



# ICSU

International Council for Science

REGIONAL OFFICE FOR AFRICA

## Progress in the Implementation of ICSU ROA Science Projects

### Completed Projects Proposals

The following project proposals have been completed and submitted to potential ICSU ROA partners for financial contribution:

#### 1. Sustainable Energy Projects for sub-Saharan Africa:

- 1.1. Project SE 01: Development of energy models and scenarios for Africa
- 1.2. Project SE 02: Increase in access to high quality, reliable and affordable energy in a sustainable manner: Renewable energies – bio-energies
  - 1.2.1. Sub Project SE 02.1: Establishment of a knowledge network including an electronic library in the sector of bio-energy
  - 1.2.2. Sub Project SE 02.2: Bio-energy technology piloting and testing for the implementation in Africa
  - 1.2.3. Sub Project SE 02.3: Bio-energies efficiency in transport

#### 2. Projects on Natural and Human-induced Hazards and Disasters in sub-Saharan Africa

- 2.1. Project HD 01: Geohazards in sub-Saharan Africa
  - 2.1.1. Sub Project HD 01.1: Assessing and mitigating Earthquake hazards in Africa
  - 2.1.2. Sub Project HD 01.2: Characterisation of Africa's active volcanoes for appropriate hazard monitoring, using remote sensing and ground-truthing techniques
- 2.2. Project HD 02: Hydro-meteorological Hazards and Disasters in sub-Saharan Africa: Vulnerability and Resilience
  - 2.2.1. Sub Project HD 02.1: Drought events in sub-Saharan Africa: Case study of the Sahel
  - 2.2.2. Sub Project HD 02.2: Development of a Decision Support System for Flood Management in sub-Saharan Africa: Case studies of the Volta and Nile Basins
  - 2.2.3. Sub-Project HD 02.3 Climate change and socio-economic determinants for anthropogenic fires in African savannahs

## **Project proposals under Preparation**

The following project proposals are under preparation and will be completed by 31 March 2010:

### **1. Projects on Health and Human Well-being in sub-Saharan Africa**

#### 1.1 Project WB 01: HIV/AIDS and Public Health

1.1.1 Sub Project WB 01.1: Comparing the physiology and pharmacokinetic role of food-derived, versus synthetic micro-nutrients on the nutritional status of HIV and TB patients

1.1.2 Sub Project WB 01.2: Determinants and risk factors of non-communicable diseases among rural and urban populations

1.1.3 Sub Project WB 01.3: Environmental sanitation and household water supply

#### 1.2 Project WB 02: Modern bio-medicine, traditional medicine and indigenous knowledge systems

#### 1.3 Project WB 03: Food and Nutrition Security

1.3.1 Sub Project WB 03.1 Sustainable improvement of food production

1.3.2 Sub Project WB 03.2 Sustainable increase in livestock production

1.3.3 Sub Project WB 03.3 Improving post harvest technologies

1.3.4 Sub Project WB 03.4 Food safety and quality nutrition

1.3.5 Sub Project WB 03.5 Adaptation of agricultural production systems to climate change

1.3.6 Sub Project WB 03.6 Improving accessibility to food

### **2. Projects on Global Environmental Change (including Climate Change and Adaptation)**

#### 2.1 Project GC 01: The impact of land degradation and biodiversity loss on human well-being in Africa

#### 2.2 Project GC 02: Impact of climate change on rainfall and water resources in Africa

2.2.1 Sub Project GC 02.1: Sustainable adaptation to changes in rainfall patterns for food security in Africa

2.2.2 Sub Project GC 02.2 Integrated trans-boundary water resource management in the context of climate change in Africa

#### 2.3 Project GC 03: Air Pollution and health impact in urban areas in Africa

2.3.1 Sub Project GC 03.1 Air pollution assessment of mega-cities in Africa

2.3.2 Sub Project GC 03.2: Monitoring and modelling of trans-boundary atmospheric aerosols due to anthropogenic and natural sources in Africa

2.3.3 Sub Project GC 03.3 Dust events and related hazards in sub-Saharan Africa

2.3.4 Sub Project GC 03.4: Ground level ozone in Africa and its impacts on crops, food security and ecosystem services

## 2.4 Project GC 04: Africa's Oceanographic Uniqueness

2.4.1 Sub Project GC 04.1: Monitoring strategies for adaptive management and governance within the coastal zones and large marine ecosystems

2.4.2 Sub Project GC 04.2: Coastal erosion assessment and abatement modalities along sub-Saharan Africa

For further details, please, contact the following:

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  - i. Natural and Human-induced hazards and Disasters in sub-Saharan Africa;
  - ii. Health and Human Well-being in sub-Saharan Africa
2. Dr. Daniel Nyanganyura ([d.nyanganyura@icsu-africa.org](mailto:d.nyanganyura@icsu-africa.org)) for projects on:
  - i. Sustainable Energy for sub-Saharan Africa
  - ii. Global Environmental Change (including Climate Change and Adaptation)