

Economic Commission for Africa



SCIENCE WITH AFRICA

3 - 7 March 2008 United Nations Conference Centre Addis Ababa, Ethiopia

# Science with Africa Conference

# **Concept Note**

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Economic Commission for Africa





# Science with Africa Conference

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3 - 7 March 2008 Addis Ababa, Ethiopia

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### 1. Introduction

The Constitutive Act establishing the African Union calls upon the development of the continent by promoting research in all fields particularly in science and technology. In this regard, the first Conference of African Minister's for Science and Technology, in November 2003, recommended the integration of Africa's science and technology programmes particularly AUC and NEPAD programmes into a consolidated and well-coordinated policy and programme framework for Africa in order to direct socio-economic development of the continent through science and technology.

Furthermore, one of the strategic focus areas of ECA's programme priorities is promoting regional integration in support of the AU vision and priorities. ECA support to the implementation of AUC regional integration agenda focuses on undertaking research and policy analysis on the issues. It also seeks to strengthen capacity and provide technical assistance to institutions driving the regional integration agenda, including Regional Economic Communities (RECs), and working on a range of trans-boundary initiatives and activities in sectors vital to the regional integration agenda. In addition, ECA promotes the use of science, technology and innovation in economic development by helping to articulate S&T and innovation systems for Africa's development. It also supports the NEPAD S&T Consolidated Plan of Action, and promotes establishment of S&T parks and incubators in member States. Research and development activities are also undertaken on selected emerging issues and topics of importance. As part of its work to promote the application of S&T for development, ECA provides support to selected centres of excellence in the various sub regions and facilitates networking among them.

In 2007, the African Union recognized the need for a focused discussion at the highest level on effective development and utilization of science and technology and assigned the theme "Science, Technology and Scientific Research for Development" to its January 2007 Heads of State and Government Summit. The Summit subsequently declared the year 2007 as the launching year of building constituencies and champions for Science and Technology and innovation in Africa. It supported the establishment of Pan African Intellectual Property Organization (PAIPO). It reiterated its commitment to Khartoum 2006 decision urging Member States to allocate at least 1% of Gross Domestic product (GDP) to Research and Development. It also endorsed the need for South- South and North – South cooperation in science, technology and innovation.

Mr. Abdoulie Janneh, Executive Secretary of the United Nations Economic Commission for Africa (UNECA), at this AU Summit, highlighted the need to improve science and technology and related policy options for African states and the associated fragility of links between the scientific community and political institutions in Africa. Mr. Janneh called for Africa to undertake "*a major science and technology capacity building initiative in order to generate, revamp and deploy large numbers of scientists, engineers and technicians*". He also stressed the need to create and foster strong links between technology-based industries, academic institutions and governments, as well as establish public-private partnerships in scientific and technological research to allow Africa to develop appropriate technologies for national needs.

In 2005, in his address at the Gleneagles G8 Summit, the then United Kingdom Prime Minister Tony Blair highlighted the need for improved technology transfer to be included in the Millennium Development Goals (MDGs). Since then, a number of high–level meetings have addressed the importance of the role of R&D and science in addressing deprivation in Africa. At the G8 meeting held in Heiligendamm, Germany 6-8 June 2007, global leaders reinforced their commitment to support developing countries by agreeing to invest 44 bn euros within the next ten years to fight AIDS, Malaria and Tuberculosis. Furthermore, the Summit Declaration explicitly stated the aim of strengthening R&D cooperation between advanced and developing countries.<sup>1</sup>

### 2. e Science with Africa Conference

The UN Economic Commission for Africa (UNECA) in collaboration with the African Union Commission and its partners will organize a conference entitled **"Science with Africa"** to explore how African science based entities can increase their collaboration with and participation in international science and R&D projects.

#### 2.1 Attendance

The conference will bring together

- African and international scientists,
- Experts in the areas of science project management, dissemination, partnering, intellectual property & patents, research management and the commercialization and exploitation of research results.
- African science and technology policy and decision makers; and
- International development partners
- International and African private sector and Civil Society Organizations (CSOs)

#### 2.2 Conference Objectives

The Science with Africa conference will achieve the following:

- Increased synergies between European, USA and other global science based organisations and those of Africa, to promote North-South cooperation, to foster technology transfer and to improve existing R&D activities, centers of excellence and partnerships;
- Improved linkages between international scientific research programmes and business enterprise to expedite economic growth in Africa.
- Provide a framework for using Science and Technology options to support economic progress in Africa;

#### 2.3 Conference Programme Structure

The conference will be opened on 4<sup>th</sup> March with a keynote speech on "Science, Technology and Innovation in Africa", and morning plenary sessions and afternoon breakout groups on various crosscutting themes on 4<sup>th</sup> and 5<sup>th</sup> of March. During the plenary sessions, the conference will examine Science Policy Evaluation and the development of new Methodologies, International Programmes to Support ST&I in Africa, and IPR, Patents, Technology Transfer in Africa. Speakers from Africa and the rest of the world will include senior policy makers from Africa and around the world, eminent scientists, science and research project managers, experts in proposal preparation and IP and patent specialists.

<sup>1</sup> http://www.g-8.de/Content/DE/Artikel/G8Gipfel/Anlage/Abschlusserkl\_C3\_A4rungen/WV-afrikaen, property=publicationFile.pdf

On the third day, there will be a mix of workshops and a marketplace of ideas where participants would be given an opportunity to present their papers. The market place session is aimed at providing space to a maximum number of presentations on various themes of the conference. The session will facilitate sharing knowledge and best practices in an informal marketplace context. It will also help in identifying most innovative and potentially replicable projects/ideas. The session runs from the morning until the closing session in the afternoon.

#### Exhibition

In addition, there will be exhibition space featuring international and local companies, organizations and government offices specializing in a variety of services. The exhibit provides participants and exhibitors with an excellent opportunity to network and exchange ideas regarding the promotion of science in Africa.

#### **Ideas Factory**

As a member and the regional focal point for the Global Knowledge Partnership (GKP) in Africa, ECA, Brainstore and GKP with the support of the Swiss Development Cooperation (SDC) will facilitate a knowledge sharing process during the conference. The knowledge sharing process led by Brainstore, will be in a form of an Ideas Factory where the conference participants develop ideas on how African R&D can be strengthened and participation of African scientists in international research projects can be notably increased.

"Science with Africa" Conference, 3 – 7 March 2008, Addis Ababa, Ethiopia: Programme at a Glance

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#### 2.4 Conference emes

#### 2.4.1 Cross-Cutting emes

#### > Science Policy

The science policy of a nation can be viewed as its underlying platform regarding the support, prioritization, justification and management of scientific research, development and innovation (R&D&I). This approach does not view resource dedication in isolation, but aims to integrate, at a macro-level, a diverse set of factors such as scientific priorities, funding mechanisms, funding programs and surrounding policies on higher education, labor laws for scientists, technology transfer, etc. in order to better guide policy makers in R&D&I investment and innovation payoff.

The AU Commission is convinced that the development of a sound science and technology policy framework would stimulate the development of science and technology in Member States and would provide a framework for some countries to develop their science and technology policies and draw up national programmes in science and technology. In this context AU Commission with NEPAD are in the development stage of an African science and technology policy framework for Africa to support Member States in developing and /or improving their S&T policies.

Furthermore ECA believes that in medicine, agriculture, education, and industry, advances in human knowledge have driven improvements in the quality of human life. The twenty-first century offers the promise of even greater and accelerated progress as digital technologies drive down the costs of creation, reproduction, distribution, and consumption of knowledge.

Consequently, Science with Africa will explore how best practices in science policy evaluation can be applied to assist policy makers in developing tools and methodologies, which will serve as a guide for improved scientific capacity and the overall competitiveness of the respective states and how to support the AUC and NEPAD initiatives to develop common science and technology policy framework for the continent.

#### > Innovation

In a recent book and new report (October 2007) by the World Bank Institute on 'Building Knowledge Economy – Advanced Strategies for Development', it has stated the four pillars of the knowledge economy as *economic and institutional regime, education, information and communication technology infrastructure and innovation.* Innovation systems consists of organizations that can tap into the stock of global knowledge, assimilate and adapt it and create local knowledge that can be translated through engineering into usable technologies and processes.

Whereas numerous African countries are improving their science, engineering and technology -base, further effort is needed for economic benefits from publicly financed S&T. Innovation is commonly understood to represent this process. Since the adoption of the Lisbon Agenda, the EU and its Member States have launched numerous initiatives to improve the commercialisation of research results covering all stages of the development chain: the protection of research results via IPR<sup>2</sup>, the transfer of knowledge<sup>3</sup> and technology through the exchange of scientists, the creation of

<sup>2</sup> E.g. Communication on Knowledge Transfer; Community's Patent Strategy

<sup>3</sup> Communication on Knowledge-Transfer; European Institute of Technology (EIT)

spin-offs, the agreement of research contracts and the licensing of technology and finally financing schemes for the commercialization of research results such as venture capital and start-up funds.<sup>4</sup> Science cooperation and investment in African science based organisations can only benefit the African economy and people if mechanisms are in place that help to transfer the knowledge into the economy and general regional knowledge base. Several international institutions provide support such as the UN Commission on Science and Technology for Development (UNCSTD) that has decided to focus on innovation and technology to support development in Africa. At the ministerial meeting of the Group of 77 at the UN on Science and Technology in Rio de Janeiro in September 2006, the Ministers agreed to focus on the challenges and strategies for science, technology and innovation for developing countries.<sup>5</sup> On the African level, AUC and NEPAD) is developing science, technology and innovation indicators for Africa.<sup>6</sup> With Art. 66.2, the TRIPS agreement has a provision that obliges developed countries to provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed countries.

In this context, the conference will focus on the following topics:

- Science with Africa Market place where proposals based on abstracts were received from both African and International Scientists;
- Clinical Trials workshop aimed at developing guidelines for health research in Africa; and
- Capacity building for STI in Africa which will examine various aspects of improving STI development, as well as examining the role of women and the use of African languages.

#### 2.4.2 Science emes

#### ➢ Energy

Energy is widely recognized as an essential prerequisite for economic growth and sustainable development, including the achievement of the Millennium Development Goals (MDGs) and the African Union vision. Without access to modern energy and the services it can provide, people are deprived of the opportunities to engage in income-generating activities and in improving their living standards.

The 8th Ordinary Assembly of the African Union, in Addis Ababa in January 2007, endorsed the measures adopted by the African Ministers in charge of Hydrocarbons (oil and gas) at their Cairo Conference in December 2006, requesting the African Union Commission to elaborate policies and strategies for the development of clean, new and renewable energies, particularly biofuels, as an alternative solution to hydrocarbons, in response to the rise in oil prices which has adverse effects on the economies of African countries.

UNECA's energy agenda was formulated from its general mandate and in line with the energy sector priorities established by its member States. In particular, the focus of ECA's work in the energy sector is based on priorities and commitments made in the framework of the WSSD, the AUC/

http://www.g77.org/mmst/conclusion.html

<sup>4</sup> Competitiveness and Innovation Framework Programme

<sup>5</sup> Conclusions and Recommendations of the Meeting of Ministers of Science and Technology

<sup>6</sup> http://www.nepadst.org/doclibrary/pdfs/iastii\_jun2006.pdf

NEPAD energy initiatives, and other energy priorities related to the achievement of globally agreed objectives such as the MDGs.

In this context, therefore, UNECA and the African Union Commission want the Science with Africa conference to specifically:

- explore energy options for African countries in order to achieve sustainable development;
- demonstrate existing energy solutions for Africa and how R&D supports further development;
- present existing collaborative projects which contribute to a sustainable energy future in Africa;
- facilitate the development of new collaborations with the African research sector.
- support the energy cluster of the CPA and its energy center of excellences

#### > Transport and Infrastructure

African countries face growing rates of vehicle ownership and, with limited capital investment in transport infrastructure, Africa's cities confront increasing congestion and pollution. While greenhouse gas emissions from motor vehicles may not yet be a serious concern for many developing countries, the rapid pace of urbanisation and even faster pace of motorization will change this situation in the future.

Transport infrastructure and services are of critical importance for socio-economic development, trade promotion, and regional integration. However, all modes of transport in Africa suffer from low network density, a lack of interconnectivity, inefficient management and operations, inad-equate maintenance, inadequate security and safety, as well as outdated equipment and insufficient use of information and communications technologies (ICTs).

The Science with Africa conference will explore and present on existing collaborative R&D projects with a view to support technology transfer to Africa and involve African researchers in localising innovation.<sup>7</sup>

As part of one of its major thematic activities in support of regional integration and economic cooperation on its strategic business plan for 2007-09, ECA will foster implementation of AUC/NEPAD infrastructure initiatives.

With respect to transport and infrastructure, the conference therefore aims to:

- explore the link between poverty, transport and sustainable development;
- present new technological solutions to address the transport challenges;
- examine development strategies for the improvement of transport infrastructures;
- present financing schemes to improve transport infrastructure;
- highlight the role of geoinformation to enable and enrich network planning, modeling, and scenario evaluation; and
- present cooperative research projects in the transport sector.
- Support the AU's transport infrastructure master plan

<sup>7</sup> Calestous Juma and Bob W. Bell, Jr.: Rejuvenating African Economies: The role of engineering in international development.

#### > Health

Health is an essential basic human right. It is also one of the areas of human development where progress in S&T has delivered truly great differences in human well-being. It continues to be an exceptionally active area of scientific research and innovation. As far back as 8000 BC10, the history of medicine and health has been replete with revolutionary innovations with high human development impact; some of which have been fairly basic.

Africa bears the heaviest burden of disease mainly due to communicable diseases especially HIV/ AIDS, malaria and tuberculosis. In 2002 Malaria alone caused 10.7% of all children's deaths in developing countries.<sup>8</sup> Africa also experiences high child and maternal mortality rates. In 2002 communicable diseases continued to be the main causes of death in Africa. Five conditions accounted for over 50% of all deaths, HIV/AIDS, lower respiratory infections, Malaria, diarrhoeal diseases and childhood diseases.

To this end, R&D cooperation is not only necessary for the development of new drugs but also presents the most promising way to strengthen the science base in Africa. In the process of developing pharmaceuticals against diseases in Africa, clinical trials are the most critical stage of development. Problems include the high costs with a low prospect of return, the need of common standards and general recognition, lack of capacity, IP and ethical issues. These issues can only be tackled efficiently in cooperation with all stakeholders on a global scale; namely the developing countries, research institutions, pharmaceutical companies, developed countries including the regulatory bodies and international organisations such as the WHO.

In this context, Science with Africa will:

- Bring together stakeholders to improve the framework for clinical trials;
- Present existing partnerships and projects in the health sector in Africa;
- Facilitate the creation of new collaborations through the development of network;
- Present regional, national and international initiatives and help to create synergies.
- Identify policies and strategies, including different financing formats, to boost research and development on major health issues in Africa such as HIV/AIDS and malaria;
- Propose policies and strategies to develop affordable, accessible and sustainable health technologies and treatment, targeting the poor and vulnerable, and overall, to improve equity in health care in Africa; and
- Explore how science and technology in both developed countries and in Africa can lead to the development of new vaccines, especially those that offer multiple protection, and the development of biopharmaceutical manufacturing technologies that can help in the manufacture of low cost medicines that are readily available for use in the continent.
- Explore how medical technologies can be improved for patient monitoring systems and in the collection, management and dissemination of health care information; and
- Identify innovative policies and strategies to train, retain and sustain national health personnel.

<sup>8</sup> Source: US National Center for Infectious Diseases

#### > Life Sciences

Life science refers to the science that uses living organisms and/or their constituent parts to replace or augment products or processes. It contains other fields of study such as biochemistry, botany, cell biology, genetics, molecular Biology and biology. One area in life sciences, that is of critical importance to Africa is biotechnology.

Biotechnology or biological technology is a term used to represent a continuum of different biotechniques, ranging from tissue culture to genetic engineering. It embraces both life sciences and engineering and has been identified as the leading technology of 21<sup>st</sup> century with tremendous potential to address economic, social and environmental issues afflicting the poor in developing countries. Its tools include in vitro culture; candidate genes identification and gene isolation; bioengineering techniques that allow gene transfer and modification, molecular marker technology to help accelerate breeding, DNA fingerprinting and methods of disease control and treatment.

African Head of States have recognized it in the New Partnership for Africa's Development (NE-PAD) as "an important priority area in science and technology for the continent's development". These Heads of States have urged to "harness biotechnology tools for the development of Africa's rich biodiversity, pharmaceutical industries and indigenous knowledge base as well as for the improvement of agricultural productivity, among others".

UNECA has spearheaded the creation of UN-Biotech/Africa, which is a mechanism for the improvement of the UN interventions in support of Africa's efforts to develop, transfer and apply biotechnology. It is designed to accelerate UN responses to the continent's major and greatest development challenges. Its vision is to make Africa a global partner in biotechnology development and application for food security and poverty reduction in Africa.

In this context, the conference will:

- Analyse opportunities offered by new developments in Life Sciences for Africa;
- Present existing research collaborations in the field of Life Sciences;
- Demonstrate the strengths of African Life Sciences;
- Help establish a framework to facilitate new collaboration;
- Present European and African initiatives and institutions in the field of Life Sciences.

#### > Agriculture and Climate Change

Agriculture is the prime engine for development of Africa's mostly agrarian economies and therefore the most important sector in these economies. It constitutes approximately 30% of Africa's GDP, about 50% of the total export value. It provides livelihood supports for 70 per cent of the region's population. It is viewed in a large part of the development literature as a precondition for industrialization in Africa.

African agriculture is, however, of subsistence nature with a high dependence on rainfalls. It suffers from weak links or serious disconnects between the components of agricultural national system of innovation, in particular between industry and science and technology research institutions (universities, agricultural research centers etc) and fragmented scientific and technological activities or lack of integrated approach to scientific and technological interventions specific to commodity value chains. It also suffers from the fact that smallholder farmers and pastoralists options for increasing land, labour and capital inputs and related productivities are limited and that R&D does not tap into and build upon these farmers and pastoralists' wealth of knowledge. It further suffers from weak science culture with constituencies neither demanding nor promoting scientific and technological development. Its extension and information service schemes have collapsed. Much of its productivity increases are from area expansion. It is a low-input, low-output sector whose consistently low performance over many decades is seen as the single most important constraint to Africa's socio-economic development.

In this context, science with Africa will:

- Review and make recommendations regarding the above African R&D strategy;
- Show scenarios and foresight studies in the field of agriculture under climate change threat;
- Present recent developments in agricultural research particularly in the area of integrated R&D applied to agricultural commodity value chains and related interface with climate change.
- Present existing research collaborations in the field of agriculture and climate change;
- Present technologies to address the negative effects of climate change on African agricultural natural resource base including water scarcity; and
- Help to establish a framework to facilitate a new collaboration to achieve all above.

#### > ICT

ICTs are among the driving forces of globalization. African countries are facing new challenges to their socio-economic development as a result of this globalization process and the impact of the emerging new information age. While there has been global progress in improving access to ICTs and awareness of their potential, access to these technologies remains extremely uneven as evidenced by ICT-related growth and productivity, which are, to a large extent, confined to developed economies. The digital divide, characterized by highly unequal access to ICTs, manifests itself both at the international and domestic levels and therefore needs to be addressed by national policy-makers as well as by the international community. Emerging evidence indicates that ICTs are central to the creation of a global knowledge-based economy and can play an important role in accelerating growth, promoting sustainable development and eradicating poverty in developing countries and in countries with economies in transition. This in turn facilitates effective integration into the global economy.

Since the launch of AISI, ECA has been supporting member States to embark on the development of NICI policies, plans and strategies. This activity is considered as an important implementing mechanism. His Excellency, John Agyekum Kufuor, President of the Republic of Ghana also noted in his address delivered at the Opening Ceremony of the Second Preparatory Conference on the World Summit on the Information Society (WSIS) that:

"It is important that we use the opportunities created through the African Information Society Initiative of the ECA to link the implementation of the African strategies to the global Action Plan to achieve the Millennium Development Goals".

The African Union Commission (AUC) has also taken a concrete measures towards harmonizing the national e-strategies and e-policies for the African member states and launched their initiative in

<sup>9</sup> Address delivered at the Opening Ceremony of the Second Preparatory Conference on the World Summit on the Information Society (WSIS) by H.E. John Agyekum Kufuor, President of the Republic of Ghana, Accra, Ghana, 2-4 February 2005.

2007 to achieve this goal and the final proposal of the initiative will be presented to the forthcoming African Union CIT Ministerial Conference in May, 2008.

In preparations for the second phase of the WSIS in Tunis, the AUC with the support of the ECA and Bamako Bureau developed the African Regional Action Plan on Knowledge Economy (ARAP-KE) to be the steering working structure for the African member states to bridge the digital divide and harnessing the potential of ICTs to achieve the MDGs and the African Union vision.

To this end, the Science with Africa conference will:

- Demonstrate the potential of ICT for the support of African science based organisations;
- Present existing cooperative R&D projects in the field of ICT;
- Analyse the need of ICT in support of traditional governance in rural development, education, rural urban and rural connectivity in Africa (internet access, eCommerce, telemedicine, IT transfer, mobile networks);
- Facilitate future R&D collaboration in the field of Science and Technology
- Showcase existing ICT application and services in the different themes of the conference such as e-health, e-agriculture, etc.

#### > Water

African leaders have identified lack of efficient water management as one of the major constraints to development and economic progress. At the policy level they have adopted the African Water Vision 2025<sup>10</sup> and its Framework of Action and further strengthened the importance of water management by adopting the Sirte Declaration<sup>11</sup> at the African Union Heads of State Extraordinary Summit at Sirte Libya in 2004. As part of its business plan to enhance effective development and management of water resources, ECA promotes the implementation of this vision by providing assistance to member States, River Basin Organisations and RECs on integrated river-basin and watershed-management strategies and plans, and publish the biennial African Water Development Report (AWDR) as an input to the UN World Water Development Report. ECA also helps strengthen human and institutional capacities for implementing water-related initiatives including the African Water Information Clearing House (AWICH) and the Pan-African Implementation and Partnership Conference on Water (PANAFCON).

The **shared Vision** is for "an Africa where this is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation and the environment".

The use of biotechnology and development in nanotechnology for water purification, waste water treatment and desalinization provide new areas of confluence of interests of both developed country and African scientists with a focus of adaptation and appropriate applications of the new technologies.

In this context, therefore, the conference will focus on the following:

• Analyze Science and Technology solutions to the major water management problems, which can be categorized into the "hard" and "soft" solutions. Examples of the "soft" are water information and assessment systems for planning, hygiene education, and basic water conservation maintenance of ecosystems. Examples of the "hard" are irrigation

<sup>10</sup> African Water Vision 2025, 2000, ECA, OAU, AfDB.

<sup>11</sup> African Union, 2004

and drainage technologies, small scale water transport, water storage systems, hydropower systems of all scales, etc.

- Highlight the particular challenges of water scarcity and excesses anticipated to be amplified by Climate Change.
- Present technologies and scientific projects in the field of water purification.
- Present existing cooperative R&D programmes/projects in the field of water management.
- Facilitate future collaboration in the field in support of the AMCOW and AMCOST Initiative on Water Centres of Excellence<sup>12</sup>.
- Develop S&T Partnerships to support existing African instruments for Water Information (African Water Information Clearing House<sup>13</sup>, AWICH), Monitoring and Evaluation (African Water Development Report <sup>14</sup>, AWDR) and the Dissemination (African Water Journal<sup>15</sup>).

## 3. Expected Outcomes

The Science with Africa conference is expected to achieve, among others, the following outcomes:

- Raise the level of participation by Africa-based scientists in international collaborative research projects, and also the encouragement of the African scientists in Diaspora to participate and develop joint research programmes with the African Institutions.
- Improve awareness of access to and use of existing patent information, thereby assisting technology transfer both with and in Africa.
- Establish an empirical evidence based system for improved investment by the private sector for Science with Africa;
- Put in place a dissemination system and enabling ICT environment in providing access to information and knowledge on science partners in Africa
- Strengthened and better-networked institutions and centers of excellence
- Increased cooperation in inter-African R&D initiatives to address African development challenges
- Established mechanisms to support and sustain innovation in African R&D
- Enhanced partnerships between African institutions and governments in cooperation on R&D

The outcomes will also contribute immensely to the implementation of the AU Consolidated Plan of Action in the area of Science and Technology and ECA's strategic focus on increased regional integration and integration into the global economy.

### 4. Date and Venue

The Conference will take place on **3-7 March 2008, at the United Nations Conference Centre, Addis Ababa, Ethiopia**.

<sup>12</sup> Initiatives of the African Minister's Council on Water (AMCOW) and the African Ministers Council on Science and Technology (AMCOST).

<sup>13</sup> Managed by UNECA on behalf of UN Water/Africa.

<sup>14</sup> Coordinated by UNECA on behalf of UN Water/Africa

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