon, from 28-29 August 2008 to explore the nature of, and opportunities offered by, the interlinkages between health and environment. They recognized the mutual importance and relevance of their respective sectors and the synergies that may be derived from intensified collaboration.

Through the Libreville Declaration, they committed their countries to establish a strategic alliance between health and

environment as a basis for joint plans of action.

They requested WHO and UNEP to support the implementation of the Declaration, and increase their efforts in advocacy, in resource mobilization and in obtaining new and additional investments in order to strengthen the strategic alliance between health and environment, along with other partners, Financial institutions and African Sub-regional Economic Communities; Help African countries in sharing experiences, developing capacity and establishing a mechanism to monitor progress towards the fulfillment of the commitments made at the Conference, through peer review, and organize a second Inter-Ministerial Conference on Health and Environment in Africa before the end of 2010, and; Support the implementation of health and environment conventions and agreements and the establishment of an African network for surveillance of communicable and non-communicable diseases, in particular those with environment determinants.

The Libreville Conference further recognized that an integrated policy approach was the best way forward to address inter-linked health and environment issues. So

far, despite some efforts towards working in a more cross-cutting fashion, health and environment issues have essentially been addressed within their respective sectors.

### Key steps to the 2010 Conference

African ministers decided to meet again in 2010. In the run up to the second Inter-ministerial Conference on Health and Environment in 2010, an ambitious programme has been developed. Major achievements will include:

- The formalization of the health and environment strategic alliance as a new country initiative to harmonize, streamline, integrate and jointly resource health and environment actions;
- The development of national strategic plans based on firm evidence for joint action that will provide information on prevailing ecological settings risk factors in the environment, public health and resources development, as well as and financial resource mapping etc. and
- The establishment of a Financial Mechanism to support country strategic plans within the Health and En-

vironment Strategic Alliance. WHO and UNEP will carry out a detailed assessment to identify existing funding mechanisms, to profile donor sources globally, and consider requirements for accessing such funds.

The Joint Task Team (JTT) established by WHO and UNEP in November 2008 is entrusted with the responsibility to inter alia develop and implement a roadmap highlighting milestones and main activities to be carried out during the inter-session period, one of the short term activities being the organization of the Meeting of Partners by end of February 2009 as well as subsequent meetings of partners; support preparations for the Second Inter-ministerial Conference on Health and Environment in Africa to be held in 2010 and Facilitate resource mobilization.

At their meeting earlier this month, the JTT developed a roadmap with the view to chart the process and key milestones for implementing the Libreville Declaration at national and international levels, in order to report to Ministers of Health and Ministers in charge of Environment at their second meeting in 2010. The roadmap will also serve as the basis for coordinated partners' actions in support of country processes.

The strategic direction contained in the Medium-term Strategy provides a clear, results-based focus for UNEP programmes of work. This focus will enable UNEP to deliver on its mandate more effectively by building on its existing expertise and comparative advantage in a limited number of priority areas.

UNEP has identified six cross-cutting thematic priorities. These include Climate change; Disasters and conflicts; Ecosystem management; Environmental governance; Harmful substances and Hazardous waste; and Resource efficiency-sustainable consumption and production. Delivering tangible results against each of the priorities will be the focus of its efforts in the period 2010–2013.

This signals major changes that UNEP will undergo this year in terms of institutional adjustments and business processes. There is a major departure from the current business model to a model that will bring more cohesiveness as UNEP delivers one in a more coordinated and results-oriented approach. UNEP is therefore in the process of reorganizing, restructuring and refocusing itself.

In line with the change process, the Regional Office for Africa will organize a retreat in March this year, in order to kick start the 'readiness process' in terms of appropriate changes in functions and structure to prepare and equip the office for the full implementation of the Programme of work 2010-2011.

*The outcome of this retreat will be one of the major focuses of the next edition of ROA News.*



# Ozone and Climate Change- an opportunity for African Journalists

By ALS

*As part of UNEP continued support to build the capacity for environmental reporting within the African Network of Environmental Journalist (ANEJ), the Ozone Compliance Assistance Programme in Africa the Regional Office for Africa have recently organized a series of workshops for environmental journalists. These workshops were intended to help journalists get a better grasp of the issues and examine how the world faces the challenge of protecting the ozone layer and the role of the media in promoting awareness and prompting action on ozone and climate Change and to build bridges between journalists and ozone Experts so as to increase efficiency in accurate information delivery to all stakeholders. The partnership in providing resource material is now extended to the London-based International Institute for Environment and Development IIED.*

The build-up of ozone depleting substances and greenhouse gases in the atmosphere is largely the consequence of industrialization over the last two and a half centuries. How has the world measured up to this threat, particularly in an era of rampant economic globalization? Is this response part of the solution or part of the problem? What can be done to arrest this trend, even while permitting developing countries to industrialize?

These issues have never been higher on the media's agenda, yet problems persist in the way it is reported. There are many criticisms of how the media has covered these issues to date, but many signs of improvement too. For journalists new to the topic, ozone and climate change issues are complex, making training a priority for media outlets.

In the case of climate change for instance, challenges include making stories more relevant to audiences, raising the profile of adaptation and the perspectives of the poor, and reporting on ways to address climate change that bring additional benefits.



*Journalist following presentations*

In developing countries especially, few reporters are well trained, connected and resourced for the challenge ahead. But ozone and particularly climate change issues now encompass so many development issues and more. The main issue is to grasp the complex nature of the issue as it continues to gather new dimensions. Training and access to experts are still clearly a challenge in Africa.

## Time for synergetic action on Ozone and climate change

Much has changed since the international community first agreed over 20 years ago to take action to control ozone-depleting substances (ODS). Continuing scientific research has further revealed the scale of the problem, which in many cases is bleaker than previously believed. But this has also brought about alternatives and new solutions. The Montreal Protocol will – and must – continue to adapt in light of new scientific information.

The information from the Scientific Assessment Panel's report in 2006 found that, even if complying with all present control measures, Antarctic ozone will only return to its previous levels some time between 2060 and 2075, up to 25 years later than earlier estimates. Meanwhile the solutions put in place to combat ozone depletion have created their own set of challenges – such as illegal trade – which in turn require an international response. In recent years, attention focused more in strengthening the implementation of control measures, a work that will



*Ozone officers , ANEJ Journalists and UNEP staff in Lilongwe, Malawi-Consolidating partnerships*

need to be intensified to address various issues that have emerged.

One of the emerging challenges is the link between ozone and climate change. There is increasing evidence that changes in climate, ground temperature, levels of greenhouse gases and water vapor in the atmosphere will influence the recovery of the ozone layer.

Decisive multilateral action on environmental threats and challenges can bring wide-ranging health, social and economic benefits. The Montreal Protocol on Substances that Deplete the Ozone Layer, which underpins the international community's efforts to combat depletion of the earth's fragile protective shield, also contributes to combating climate change, since many of the chemicals controlled under the treaty have also emerged as ones that contribute to global warming. Not only has the Montreal Protocol for the protection of the ozone layer served as a useful example in developing the international climate regime, but policies

pursued in both issue areas influence each other. By phasing out chlorofluorocarbons (CFCs) - once common in products such as refrigerators - and now deciding to accelerate a freeze and phase-out of hydrochlorofluorocarbons (HCFCs), the treaty has provided two benefits at once. The Montreal Protocol and indeed all MEAs have consequences that extend well beyond their expected target. As experience has shown, those consequences often collide in unexpected ways.

Faced with the choice of beginning a phased reduction in the programme or expanding it to enhance its coverage of both ozone and climate, the Parties to the Montreal Protocol decided in 2007, to harness the power of the Montreal Protocol to achieve further ozone and climate benefits through the acceleration of the phase-out of HCFCs.

Where possible, increased synergies are being pursued between the Montreal Protocol and other international or multilat-

eral environmental agreements (MEAs) such as the Kyoto Protocol on climate change, the Stockholm Convention on Persistent Organic Pollutants (POPs), the Basel Convention on waste, the International Plant Protection Convention (IPPC) and the Rotterdam Convention on chemicals.

The potentials for enhancing synergy are explored, and related options discussed. Some initiatives for exploiting the potentials are already underway, aiming in particular at enhancing learning and exchanging of information. This is indeed a very good opportunity for journalists as it provides more chances to give human face to stories thus making it more interesting and close to people's concerns. This is also likely to help tackle urban air pollution, deforestation, loss of biodiversity and other dangers and make them more reader friendly and prompt participation and action.

### Enhancing journalists' capacity to deal with ozone issues in Africa

Africa has been identified as one of UNEP priority area of focus, by the United Nations Environment Programme's Governing Council considering the specific nature of challenges facing this continent and its' relatively low capacity to address the emerging issues. The need to involve all stakeholders as we strive to reach a sustainable development points to the critical necessity to enhance public awareness and participation in environmental protection and decision processes. But there are also constraints in communicating outreach information on these critical and at times rather technical environmental issues to different audiences.

In the context of this mission and to consolidate the experience journalists in environmental reporting, UNEP assisted in the establishment of the African Network of Environmental Journalists (ANEJ), with the view to build strategic partnership with the media, in support of its' public awareness programme in the region. The Ozone Compliance Assistance Programme Team in Africa has been particularly active on this front. Since the establishment of ANEJ in 2002, a series of training workshops have been held to help build the capacity of African journalists in understanding Ozone related issues. Particular emphasis has been placed on the phase out of Ozone depleting substances and harmonization of ozone legislations in different sub regions; illegal trade of environmentally- sensitive commodities such as ozone depleting substances (ODS), toxic chemicals, hazardous waste and endangered species, through the Green Customs Initiative; alternatives to methyl bromide; maximizing the climate- combating benefits of the Ozone layer, Treaty-the Montreal protocol.

This effort is going to gain a new momentum as the world moves towards a total phase-out of major ODS in 2010. Some critical challenges still need to be addressed:

**Critical or essential uses:** The overall quantity of methyl bromide used globally in soil fumigation has gone down substantially. However, sectors where no technically or economically feasible alternatives are available are still exempt from the rules. A number of medical applications, for example for treating asthma and other bronchial diseases are still exempt from the rules on CFCs. Alternatives have now been developed in some countries, but incentives must be introduced to make the technology more widespread, particularly in developing countries.

**Addressing the alarming growth of HCFCs:** Production and consumption of HCFCs in developing countries is set to double from their current levels, despite the already agreed 2013 freeze date and 2030 total phase out date. HCFCs represent about 60 percent of the remaining ozone depleting substances in industrialized countries, and over 90 percent of remaining ODS used in African countries, with overall quantities steadily increasing. To avoid a further delay in the recovery of the ozone layer, there is a need to address this alarming increase by moving forward the current phase out schedules.

**Illegal trade:** There is evidence of a significant black market in ODS, with a flow of trade from chemical producers in certain emerging market countries to western companies. Currently, there is insufficient sharing of license information between the parties and there remain significant discrepancies between data declared by importing and exporting countries.

**Assessment:** Action is needed to assess new substances in light of the latest scientific information on their ozone depleting potential and on whether they need to be added to the list of controlled substances.

**Exemptions for quarantine/pre-shipment:** To ensure that goods for export are pest free, the numbers of quarantine and pre-shipment (QPS) applications are increasing rapidly in a number of areas. These applications continue to rely heavily on Methyl Bromide although more and more alternatives are becoming available.

**Linking ozone and climate policies:** The link between ozone and climate change must be addressed more fully. There is increasing evidence that changes in climate, ground temperature, levels of greenhouse gases and water vapor in the atmosphere will influence the recovery of the ozone layer

# UNEP and Kenya Pioneer Practical low cost Technologies for Wastewater Management in Mombasa

UNEP and Kenya are bringing nature's answers to the sanitation challenges in the coastal city of Mombasa through appropriate, simple, efficient, low-cost and environmentally sound technologies in managing wastewater at the Shimo La Tewa Prison in Mombasa, Kenya, a prison with a population of 4000 inmates and staff faced with a critical sanitation challenge.

Before the implementation of this joint project, the sewage was discharged directly into the Mtwapa Creek, thus contaminating the water and threatening not only the health of the inmates and prison staff, but also the coastal and marine ecosystems and local communities living around the creek, around 55,000 inhabitants. The creek supports diversity of habitats such as mangrove forests, coral reefs and sea-grass beds and also serves as breeding ground for living marine resources with immense socio-economic importance

UNEP through the Nairobi Convention is supporting the Kenya Government through this demonstration project which intends to treat wastewater emanating from the prison premises by use of natural systems with minimum energy



*Example of a constructed wetland treatment system*

requirements, while exploring opportunities for recycling of treated wastewater for irrigation and aquaculture, as well as generating biogas for use in cooking, heating and lighting.

The technology involves the development of a sewer system and wetland wastewater treatment system at a far lower cost than the price of high-tech treatments (the cost in the range of US\$ 100,000-200,000 - about US\$ 20-50 per person for the prison population when compared with the conventional wastewater



*Fishponding using wastewater pre-treated in a constructed wetland system*

treatment systems often costing in range of US\$ 450-800 per person), while also triggering scores of environmental, economic and social benefits. The wetland treatment system will be commissioned in 2009. The project is also to assess using the wetland- filtered water for irrigation and fish farming giving prisoners a new source of protein or sold to local markets, alternative livelihoods.

Thus it has the potential recovery of costs of its construction as well as in contributing to the MDG and WSSD targets on water and sanitation. The scheme is among a raft of projects being undertaken under the "Addressing Land-Based activities in the Western Indian Ocean (WIO-LaB) Initiative, which forms part of the UNEP-brokered Nairobi Convention treaty-a regional seas agreement.

It is hoped the lessons learnt can be applied to other parts of the Nairobi Convention region so that the multiple challenges of sanitation and pollution can in part be viewed through a nature-based lens. Some of the countries in the region have expressed great interest in the use of the wetland wastewater treatment technology to manage their municipal wastewater.



*Growing vegetables on wastewater*



*Building the technical capacity of inmates by involving them in the construction works and operation of the facilities*

### Developing a wetland-lagoon system for wastewater management at Shimo La Tewa Prison, Mombasa – Kenya

**Description:** The goal of the project is to demonstrate a sustainable manner of pollution control of Mtwapa Creek in Mombasa by designing and constructing a sewer system and constructed wetland wastewater treatment system at Shimo la Tewa Prison in Mombasa. The aim is to treat wastewater emanating from the prison premises by use of natural systems with minimum energy requirements, while exploring opportunities for recycling of treated wastewater for irrigation and aquaculture, as well as generating biogas for use in cooking, heating and lighting. The project also involves upgrading of the existing sanitary facilities in the prison itself so as to improve the ‘living conditions’ and reduce health risks of the approximately 2,500 inmates and 1,500 staff. Furthermore, facilities for rainwater harvesting will be constructed at the Boy’s prison, where also the use of ecosan toilets will be tested. Construction and operation of the facilities will involve inmates, which will not only generate a (modest) source of revenue for them but will also enhance their technical skills. Specific training elements are built into the project for this purpose. The project is intended to serve as an example of best practice in sanitation in prisons in Kenya (within the context of the ongoing Prison Reform process) as well as in the rest of the region.

**Partners:** The National Environment Authority (NEMA), the Coast Development Authority (CDA), Kenya Prisons Service and Shimo La Tewa Prison more in particular, the Mombasa Water and Sewerage Company, the Municipal Council of Mombasa, The Kenya Marine and Fisheries Research Institute (KMFRI). Technical assistance is furthermore provided by the University of Dar es Salaam (a regional knowledge centre on constructed wetland technology) as well as the University of Wageningen, the University of Amsterdam and the Waterboard “Noorderkwartier” from the Netherlands. The latter support

from Dutch counterpart institutions is coordinated through the NGO Aqua for All, representing the Dutch Water Sector, which also provides cash co-financing to the tune of over 100,000 USD to the project.

**Costs:** The solutions demonstrated are very cost-effective. The investment costs of the constructed wetland treatment system for the main prison amount to approximately 17,000 USD, with an additional 38,000 USD going into the sewer system development, including improved sanitary facilities in the prison itself, and a further 30,000 USD being needed for the construction of a septic tank system. Labour costs are estimated at 27,000 USD. The total costs therewith amount to approximately 110,000 USD or 25 USD per person, which is substantially less than more conventional solutions. (Noted should be that the total project value, including project management costs, other components such as rainwater harvesting, ecosan toilets, training and capacity building, education and awareness raising activities, are estimated at 400,000 USD, half of which is provided for by the WIO-LaB Project budget)

