

## ICSU Regional Office for Africa starts implementing its four published science plans

Founded in 1931, ICSU is a non-governmental organization with a global membership of National Scientific bodies (115 Members, representing 135 Countries) and international Scientific Unions (30 Members). The Council is frequently called upon to speak on behalf of the global scientific community and to act as an advisor in matters ranging from the environment to conduct in science. ICSU's activities focus on three areas: planning and coordinating research; science for policy; and strengthening the Universality of Science.

ICSU Regional Office for Africa (ICSU ROA) was established in April 2005, and its secretariat is based at the National Research Foundation (NRF) building in Pretoria, South Africa.

ICSU ROA has prepared and published four science plans in the priority areas that were identified by the ICSU Regional Committee for Africa. The Regional Office has begun implementing its four published science plans by developing and implementing projects from these science plans. Below are the details:

- I** Science plan on Sustainable Energy: The projects that have been developed and whose implementation begins in 2009 are:
- ◆ Project SE01: Development of energy models and scenarios.
  - ◆ Project SE02: Increase in access to high quality, reliable and affordable energy in sustainable manner: Renewable energies- Bio - energies. The sub-projects to be undertaken include: SE02.1: Electronic library and knowledge network for bio-energies; SE02.2: Bio-energies technologies- quality characterization and adaptation; and SE02.3: Energy efficiency in transport.
- II** Science plan on Natural and Human-induced Hazards and Disasters: The project proposals are in their final stages of being developed and they include:
- ◆ Project HD01: Geo-hazards. The sub-projects to be undertaken include: HD01.1: Assessing and mitigating seismic hazards; HD01.2: Monitoring hazards from volcanoes and explosive crater lakes; HD01.3: Mitigating the impact of landslides; HD01.4: Causes and consequences of sea-level changes, and coastal erosion and ocean pollution; HD01.5: Integrated modeling of the African lithosphere deformation and the implications for geohazards.

- ◆ Project HD02: Hydro-meteorological hazards and disasters: vulnerability and resilience - the sub-projects to be implemented include: HD02.1: Drought events in sub-Saharan Africa; HD02.2: Floods in sub-Saharan Africa; HD02.3: Climate Change and socio-economic determinants for anthropogenic fires in African savannahs; HD02.4: Dust events and related hazards in sub-Saharan Africa; and HD02.5: Physical and socio-economic approaches for supporting adaptive water management in sub-Saharan Africa.

### III Science plan on Health and Human Well-being: Task Teams of experts have been identified who are developing the following project proposals:

- ◆ Project WB01: HIV/AIDS and Public Health - the sub-projects are: WB01.1: Comparing the physiology and pharmacokinetic role of food-derived versus synthetic micronutrients on the nutritional status of HIV and TB patients; WB01.2: Determinants and risk factors of non-communicable (lifestyle) diseases among rural and urban populations; WB01.3: Environmental sanitation (waste water treatment, sewage, domestic and urban waste disposal) and household water supply.
- ◆ Project WB02: Modern biomedicine, traditional medicine and indigenous knowledge systems.
- ◆ Project WB03: Food and nutrition security, with the following sub-projects: WB03.1: Sustainable improvement of food production; WB03.2: Sustainable increase in livestock production (including fisheries and non-conventional mini-livestock); WB03.3: Improving post-harvest technologies; WB03.4: Food safety and quality nutrition; WB03.5: Adaptation of agricultural production systems to climate change; WB03.6: Improving accessibility to food.

### IV Science plan on Global Environmental Change (including Climate Change and Adaptation): International Workshop of Experts in Global Environmental Change will be held in February 2009 in Pretoria, South Africa to develop projects from the following topics:

- ◆ GC01: Land degradation, biodiversity loss and human well-being;
- ◆ GC02: Climate change and its impact on rainfall;
- ◆ GC03: Resilience of food systems;
- ◆ GC04: Water resources and their governance;
- ◆ GC05: Atmospheric composition change;
- ◆ GC06 Africa's oceanographic uniqueness.

ICSU ROA and the NRF in collaboration with the government of Mozambique (including AICIMO) successfully organized the pre - GA activities that were held in the various provinces of Mozambique (13 - 17 October 2008), the Science in Africa Symposium (20 October 2008), and the Dialogue on Science, Technology and

Innovation in Africa (21 October 2008). The Symposium and the Dialogue were held at the Joaquim Chisano Convention Centre in Maputo, Mozambique. During the Dialogue on Science, Technology and Innovation (STI) in Africa, the following four topics were discussed:

- ◆ The role of STI in the attainment of the MDG's
- ◆ STI partnership between Africa and Europe, and the rest of the world.
- ◆ The involvement of the African Diaspora in STI activities in Africa
- ◆ Funding of science research (R&D) in Africa

The Regional Office mobilized financial resources to invite approximately 100 African scientists, policy - and decision makers on S&T, including African Ministers of S&T, to attend the pre - 29<sup>th</sup> GA activities in Mozambique in October 2008.

ICSU ROA is in final stages to produce (in press) a book titled, "*Science, Technology, and Innovation for Socio - economic Development: Success Stories from Africa.*" This book was launched during the 29<sup>th</sup> ICSU GA in Maputo (attended by approximately 700 participants) and its main objective is to promote science education and research in Africa.

For those in need of soft or hard copies of the ICSU ROA science plans, please contact Mr. Bongani Mahlalela; e-mail address: [b.mahlalela@icsu-africa.org](mailto:b.mahlalela@icsu-africa.org)

For those who would like to be part of the implementers of the projects developed from the following science plans: Sustainable Energy in sub-Saharan Africa; Global Environmental Change (including Climate Change and Adaptation); please contact Dr Daniel Nyanganyura, email address: [d.nyanganyura@icsu-africa.org](mailto:d.nyanganyura@icsu-africa.org)

For those who would like to be part of the implementers of the projects developed from the following science plans: Health and Human Well-being in sub-Saharan Africa, and Natural and Human-induced Hazards and Disasters in sub-Saharan Africa; please contact Dr Andrew Enow, e-mail address: [a.enow@icsu-africa.org](mailto:a.enow@icsu-africa.org)

Prof Sospeter Muhongo  
Regional Director  
ICSU Regional Office for Africa  
Pretoria, South Africa

[k.potgieter@icsu-africa.org](mailto:k.potgieter@icsu-africa.org)  
[www.icsu-africa.org](http://www.icsu-africa.org)

26 November 2008