

# **INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)**

## **Support to NEPAD**

**Period of Report: July 2008 to June 2009**

### **I. Support to African Member States in Areas Relevant to NEPAD**

The IAEA assistance continued to focus on supporting Member States under national and regional technical cooperation programmes in developing technical, managerial and institutional capacities in various areas of sustainable applications of nuclear technologies. These activities have direct relevance to most of the programmes of the New Partnership for Africa's Development (NEPAD).

Over 500 TC projects were operational in 2008 and over 150 new projects were approved under the TC programme cycle 2009–2011.

About US\$ 73.9 million are allocated to Africa under the Technical Cooperation Fund (TCF) for 2009–2011, representing 29.6% of the total TCF budget of the Agency and the highest share among the regions. About 37.5% of this budget is earmarked to support regional cooperation.

Special emphasis continues to be placed on LDCs. The total budgets for 2009–2011 for national projects in African LDCs will account for over 50 per cent of the budget that has been approved for TC country programmes in Africa.

In addition, IAEA supports the African Regional Cooperative Agreement for Research Development and Training related to Nuclear Science and Technology (AFRA) cooperative programme which includes projects such as sustainable energy development, human health nutrition and communicable disease prevention, livestock production and animal disease control, crop improvement, industrial quality control (non-destructive testing), quality management and control, management of coastal zones, and support to Member States in establishing a robust and sustainable national radiation safety infrastructure and capabilities in nuclear security.

#### **Human and Institutional Capacity Building**

IAEA continued in 2008 its support to institutions of higher learning and training in Africa to sustain development of Human Resources base in areas of nuclear science and technology significant to social and economic development. For the period July–December 2008, 206 fellowships and scientific visits were granted for the Member States in the Africa region under the IAEA TC programme. Furthermore, over 500 scientists and technicians participated in regional training courses and technical workshops.

Under an AFRA project, ICT Tele-centers have been upgraded in South Africa and Uganda while a new centre has been established for the first time in Cote d'Ivoire. Specific regional training courses were held to promote the utilization of ICTs in human capacity building in nuclear science and technology.

### **Enhancing Water Resource Management**

IAEA supported TC projects in the water sector focused on national and regional problems through partnerships with other development agencies. In partnership with the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP), the IAEA is supporting two major regional projects on the Nubian Aquifer (Chad, Egypt, Libya, Sudan), and the Nile Basin (Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, United Republic of Tanzania, and Uganda), which will ensure common understanding of ground water issues and analysis among the riparian countries.

The agency together with the GEF continued to support the Ethiopian Groundwater Assessment Programme (EGRAP). In addition, a new regional programme involving Eritrea, Ethiopia, Kenya, Uganda and the United Republic of Tanzania has been developed to integrate isotope techniques in the African Rift Geothermal Facility (ARGeo) programme. The IAEA also supports activities related to the Risk Mitigation Facility implemented by the World Bank, as well as a feasibility study to present bankable proposals to local and/or international sources of financing.

### **Improving Health Services**

The Agency under the TC programme concentrates on management of cancers, the assessment of the efficacy of nutritional intervention programmes, the development of capabilities for nuclear medicine investigations, and the control of human communicable diseases.

The IAEA TC Programme has provided support to strengthening the capability of Member States in clinical nuclear medicine. The AFRA countries have also promoted sound medical physics practices with regard to nuclear medicine.

Assistance was provided to South Africa to control the spread of drug-resistant tuberculosis (TB) in a high-incidence area through the use of molecular methods to rapidly detect drug resistant tuberculosis. Other African laboratories are benefiting from this project in the area of training, primarily because of the availability of these molecular tests and expertise in South Africa.

### **Increasing Agricultural Productivity**

IAEA continued to Support Member States through several national and regional projects aimed at enhancing crop productivity, soil and water management, and pest control.

Activities related to the management of the tsetse fly and trypanosomosis continued to be coordinated with the African Union Coordination Office of the Pan African Tsetse and Trypanosomosis Eradication Campaign (PATTEC). Assistance to Member States is being provided through the implementation of one regional project, a bi-national project between Mozambique and South Africa and national TC projects in Botswana, Ethiopia, Kenya, Senegal, Uganda and Zimbabwe. Another project is the Southern Tsetse Eradication Project in Ethiopia which aims to eradicate tsetse in an area of 25 000 km<sup>2</sup>.

In addition, the Agency supports national and regional sero-surveillance programmes carried out in cooperation with the African Union Pan African Bureau of Animal Resources (AU/IBAR) and the Pan African Veterinary Vaccine Centre. In the area of crop production, an AFRA project will continue to provide assistance to several countries in the use of mutation breeding and biotechnology to develop improved crop varieties, including neglected crops.

### **Sustainable Energy Development and Planning**

IAEA continues to transfer to African Member States under the TC mechanism energy planning models for integrated energy planning, planning for the expansion of least cost electricity systems, financial analysis, quantification of environmental burdens, estimation of external costs, and multi-criteria decision analysis.

Under a regional AFRA project, important efforts were deployed in 2008 to help the African Member States develop their energy strategies, and to complete the training of the national energy planning teams through more hands-on training for some francophone countries (Burkina Faso, Chad, Cote d'Ivoire, Mauritania and Niger) on energy demand.

Through active participation in the AFRA project, the United Republic of Tanzania has significantly strengthened its planning capabilities for sustainable energy development.

IAEA assistance to study the feasibility of introducing nuclear power as a source of electricity generation is being provided at different stages to several African countries including Algeria, Egypt, Ghana, Libya, Nigeria, Morocco, and Tunisia.

### **Upgrading Radiation Protection Infrastructure and Enhancing Capability in Nuclear Security**

The primary goal of Agency assistance under the TC programme is to help Member States comply with the requirements and legal provisions of the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (BSS). We have four projects under the thematic safety areas of medical exposure control, public and environmental exposure control, emergency preparedness and response, as well as education in the field.

The Agency supports comprehensive training programme which will include regional training courses, technical workshops and postgraduate educational courses on radiation

protection and nuclear security including aspects of illicit trafficking, physical protection of nuclear installations among others.

Assistance under a regional AFRA project, supported by the IAEA Nuclear Security Fund, is being provided to Member States to increase national capacities for prevention, detection and response to illicit trafficking of nuclear and other radioactive materials; to train staff in regulatory authorities, at nuclear installations and at other locations where these materials are used or stored, as well as staff in law enforcement organizations.

## **II. Financial resources committed by the IAEA for the TC Programme in Africa**

The table below provides information on the financial resources committed by the IAEA under the TC programme of which major projects are closely related to NEPAD's priorities. Information is also provided below on the financial resources allocated to staff costs at the IAEA Technical Cooperation Department's Division for Africa in Vienna.

### **1) Disbursements under the IAEA TC Programme in Africa**

Year	Disbursements under TC Programme for Africa (US \$)			Africa's share in the overall IAEA financial disbursements
	Technical Cooperation Fund (TCF)	Extra-budgetary Resources	Total	
2006	22,203,800	2,372,100	24,575,900	25.7%
2007	22,459,900	2,796,500	25,256,400	28.0%
2008	23,697,624	3,050,981	26,748,605	28.2%

## **III. Advocacy work to raise awareness on the implementation of NEPAD**

In support of NEPAD, the Agency will pursue its efforts to enhance further the existing collaboration with AU-PATTEC, UNDP/GEF, the United Nations Human Security Trust Fund (UNHSTF), the African Development Bank (AfDB), the Arab Bank for Economic Development in Africa (BADEA), and the Islamic Development Bank (IDB). Steps are also being undertaken to develop partnership with the European Union to support key areas of socio-economic significance relevant to nuclear science and technology applications, such as energy, health and environment.