



Regional Office for Africa

ICSU Regional Office for Africa

Annual Report 2008/09

Regional Office for Africa

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Strengthening international science for the benefit of society

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ACRONYMS

ACP	Africa Caribbean and the Pacific
AfDB	African Development Bank
AICIMO	Scientific Research Association of Mozambique
AMMA	African Monsoon Multidisciplinary Analysis
ANSTI	African Network of Scientific and Technical Institutions
AU	African Union
AU/STRC	African Union Science, Technology and Research Commission
CARS	Centre for African Renaissance Studies
CODATA	Committee on Data for Science and Technology
CODIST	Committee on Development Information, Science and Technology
COMESA	Common Market of Eastern and Southern Africa
COVIDSET	Conference of Vice Chancellors and Deans of Science, Engineering and Technology
DAAD	German Academic Exchange Service <i>[Deutscher Akademischer Austausch Dienst]</i>
DG	Director General
DFG	German Research Foundation [<i>Deutschen Forschungsgemeinschaft</i>]
DST	Department of Science and Technology (South Africa)
eGY	Electronic Geophysical Year
ESF	European Science Foundation
EU	European Union
FANRPAN	Food, Agriculture and Natural Resources Policy Analysis Network
FP6	Sixth Framework Programme of the European Union
FP7	Seventh Framework Programme of the European Union
GECAFS	Global Environmental Change and Food Systems
GECAFS-SAf	Global Environmental Change and Food Systems – Southern Africa
GEM	Global Earthquake Model
GSSA	Geological Society of South Africa
IASPEI	International Association of Seismology and Physics of the Earth's Interior
ICT	Information and Communication Technology
ICSU	International Council for Science
ICSU GA	International Council for Science General Assembly
ICSU EB	International Council for Science Executive Board
ICSU RCA	International Council for Science Regional Committee for Africa
ICSU ROA	International Council for Science Regional Office for Africa
ICSU SA	International Council for Science South African National Secretariat
IFS	International Foundation for Science
IGBP	International Geosphere Biosphere Programme
IGU	International Geographical Union
IKS	Indigenous Knowledge Systems
INASP	International Network for the Availability of Scientific Publications
INQUA	International Union for Quaternary Research
IPR	Intellectual Property Rights
ISDR	International Strategy for Disaster Reduction
ISPRS	International Society for Photogrammetry and Remote Sensing
ISTD	ICT, Science and Technology Division (UNECA)

IT	Information Technology
IUBMB	International Union of Biochemistry and Molecular Biology
IUBS	International Union of Biological Sciences
IUFoST	International Union of Food Science and Technology
IUGG	International Union of Geodesy and Geophysics
IUGS	International Union of Geological Societies
IUPAP	International Union of Pure and Applied Physics
IUPHAR	International Union of Pharmacology
IUPS	International Union of Physiological Sciences
IUSS	International Union of Soil Sciences
IUTOX	International Union of Toxicology
IYPE	International Year of Planet Earth
JICA	Japan International Cooperation Agency
JSPT	Joint Science Programme Team
KNAW	The Royal Netherlands Academy of Science [<i>Koninklijke Nederlandse Akademie van Wetenschappen</i>]
MoA	Memorandum of Agreement
NASAC	Network of African Science Academies
NC	National Committee
NCST	National Committee for Science and Technology
NGO	Non-Governmental Organisation
NRF	National Research Foundation (South Africa)
NSF	National Science Foundation (United States of America)
PSC	Project Steering Committee
REC	Regional Economic Community
SAAFoST	South African Association of Food Science and Technology
SADC	Southern Africa Development Community
SARUA	Southern Africa Regional University Association
SASBCP	South African Society for Basic and Clinical Pharmacology
SHWB	Science for Health and Well-being
SIDA	Swedish International Development Agency
SIT	Science Implementation Team (IYPE)
STI	Science, Technology and Innovation
THORPEX	The Observatory system Research and Predictability Experiment
TIGGE-LAM	THORPEX Interactive Grand Model Ensemble-based Limited Area Modelling
ToR	Terms of Reference
TOXSA	Toxicology Society of South Africa
TWAS	Academy of Sciences for the Developing World
UK	United Kingdom
UN	United Nations
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USA	United States of America
WAYS	World Association of Young Scientists
WDC	World Data Centre
WMO	World Meteorological Organisation
WWRP	World Weather Research Programme
YES	Young Earth Scientists
ZAR	South African Rand

1 MESSAGE FROM THE CHAIR OF THE REGIONAL COMMITTEE

The 2008/09 financial year was ICSU ROA's fourth year of operation since its inauguration on 01 September 2005. Following up on the achievements of the previous years, notably marked by the publication and distribution of its four science plans, ICSU ROA focused its activities in the 2008/09 financial year on preparing project proposals for the implementation of these science plans. Four project proposals have been finalised, viz:



- Sustainable Energy for sub-Saharan Africa:
 - Project SE 01: Development of energy models and scenarios for sub-Saharan Africa
 - Project SE 02: Increase in access to high quality, reliable and affordable energy in a sustainable manner: Renewable energies – bio-energies
- Natural and Human-induced Hazards and Disasters in sub-Saharan Africa
 - Project HD 01: Geohazards in sub-Saharan Africa
 - Project HD 02: Hydro-meteorological Hazards and Disasters in sub-Saharan Africa: Vulnerability and Resilience

In the pursuit of implementation of the science plans, ICSU ROA organized two international workshops of experts during the financial year under review to develop projects from the remaining two science plans. At these workshops three projects were identified under the science plan on Health and Human Well-being, and four from the science plan on Global Environmental Change (including Climate Change and Adaptation).

The ICSU Regional Committee for Africa commends the Regional Office for promoting the development of science and technology for Africa's socio-economic development through these and other project initiatives. ICSU RCA also appreciates the involvement of ICSU ROA in several other scientific initiatives with African and international partners on various projects and programmes, particularly in promoting the activities of the ICSU family in Africa.

ICSU RCA also recognizes and encourages the Regional Office's continuous engagement of African governmental bodies and policy institutions. This engagement has culminated, among other aspects of recognition, in the inclusion of ICSU ROA in the African Cluster on science and technology, an initiative of the African Union also supported by UNESCO and UNECA.

The climax of ICSU ROA activities during the 2008/09 financial year was the 29th ICSU General Assembly held in Maputo, Mozambique during October 2008. The Associated Events of the ICSU GA, jointly organized by ICSU ROA, AICIMO and the government of Mozambique through the Ministry of Science and Technology, greatly contributed to the success of the ICSU General Assembly. Workshops held in the provinces have made a lasting impact on science and technology in Mozambique. Active follow up of the proceedings of these workshops will go a long way to enhance science for the society in Mozambique and in Africa as a whole.

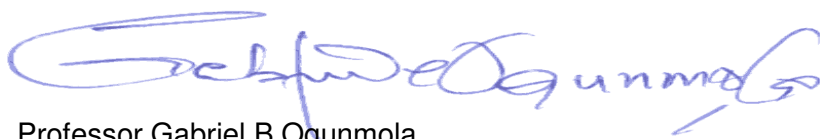
Some of the engaging follow up action of these events are: the subsequent creation of the Mozambican Academy of Sciences, which was launched on 20 March 2009; and the expression of interest to create a biotechnology centre, a mathematical centre, as well as an institute for training of experts on water resource management. One of the Associated Events of the 29th ICSU GA was the launch of the ICSU ROA book titled "Science, Technology and Innovation for Socio-Economic Development: Success Stories from Africa". The book showcases the contribution of African researchers to the development of science and technology in the world.

Most remarkable was the engagement of political leaders in a fully committed dialogue with the scientific community during the one-day symposium and the half-day dialogue on Science, Technology and Innovation (STI) in Africa.

In the midst of these achievements, ICSU RCA notes that the Regional Office still operates without the full staff complement as envisaged when setting up the office. The Regional Committee is also aware of a few outstanding challenges with regard to staff welfare at ICSU ROA.

These challenges notwithstanding, ICSU RCA appreciates and commends the continued commitment of the Government of South Africa through the Department of Science and Technology (DST) and the National Research Foundation (NRF) in supporting and sustaining the operation of the Regional Office. On behalf of the Regional Committee, I wish to express our gratitude for this generous support, and look forward to continued engagement of the Government of South Africa to host ICSU ROA and through it, promote STI advancement on the continent. We hope to be able to harness additional support from other African governments, as well as from partners within and outside Africa, for implementation of ICSU ROA projects in the years ahead.

I wish to acknowledge the financial support to ICSU ROA by SIDA, UNESCO, DAAD and other partners, to promote its activities during the 2008/09 financial year. We hope that ICSU ROA will continue to receive such support in its future activities.

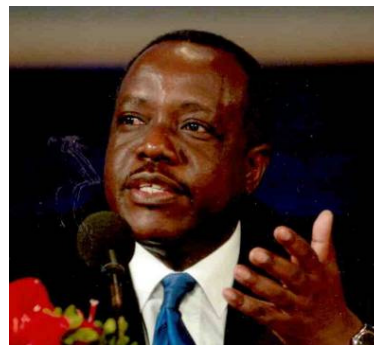


Professor Gabriel B Ogunmola
Chair
ICSU Regional Committee for Africa

2 DIRECTOR'S OVERVIEW

The activities of the ICSU Regional Office for Africa (ICSU ROA) continued to expand in the 2008/09 financial year as the Regional Office entered its fourth year of operation since its inauguration on 01 September 2005. A great deal has been achieved in the financial year under review and it is impossible to include everything in the introductory remarks.

The main driver on our road to success is our sound partnership with science, technology and innovation organizations and institutions working on sustainable growth and development in Africa.



To avoid having the usual rhetorical science plans for Africa, the most important activity in the year under review was the commencement of the implementation of ICSU ROA's four published science plans for sub-Saharan Africa, viz Sustainable Energy, Natural and Human-induced Hazards and Disasters, Health and Human Well-being, and Global Environmental Change (including Climate Change and Adaptation). From the Sustainable Energy science plan, two project proposals were developed, one on energy models and scenarios, and the other on renewable energies (ie bio-energies) for sub-Saharan Africa. Implementation of these projects will be done in collaboration with AU/NEPAD. The experts implementing the science plan on Hazards and Disasters in sub-Saharan Africa have completed preparation of project proposals on geo-hazards (in line with the UN-proclaimed International Year of Planet Earth) and on hydro-meteorological hazards and disasters. Task Teams to develop projects from the remaining two science plans (ie Health and Human Well-being, and Global Environmental Change) have been formed. ICSU ROA is preparing guidelines for the preparation of project proposals from these two science plans.

A major achievement in the year under review was the successful co-organization of the 29th ICSU General Assembly (GA), held in Africa for the first time, in Mozambique during October 2008. ICSU ROA, in collaboration with the National Research Foundation of South Africa, the Ministry of Science and Technology of the Republic of Mozambique, and the Scientific Research Association of Mozambique, convened the Associated Events of the 29th GA. This highly successful Assembly was attended by over 1,000 students, scientists, policy- and decision-makers (eg African Ministers of S&T) from around the world. Of the most remarkable achievements was the organization of pre-GA activities (themed workshops) in the different provinces of Mozambique, a one-day symposium, as well as a half-day dialogue on the development of science, technology and innovation in Africa. A book titled, "Science, Technology and Innovation for Socio-economic Development: Success Stories from Africa" was launched during this General Assembly. This book will be published during the next financial year and its main objective is to promote science education and research on the continent whilst also showcasing Africa's contribution to the advancement of STI in the world.

In the 2008/09 financial year, ICSU ROA continued to work with its established partners and engaging new partners in promoting and facilitating development of STI on the continent. The Regional Office continues to promote the scientific activities of the ICSU community in Africa. A significant undertaking was ICSU ROA's involvement in the organization of the Africa IYPE launch event in Arusha, Tanzania in May 2008. HE the President of the United

Republic of Tanzania and the Director General of UNESCO attended this well-organized event, and it was during this event that the Director General of UNESCO announced the Organization's new programme on promotion of earth science education in Africa.

ICSU ROA also continued working with the African Union on several scientific fronts including the AU's newly established science awards programme for recognition of outstanding S&T achievements by African scientists. UNESCO Regional Office for Africa and United Nations Economic Commission for Africa (UNECA) continued partnering with ICSU ROA in various activities as narrated in this report. In the year under review, ICSU ROA succeeded in expanding its S&T network of implementers of its activities, and forged new S&T partnerships as reported in this document.

The ICSU ROA website and electronic mailing list continue to be important conduits for dissemination and accessing regional (Africa) and international S&T information. During the 2008/09 financial year, the staff of ICSU ROA continued receiving invitations to many regional (Africa) and international conferences where they delivered lectures on S&T. The staff also exhibited and disseminated ICSU ROA print material at selected conferences held in Africa.

We wish to register our sincere appreciation and gratitude to our sponsors in the 2008/09 financial year, especially to the Department of Science and Technology and the National Research Foundation of the Republic of South Africa. The financial contributions from the Swedish International Development Agency, UNESCO Regional Office for Africa, ICSU Secretariat, German Academic Exchange Service, the International Foundation for Science, and the European Union through its 6th Framework Programme, are also gratefully acknowledged.

The members of the ICSU Regional Committee for Africa (ICSU RCA), the four staff members of the Regional Office and the staff at the host institution (NRF of South Africa) deserve our sincere thanks and gratitude for the excellent work done in the 2008/09 financial year. As we enter the new financial year of 2009/10, we remain mindful of the importance of the continued effort to utilize S&T for poverty reduction from the African continent. The Regional Office's probity will always remain towards this cause for the benefit of the entire humanity.

***"Modern science was largely conceived of as an answer to the servant problem –
Frans Lebowitz"***



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

3 HIGHLIGHTS

ICSU ROA Projects. ICSU ROA focused its activities during the 2008/09 financial year on the preparation of project proposals to implement its published science plans. In this regard, 4 project proposals have been prepared, namely:

- (i) Project SE01: Development of energy models and scenarios for sub-Saharan Africa.
- (ii) Project SE02: Increase in access to high quality, reliable and affordable energy in a sustainable manner in sub-Saharan Africa: Renewable Energies – Bioenergies for sub-Saharan Africa.
- (iii) Project HD01: Geo-hazards in sub-Saharan Africa, to be implemented within the framework of the UN-proclaimed International Year of Planet Earth (IYPE)
- (iv) Project HD02: Hydro-meteorological hazards and disasters in sub-Saharan Africa: vulnerability and resilience.

ICSU ROA also organised an international workshop of experts in health and human well-being on 25 – 27 August 2008 to develop projects for implementation of the ICSU ROA science plan on Health and Human Well-being. From this workshop, three projects were proposed. The full proposals for these projects will be developed during the 2009/10 financial year. The identified projects are:

- (v) Project WB01: HIV/AIDS and public health
- (vi) Project WB02: Modern biomedicine, traditional medicine and indigenous knowledge systems
- (vii) Project WB03: Food and nutrition security.

In a similar workshop of experts in Global Environmental Change (including Climate Change and Adaptation), the following projects were proposed and will be fully developed during the 2009/10 financial year:

- (viii) Project GC01: The impact of land degradation and biodiversity loss on human well-being in Africa
- (ix) Project GC02: Impact of climate change on rainfall and water resources in Africa
- (x) Project GC03: Air pollution and health impact in urban areas in Africa
- (xi) Project GC04: Monitoring strategies for adaptive management and governance within the coastal zones and large marine ecosystems.

The proposed project on “Resilience of food supply systems” is merged with Project WB 03.

Associated Events of the 29th ICSU General Assembly. As part of the activities of the 29th ICSU General Assembly held in Maputo, Mozambique in October 2008, ICSU ROA, in collaboration with the government of Mozambique (Ministry of Science and Technology) and the Scientific Research Association of Mozambique (AICIMO), organised thematic workshops in the 9 provinces of Mozambique, a one-day symposium on science, technology and innovation (STI) in Africa, and a half-day dialogue on STI in Africa. These Associated Events were the first of the kind in the history of ICSU General Assemblies and they had a profound impact on the development of science and technology in Mozambique, and in Africa as a whole.

The book on “**Science, Technology and Innovation for Socio-Economic Development: Success Stories from Africa.**” ICSU ROA launched its book on success stories of STI from Africa during the one-day symposium at the 29th ICSU General Assembly. The book emphasizes the importance of STI for the socio-economic development of Africa and aims to promote science education and research on the continent, while showcasing Africa’s contribution to the advancement of science and technology in the world. The book is edited by Sospeter Muhongo, Francis Gudyanga, Achuo Enow and Daniel Nyanganyura. It is composed of 11 chapters arranged in 4 sections. All contributions to the book are made by renowned African scientists.

International Year of Planet Earth (IYPE). ICSU ROA has been coordinating the activities of the UN-proclaimed International Year of Planet Earth (IYPE) in Africa. The Year was launched in Africa on 08 – 09 May 2008 in Arusha, Tanzania. This event was presided over by the President of the United Republic of Tanzania, His Excellency Jakaya Mrisho Kikwete. Through the guidance of ICSU ROA, IYPE National Committees (NCs) were established in 26 African countries. ICSU ROA will organise a meeting of the SIT leaders and NC Chairs in June 2009 to discuss the progress made on the implementation of the scientific programmes of the 10 broad scientific themes of IYPE in Africa. An important legacy of the IYPE is the publication of 10 volumes, one for each of the 10 scientific themes by Springer Verlag. ICSU ROA has urged African scientists to contribute chapters or part thereof in these volumes.

Partnership with Inter-Governmental Bodies. ICSU ROA has been very involved in joint activities with the African Union (AU) and its programme implementing body, the New Partnership for Africa’s Development (NEPAD); and the United Nations Economic Commission for Africa (UNECA). Some examples include the African Cluster for science and technology which is coordinated by AU/NEPAD, UNECA, ICSU ROA, and the UNESCO; the nomination of ICSU ROA to the Advisory Committee for the AU Scientific Awards Programme; and the involvement of ICSU ROA in organising the AU/NEPAD congress on “science, technology and innovation for Africa’s industrialisation” in Nairobi, Kenya in November 2008.

New Partnerships and Networks. ICSU ROA has recently added to its growing network of scientific collaborators, the African Monsoon Multidisciplinary Analysis (AMMA) project and THORPEX. Through the Interlink project, ICSU ROA and other partners in the consortium have created a network of African Environmental Researchers. This network has proposed research topics of interest to Africa for inclusion in future EU FP7 calls on the environment theme, and intends to submit a proposal for the next call, in partnership with its European collaborators.

Fund-raising. ICSU ROA obtained extra-budgetary funding from its partners (UNESCO, DAAD) to facilitate the organisation of its two workshops of experts in health and human well-being and in global environmental change (including climate change and adaptation). Funds were also obtained from SIDA and DAAD for organisation of the 29th ICSU General Assembly (ICSU GA) and its Associated Events. These funds enabled ICSU ROA to invite more than 60 African scientists and policy-makers, including some African Ministers of Science and Technology, to the Associated Events of the ICSU GA.

4 INTRODUCTION

Upon its inception in September 2005, ICSU ROA undertook to promote advancement of science, technology and innovation (STI) for the socio-economic development of Africa. Over the years, the Regional Office has engaged several activities in pursuit of this goal, while at the same time, promoting, facilitating and coordinating the activities of the ICSU family in sub-Saharan Africa. This two-pronged approach in ICSU ROA's activities has served in strengthening international science in the context of Africa's priorities; and in bringing scientific activities of the ICSU family closer to the educational and research institutions, as well as to governments and non-governmental organisations in the region.

With regard to strengthening international science in the context of Africa's priorities and for the socio-economic development of the continent, ICSU ROA has prepared, published, and widely distributed four science plans on: (i) Sustainable Energy; (ii) Health and Human Well-being; (iii) Natural and Human-induced Hazards and Disasters and (iv) Global Environmental Change (including Climate Change and Adaptation). During the 2008/09 financial year, the Regional Office focused on preparing project proposals for the implementation of these science plans. To this effect, two project proposals were developed from each of the science plans on Sustainable Energy and on Natural and Human-induced Hazards and Disasters. Two international workshops of experts were also held during the financial year under review, to propose projects from the other two science plans. These workshops came up with three proposed projects on Health and Human Well-being and four on Global Environmental Change (including Climate Change and Adaptation).

ICSU ROA's efforts to bring the scientific activities of the ICSU family closer to Africa have been geared towards fulfilling three fundamental principles of ICSU as enshrined in its Strategic Plan 2006 – 2011, namely: (i) International Research Collaboration; (ii) Universality of Science; and (iii) Science for Policy. In fulfilment of these principles, ICSU ROA has, during the year under review, promoted and facilitated the activities of several ICSU Unions and Affiliated Bodies in Africa and has encouraged and facilitated the adherence of African institutions and organisations to these international professional bodies. ICSU ROA continues promoting the linkage between science and policy on the continent. The climax of this endeavour was the 29th ICSU GA in October 2008 in Mozambique. The symposium on STI in Africa, organised during this GA brought together several government ministers and representatives of international organisations to interact and exchange views with the African scientific community.

ICSU ROA has also established new partnerships and networks on the continent, while also strengthening its relations with existing ones. ICSU ROA promotes international research collaboration through these networks and partnerships, including S-S and N-S partnerships.

In addition to sustaining its relationship with traditional partners such as the AU/NEPAD, UNECA, UNESCO and TWAS, ICSU ROA has also established new partnerships with international organisations and agencies, to collaborate in the implementation of projects being developed from its 4 science plans.

This report presents the activities and achievements of ICSU ROA during the 2008/09 financial year.

5 ORGANISATION AND GOVERNANCE

5.1 ICSU ROA Secretariat

Although the organizational structure of the ICSU Regional Office for Africa is designed to consist of six staff members, the 2008/09 financial year started with only 4 staff, namely: the Regional Director, the Regional Director's Personal Assistant, one Programme Specialist, and a Liaison Officer. The second Programme Specialist (Dr Daniel Nyanganyura) was appointed in August 2008 and the Office has continued to function without a Communications Officer. It is hoped that this position will be filled during the 2009/10 financial year. The current composition of the ICSU ROA Secretariat is given in annexure at the end of this report (Annex A).

ICSU ROA operates in accordance with the terms of the ICSU/NRF Memorandum of Agreement (MoA) signed on 11 October 2004 in Harare (Zimbabwe) and according to the policies, procedures, conditions of service and guidelines of the National Research Foundation of South Africa (NRF). At the same time, the Regional Office is expected to comply with the core policies, principles, requirements and expectations of ICSU; and to the recommendations of ICSU RCA which is mandated to provide guidance and oversight to the Regional Office. To achieve a harmonious fulfillment of these obligations ICSU ROA needs to be guided by some specific operational rules and regulations. The production of an Operational Guide for ICSU ROA is still a challenge to the three governing pillars (ie, ICSU Secretariat, NRF and ICSU RCA) of the Regional Office.

5.2 ICSU Regional Committee for Africa

The ICSU Regional Committee for Africa (ICSU RCA) was constituted to represent the five sub-regions (west, central, east and southern Africa, and the Small Island States) and the three languages spoken on the continent (English, French, Portuguese); while also considering gender representation. Added to these statutory members are 3 Ex-Officio members, namely, the ICSU ROA Director, the representative of the ICSU Secretariat in Paris and the representative of the NRF. The ICSU Executive Board (ICSU EB) also has a representative on ICSU RCA.

Following an internal re-structuring of the NRF, Rocky Skeef who represented the NRF on ICSU RCA was replaced by Robert Kriger who took up a new position as Director for International Relations and Cooperation at the NRF. At the 29th ICSU General Assembly held in Maputo, Mozambique in October 2008, Uri Shamir (Israel) was appointed by ICSU EB to represent the Board on ICSU RCA, in replacement of Francis Gudyanga whose term of Office on ICSU EB had just ended. Francis Gudyanga previously represented ICSU EB on ICSU RCA cumulatively with his statutory membership on the Committee. He continues to sit on ICSU RCA as a statutory member while Uri Shamir sits as an Ex-Officio member. The current composition of ICSU RCA is given in annexure at the end of this report (Annex B).

The 2008/09 financial year ended with a new ICSU RCA Chair, Prof Dominic W Makawiti (Kenya) replacing Prof Gabriel Ogunmola (Nigeria).

6 ACTIVITIES

6.1 Implementation of ICSU ROA Science Plans

The activities of ICSU ROA during the 2008/09 financial year focused on implementation of its four published science plans. The preparation of project proposals on Sustainable Energy and on Hazards and Disasters had started during the previous financial year and continued during the year under review. International workshops of experts were organised to launch the implementation of the science plans on Health and Human Well-being and on Global Environmental Change (including Climate Change and Adaptation).

6.1.1 ICSU ROA Projects on Sustainable Energy in sub-Saharan Africa

The Task Teams assigned to prepare detailed proposals for the two projects on Sustainable Energy continued to develop the proposals to incorporate inputs made during a joint ICSU ROA Project Task Teams Meeting in March 2008. The first drafts of the project proposals were submitted to ICSU ROA Secretariat in June 2008 and these have been progressively revised and updated in the course of the year. It is anticipated that the proposals will be finalised by June 2009. A summary of the projects is presented here and the detailed proposals are available at the ICSU ROA Secretariat.

6.1.1.1 Project SE01: Development of energy models and scenarios

The objective of this project is to develop energy models and scenarios with related activities for optimising, effectively managing and planning energy production, distribution and use in sub-Saharan Africa. The project targets setting up a harmonised data system suitable for scenario development and modelling, and will also address human and institutional capacity enhancement in energy modelling. Important outcomes of the project include adequately trained personnel in energy scenario building and modelling; development of energy planning capabilities equipped with suitable analytical tools; and vital decision-making tools to guide development policies.

6.1.1.2 Project SE02: Increase in access to high quality, reliable and affordable energy in a sustainable manner: Renewable Energies – Bio-energies

The bio-energies project is the first part of Project SE02 which is aimed at sustainably increasing access to high quality, reliable and affordable energy in sub-Saharan Africa, especially for the rural population and urban poor. Other projects targeting this objective will be developed as the implementation of the science plan progresses.

The project explores the potential to add economic value to agricultural production in sub-Saharan Africa by using non-food farm products to generate energy. The project consists of three sub-projects:

SE02.1: Electronic library and knowledge network for bio-energies;

SE02.2: Bio-energies technologies – Quality characterisation and adaptation;

SE02.3: Energy efficiency in transport

6.1.2 ICSU ROA Projects on Hazards and Disasters in sub-Saharan Africa

Two projects were proposed on Hazards and Disasters and Task Teams were formed to prepare detailed proposals for the projects. The Task Teams continued the work started during the previous financial year and have made great progress in preparing the detailed project proposals. It is anticipated that the proposals will be finalised by August 2009. A summary of the projects is presented below and the detailed proposals are available at the ICSU ROA Secretariat.

6.1.2.1 Project HD01: Geo-hazards

This project is proposed in the framework of activities of the UN-proclaimed International Year of Planet Earth. In Africa, these activities are coordinated by ICSU ROA and they focus on outreach and research programmes. The research component of the project aims at improving research skills in Africa and in facilitating a coordinated effort by integrating existing disparate research activities on hazards and disasters on the continent. This will be done by strengthening the human and infrastructural capacities of universities and research institutions for disaster preparedness and management. The project also aims at facilitating and strengthening interdisciplinary and international scientific collaboration and networking to promote the sharing of scientific data and information on geohazards, while supporting the participation of young African scientists and researchers in high-level scientific networks. These objectives will be achieved through the following sub-projects based on two major types of geohazards:

HD01.1: Assessing and mitigating seismic hazards;

HD01.2: Characterisation of Africa's active volcanoes for appropriate hazard monitoring, using remote sensing and ground-truthing techniques.

The other types of geo-hazards will be addressed in subsequent projects that will be prepared as the implementation of the science plan progresses.

6.1.2.2 Project HD02: Hydro-meteorological hazards and disasters: vulnerability and resilience

The main objective of this project is to assess the vulnerability of socio-ecological systems of sub-Saharan Africa to hydro-meteorological hazards and disasters, and to propose or develop strategies for improving resilience of the vulnerable communities to these events. The project aims to strengthen the capacities of African countries for disaster planning and management, and for promoting and facilitating transfer of early warning technologies to disaster-prone communities. Essential tools for achieving this objective include the creation and maintenance of a hazards and disasters database which will serve for integrated modelling of multiple events.

The project is divided into three sub-projects covering three of the major hydro-meteorological hazards and disasters affecting the continent:

HD02.1: Drought events in sub-Saharan Africa: case study of the Sahel;

HD02.2: Development of a decision support system for flood management in sub-Saharan Africa: case studies of the Volta and Nile Basins;

HD02.3: Climate change and socio-economic determinants for anthropogenic fires in African savannahs.

6.1.3 International Workshop of Experts in Health and Human Well-being in sub-Saharan Africa

ICSU ROA, in collaboration with the National Research Foundation (NRF), South Africa and other international partners, organized an international workshop of experts in Health and Human Well-being in sub-Saharan Africa in Pretoria, South Africa on 25-28 August 2008. The purpose of the workshop was to identify a few projects to start implementing the science plan on this priority area. At the end of the workshop three projects were proposed. The full proposals for the projects summarised below will be finalised during the 2009/10 financial year.

6.1.3.1 Project WB01: HIV/AIDS and Public Health

This project is aimed at improving the chances of survival and prolonging the life of people living with HIV/AIDS. The project also aims at developing effective strategies to reduce the rate of new infections, including mother to child transmission, and to reduce the chances of opportunistic infections of HIV positive people. The project will assess and catalogue the risks of non-communicable diseases and increase public awareness of these risks and the preventive measures; and will sort to improve the general state of hygiene, especially in densely populated communities. These objectives will be achieved through the implementation of three sub-projects:

- WB01.1: Comparing the physiology and pharmaco-kinetic 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.

6.1.3.2 Project WB02: Modern biomedicine, traditional medicine and indigenous knowledge systems

The purpose of this project is to combine indigenous medical knowledge with modern biomedical sciences to improve healthcare in Africa. An integrated approach will be undertaken to reduce the burden of high impact transmissible diseases such as malaria, tuberculosis, HIV/AIDS and water-borne diseases. The multi- and trans-disciplinary project will cover studies on the epidemiology and pathogenesis of the target diseases, drug resistance patterns, disease diagnostics, discovery and development of new drugs and vaccines, safety evaluation and scientific validation of African traditional remedies, creation of a genetic resource database, and sustainable utilisation of biodiversity. The project will also consider socio-economic and policy aspects of new interventions.

The project will also involve accurate documentation and wide publication of demonstrated success in the use of traditional medicines. Appropriate policy frameworks for the protection of Indigenous Knowledge Systems (IKS) and their Intellectual Property Rights (IPR) will also be developed.

6.1.3.3 Project WB03: Food and nutrition security

This project aims at developing the food supply systems on the continent to ensure availability, affordability and utilisation of safe and nutritionally balanced food, in sufficient quantities to all people at all times. The project is comprised of six 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 (disease control, storage systems and food processing);
- WB03.4: Food safety and quality nutrition;
- WB03.5: Adaptation of agricultural production systems to climate change;
- WB03.6: Improving accessibility to food.

6.1.4 International Workshop of Experts in Global Environmental Change (including Climate Change and Adaptation)

To launch the implementation of its fourth science plan, ICSU ROA, in collaboration with the NRF, organized an international workshop of experts on Global Environmental Change (including Climate Change and Adaptation) in Pretoria, South Africa on 09 – 11 February 2009. The deliberations of the workshop emerged with the following projects, for which full proposals will be finalised during the 2009/10 financial year.

6.1.4.1 Project GC01: The impact of land degradation and biodiversity loss on human well-being in Africa

The main objective of this project is to improve sustainable management of land resources in Africa. This will be achieved through improvement of earth observation systems in order to determine the causes and indicators of biodiversity losses and to document the land cover changes using remotely sensed data. The project seeks to integrate climate research in Africa on land surface changes, ocean temperature and ocean circulation. It also aims at producing harmonised (international) standards for measuring climate change impact on land degradation, documenting biodiversity loss trends in Africa using direct measurements of climatic data in combination with remote sensing data. The project will also investigate the influence of the increase in temperature on the spread of diseases and disease vectors.

6.1.4.2 Project GC02: The Impact of climate change on rainfall and water resources in Africa

The objective of this project is to enhance the understanding of rainfall variability in Africa as influenced by climate change; and to develop strategies for integrated management of water resources in relation to the impact of rainfall and water resource availability for food security and rural development. This project comprises two sub-projects:

- GC02.1: Sustainable adaptation to changes in rainfall patterns for food security in Africa;
- GC02.2: Integrated trans-boundary water resource management in the context of climate change in Africa.

6.1.4.3 Project GC03: Air pollution and health impact in urban areas in Africa

This project aims at developing a network of atmospheric pollution researchers across Africa that will continuously monitor ambient concentrations of harmful substances and assess the impacts of air pollution on people, crops and natural systems. It consists of four sub-projects:

GC03.1: Air pollution assessment in African mega cities. The objective of this sub-project is to assess the air quality of major African cities and conduct case studies on impacts of air pollution on human health and on corrosion of structural materials.

GC03.2: Monitoring and modelling of trans-boundary atmospheric aerosols due to anthropogenic and natural sources in Africa. This sub-project aims at monitoring trans-boundary transportation and deposition of particulate matter and air pollutants in sub-Saharan Africa; and their impacts on climate change, human health and structural materials.

GC03.3: Dust events and related hazards in sub-Saharan Africa. The sub-project aims at building strong research and training institutions in Africa to strengthen human and institutional capacity on the continent, as well as to strengthen the link between scientific research and policy- and decision-making processes.

GC03.4: Ground level ozone in Africa and its impacts on crops, food security and ecosystems. The purpose of this sub-project is to determine the spatial distribution of ozone in Africa and its impacts on crops, food security and ecosystem services.

6.1.4.4 Project GC04: Africa's oceanographic uniqueness

The purpose of this project is develop appropriate technologies for sustainable exploitation of the resources and dynamics of the two oceans that meet at the southern tip of the continent, a feature which is unique to Africa. The project aims at establishing a framework for collaboration among various disciplines related to African oceanography; identifying gaps on climate data in Africa; developing cost-effective and affordable monitoring devices; monitoring productivity of African oceans and adapting it to climate change; assessing the effects of coastal erosion and frequency of storms and sea-level rise on coastal communities; and assessing the vulnerability of African coastal ecologies, based on ground-measured data, satellite information and models. These objectives will be achieved through the following sub-projects:

GC04.1: Monitoring strategies for adaptive management and governance within the coastal zones and large marine ecosystems. This sub-project focuses on establishing a long-term scientific monitoring system that includes partnerships between Africa, EU countries and other countries with special expertise in appropriate large marine ecosystems.

GC04.2: Coastal erosion assessment and abatement modalities along sub-Saharan Africa. This sub-project is aimed at developing proper diagnosis of coastal erosion along critical and oceanographic-distinct regions of the coastal states of Africa using first-order principles of surf zone flow and beach profile interaction on the short term, and historical chart analyses of coastline changes, on the long term.

6.1.4.5 Project GC05: Resilience of food supply systems in Africa

The objectives and activities envisaged in this project are the same as those in project WB03 (food and nutrition security). This is a cross-cutting project that addresses issues raised in the two science plans, namely, Health and Human well-being; and Global Environmental Change, (including Climate Change and Adaptation).

6.2 African Diaspora Project

The implementation of the joint ICSU ROA/NRF African Diaspora project started in January 2008 through a contract awarded to AfricaRecruit after a stringent selection procedure. This first phase of the project was scheduled to be completed in July 2008.

AfricaRecruit submitted its final report to the Project Steering Committee (PSC) in September 2008. The PSC evaluated the report making reference to the project Terms of Reference (ToR) and the work plan submitted by AfricaRecruit, and concluded that the report was unacceptable. AfricaRecruit was duly informed of the opinion of the PSC and that they were expected to submit a more comprehensive report for the project. AfricaRecruit is yet to respond to the queries of the PSC. The last instalment on the contract has been withheld until a satisfactory project report is submitted by the consultants.

ICSU ROA and the Centre for African Renaissance Studies (CARS) at the University of South Africa in Pretoria have agreed, in principle, to partner for the second phase of the project. Other partners for Phase II of the African Diaspora project are the AU/NEPAD, UNECA and South Africa's Department of Science and Technology (DST). An agreement with these partners, on how to proceed with the project will be formalised and the project continued during the 2009/10 financial year.

6.3 29th ICSU General Assembly

As a tradition, ICSU General Assemblies are normally preceded by a one-day forum to discuss science and technology in the host country. The 29th General Assembly of ICSU was the first ever to be held in sub-Saharan Africa. It was thus considered by ICSU ROA and ICSU RCA as an "all Africa event". It was therefore deemed necessary to organise the event in a special way. In this regard, ICSU ROA, with the support of its partners, and in collaboration with the Ministry of Science and Technology, Mozambique, and the Scientific Research Association of Mozambique (AICIMO), organised pre-General Assembly (pre-GA) workshops in the provinces of Mozambique, a one-day symposium in Maputo and a half-day dialogue among African scientists and policy- and decision-makers, including their international partners.

The organization of pre-GA workshops was an important innovation to the traditional practice in organising ICSU GAs. These workshops, held in various provinces of Mozambique on 13–17 October 2008, were developed on six themes covering the four thematic priorities of ICSU ROA, and two other topics proposed by the Local Organising Committee. The purpose of the workshops was to expose international scientists to the Mozambican reality, and to expose young Mozambican scientists to international and experienced scientists for the purpose of initiating the process of identifying research needs in the country. The workshops were attended by more than 60 international scientists in various disciplines, as well as by representatives from government agencies, universities, research institutions, NGOs, the private sector and over 500 Mozambican young scientists.

The one-day symposium was held at the Joaquim Chissano International Conference Centre in Maputo on 20 October 2008 on the theme: "Science, Technology and Innovation (STI) in

Africa. The deliberations at the symposium were proceeded by an interactive dialogue at the same venue the following day. These events brought together more than 800 participants from all over the world, including Nobel Prize laureates, African Ministers of science and technology (or their representatives), and representatives of intergovernmental bodies, regional economic communities, non-governmental organizations (NGOs), United Nations (UN) agencies and the private sector. During the interactive dialogue, scientists and policy- and decision-makers (African ministers, representatives of intergovernmental bodies, NGOs and UN agencies) discussed in greater detail some of the issues raised during the preceding one-day symposium on SIT in Africa.

The Associated Events of the 29th ICSU General Assembly had a profound impact on science and technology in Mozambique as evidenced by the post-GA follow-up activities such as the creation of the Mozambican Academy of Science which was launched on 20 February 2009; and the expressed interest in establishing a bio-technological centre in the country, as well as the mathematical centre and an institute to train experts on water resources. ICSU ROA is assisting in this regard by linking the Mozambican government with world experts in each of these initiatives.

A full report of the Associated Events of the 29th ICSU General Assembly has been published by ICSU ROA and is available at www.icsu-africa.org.

6.4 International Year of Planet Earth

Activities of the UN-proclaimed International Year of Planet Earth (IYPE) in Africa are coordinated by ICSU ROA. The IYPE was officially launched in Africa on 08 – 09 May 2008 in Arusha, Tanzania. This event was presided over by the President of the United Republic of Tanzania, His Excellency Jakaya Mrisho Kikwete. The Director General of UNESCO, Mr Koïchiro Matsuura, attended the launch event. The launching was attended by about 1000 people including school children, university students and scientists from African countries that have established IYPE National Committees (NCs). The programme included a scientific conference as well as exhibitions and cultural events. At the conference Sospeter Muhongo gave a keynote presentation on the role of STI for sustainable livelihood in Africa. ICSU ROA also mounted a well-attended exhibition managed by Kathy Potgieter. The booth was visited by the President of Tanzania and the Director General of UNESCO; and many conference participants.

Through the support from ICSU ROA, IYPE National Committees (NCs) were established in 26 African countries. The NCs are coordinating the implementation of IYPE activities in their respective countries. ICSU ROA is organising a meeting of the Science Implementation Team (SIT) Leaders, NC Chairs and ICSU ROA Project Leaders in June 2009 to discuss the progress being made in the implementation of the 10 broad science themes of the IYPE in Africa. The workshop will also provide an opportunity for the ICSU ROA Project/Task Team leaders to interact with the IYPE NCs and SIT leaders and harmonise the ICSU ROA projects with the IYPE scientific objectives where relevant.

An important legacy of the IYPE is the special publication of 10 volumes, one on each of the 10 science themes. African scientists have been invited to contribute chapters or parts thereof in these legacy publications.

Another aspect of the IYPE is an investment in the future generation of scientists. In this regard, a World Congress of Young Earth Scientists for Society (YES) will be organised at the University of Geosciences in Beijing, China on 25 – 28 October 2009. Sospeter Muhongo is a member of the YES Senior Advisors Council and has been invited to talk at the Academic pathways roundtable session titled “Issues facing global geoscience education and research”.

6.5 Capacity Building

The most prominent capacity building activity of ICSU ROA during the 2008/09 financial year was the training workshop on 25-28 February 2009 in Nairobi, Kenya. The workshop was organised in partnership with UNECA and the AU Scientific Technical and Research Commission (AU-STRC), in collaboration with the Kenya National Council for Science and Technology (NCST). The workshop was the first of its kind and brought together more than 50 economists and scientists from the continent and the Diaspora. The workshop initiative was a recommendation of the “Science with Africa Conference” which was held on 03 - 07 March 2008 in Addis Ababa, Ethiopia.

Other capacity building activities of ICSU ROA have been through the outreach programmes of the IYPE as well as through workshops such as the field workshops organised as Associated Events of the 29th ICSU General Assembly in October 2008 in Mozambique.

ICSU ROA has also established a partnership with the Ford Programme – Global Education Initiative (USA) to promote e-learning and IT application kits at lower levels of education. Another partnership was established with INQUA to support young and emerging African scientists in all areas of Quaternary Research through a committed grants programme for attendance of training workshops and meetings.

6.6 Publications and General Communication

6.6.1 ICSU ROA Book

An important legacy of the 29th ICSU General Assembly is the production of the book titled, **“Science, Technology and Innovation for Socio-Economic Development: Success stories from Africa.”** The book was launched during the one-day symposium at the 29th ICSU GA. It emphasizes the importance of STI for the African continent. The purpose of the book is to promote science education and research in Africa, and to showcase the continent’s contribution to the development of science and technology in the world. It deals with science and technology innovations as applied in solving some developmental and societal challenges that Africa faces in the fields of health, the environment, and sustainability of energy resources.

The book is edited by Sospeter Muhongo, Francis Gudyanga, Achuo Enow and Daniel Nyanganyura. It is composed of 11 chapters arranged in 4 sections dealing with Health; ICT and Mathematics; Environment; and Energy, respectively. All contributions to the book come from renowned African scientists.

6.6.2 Publicity Flyers

ICSU ROA has published a flyer that summarises the projects that have so far been, or are being developed from its four science plans. The flyer was published in October 2008 and by the end of the financial year close to 4000 copies had been distributed world-wide during scientific, technical and policy meetings, workshops and conferences attended by staff of the Regional Office. The production and distribution of these flyers has attracted great attention and many African and international scientists have expressed interest to participate in the implementation of the ICSU ROA projects.

6.6.3 Workshops Reports

During the 2008/09 financial year ICSU ROA organised several workshops and conferences. The most important ones include: (i) the International Workshop of Experts in Health and Human Well-being in Africa, on 25 – 27 August 2008 in Pretoria, South Africa; (ii) the Associated Events of the 29th ICSU General Assembly on 13 – 24 October 2008 in Maputo, Mozambique; and (iii) the International Workshop of Experts in Global Environmental Change (including Climate Change and Adaptation) in sub-Saharan Africa, on 09 – 11 February 2009 in Pretoria, South Africa. The proceedings of these events have been published and widely distributed electronically. Soft copies of these documents are available at www.icsu-africa.org. Hard copies are available at the ICSU ROA Secretariat on request.

6.6.4 General Communication

ICSU ROA reaches out to the general public, especially to the international scientific community, with information through publicity on its website, electronic mailing, by distribution of printed documents, as well as through oral presentations at meetings. During the 2008/09 financial year, the staff of ICSU ROA received invitations to many regional (Africa) and international conferences where they delivered lectures on S&T.

6.6.4.1 Exhibitions

ICSU ROA also disseminates information during scientific exhibitions. During the 2008/09 financial year ICSU ROA mounted an exhibition booth at the IYPE Africa launch event in Arusha (see section 6.4). ICSU ROA also mounted an exhibition booth with the NRF during the 29th ICSU General Assembly in Mozambique. In both events, ICSU ROA displayed and distributed its science plans and information flyers, as well as other publications of the Regional Office.

6.6.4.2 ICSU ROA Website (www.icsu-africa.org)

ICSU ROA has a fully operational website which is used to publicise general information about activities carried out in Africa by the ICSU family and its partners. Information gathered by the Regional Office from various sources and of relevance to the African scientific community is also made available on the website. These include important announcements of events, grants and awards; and calls for participation in international projects and programmes, or for nominations to special committees of ICSU and other international scientific bodies.

The website has also been used for world-wide dissemination of the published proceedings of workshops and conferences organised by ICSU ROA. Reports of important meetings of other scientific organisations, intergovernmental bodies, and Non-Governmental Organisations (NGOs) are also published on the ICSU ROA website.

6.6.4.3 Electronic mailing

ICSU ROA reaches out to the international scientific community by electronic mailing. For this, the Regional Office has developed an extensive and a continuously growing mailing list covering several networks and disciplines throughout the continent and beyond. The Regional Office also gathers information through electronic mailing from its numerous contacts, including its partners and networks from around the world.

6.6.4.4 Printed documents

ICSU ROA routinely displays printed documents at all local and international meetings attended by its staff. Printed information on the activities of other institutions and organisations is also collected from these meetings.

ICSU ROA staff attending meetings, workshops and conferences interact with other participants in oral discussions, in the course of which much information is exchanged.

6.7 Scientific Collaboration and Networking

6.7.1 Activities of the ICSU family in Africa

During the 2008/09 financial year, ICSU ROA supported several activities and initiatives of the ICSU family in Africa. A few examples are outlined below:

6.7.1.1 ICSU Grants Programmes

ICSU ROA supported three applications for the 2008 call for ICSU Grants Programme, of which two were approved and granted funding of €30,000 each: (i) Mapping Geo-Unions to the ICSU Framework for Science for Health and Wellbeing, led by ISPRS with the participation of IGU, INQUA, IUGG, IUGS and IUSS and (ii) World Data Centre in Africa for Biodiversity and Human Health, led by WDC with the participation of South Africa and CODATA. Both projects are going on smoothly and the role of ICSU ROA in each of these projects is stated in the project proposals.

ICSU ROA assisted the ISPRS to organise a workshop on “Science for Health and Well-being (SHWB)” in Pretoria, South Africa on 20 – 22 January 2009. The workshop brought together members of the ICSU Geo-Unions Joint Science Programme Team (JSPT) for Health and African regional representatives of the Geo-Unions to formulate a strategy for mapping the science content of the Geo-Unions to the ICSU systems approach to health and well-being in the urban environment, with particular attention to African cities. The report of the mapping exercise will be submitted to the SHWB planning Committee of ICSU and subsequently at the 33rd International symposium on Remote Sensing of Environment in Stressa, Italy on 04- 08 May 2009. Achuo Enow represents ICSU ROA on the JSPT.

For the 2009 grants programme ICSU ROA supported six applications from the International Union of Biochemistry and Molecular Biology (IUBMB), the International Union of Biological Sciences (IUBS), the International Union of Geological Sciences (IUGS), the International Union of Pure and Applied Physics (IUPAP), the International Union of Toxicology (IUTOX) and the International Union of Pharmacology (IUPHAR). Two of these applications (IUPHAR and IUTOX) were successful.

The projects covered by the grants for the two successful applications are part of the overall implementation of the ICSU ROA Science Plan on Health and Human Well-being.

6.7.1.2 International Union of Toxicology (IUTOX)

ICSU ROA supported the bid from the Toxicology Society of South Africa (TOXSA) to host the 7th Congress of Toxicology in Developing Countries (7CTDC). TOXSA is the South African affiliate to IUTOX. The Congress of Toxicology in Developing Countries (CTDC) is a series of congresses held once every 3 years. The 7th, which will be held in Sun City, South Africa on 6-10 September 2009, is the first in the series to be held in sub-Saharan Africa. ICSU ROA will be fully involved in the organisation of the Congress. Achuo Enow sits on the Conference Organising Committee while Sospeter Muhongo sits on the International Advisory Committee.

6.7.1.3 International Union of Pharmacology (IUPHAR)

ICSU ROA supported the bid of the South African Society for Basic and Clinical Pharmacology (SASBCP) to host the IUPHAR 17th World Congress of Basic and Clinical Pharmacology in 2014. The bid was successful and the Congress will be held in Cape Town on 13 -18 July 2014.

6.7.1.4 International Association of Seismology and Physics of the Earth's Interior (IASPEI)

ICSU ROA supported a bid by the Council for Geosciences, South Africa, to host the General Assembly of IASPEI in 2009. The General Assembly was held in Cape Town on 11 – 16 January 2009.

At the IASPEI General Assembly, members of the ICSU ROA Geohazards Project Task Teams and other African seismologists held an important side meeting with Prof Domenico Giardini, member of the Global Earthquake Model (GEM) Steering Committee. The purpose of the meeting was to discuss the convergence between the ICSU ROA geohazards sub-project on earthquake hazards and the GEM partnership. The outcome of this side meeting was the establishment of a strategy to acquire funds from the GEM partnership for implementation of the ICSU ROA Geohazards sub-Project HD01.1: "Assessing and Mitigating Seismic Hazards in Africa".

6.7.1.5 International Union of Food Science and Technology (IUFoST)

ICSU ROA supported the South African Association for Food Science and Technology (SAAFoST) in its bid to host the 15th World Congress of Food Science and Technology in 2010. The Congress will be held in Cape Town on 22 – 26 August 2010 under the auspices of the International Union of Food Science and Technology (IUFoST).

This activity is part of the overall implementation of the ICSU ROA Science Plan on Health and Human Well-being.

6.7.1.6 International Union of Geological Societies (IUGS)

At the 33rd Congress of IUGS held in Oslo, Norway on 06 – 14 August 2008, a decision was reached to hold the 35th International Geological Congress (2016) in Cape Town, South Africa. ICSU ROA played an important role in enabling the Council for Geosciences and the Geological Society of South Africa (GSSA) to win the bid against other strong rivals (India and Morocco).

6.7.1.7 International Union of Geodesy and Geophysics (IUGG)

The International Union of Geodesy and Geophysics (IUGG) is partnering with ICSU ROA in the implementation of its projects on hazards and disasters. IUGG has promised a grant of US\$10,000 for the sub-project on “Enhancement of geohazard research capacity in sub-Saharan Africa”. This is a cross-cutting sub-project of the Geohazards project (HD01). A similar amount (US\$10,000) was also promised for the project on “Dust events and impacts in Africa” which is a sub-project of the Hydro-meteorological hazards and disasters project.

6.7.1.8 International Union for Quaternary Research (INQUA)

ICSU ROA and INQUA established a partnership to support young and emerging Africa scientists in all areas of Quaternary Research. Through this initiative INQUA is committed to provide grants as seed funding to facilitate workshops and meetings, through which young and emerging African Quaternary scientists can be supported to develop projects that attract further funding. The initiative encourages requests to support projects that fall within the interest area of INQUA as well as address the ICSU ROA priority issues described in its 4 science plans.

ICSU ROA is also working with INQUA towards the creation of a regional branch in West Africa (WAQUA). This initiative is coordinated by Mike Akaegbobi (University of Ibadan, Nigeria), with the support of Margaret Avery (INQUA Vice President) and Achuo Enow (ICSU ROA). A workshop to this effect has been planned to take place in Ibadan on 26 – 30 October 2009. INQUA has provided seed funding for the workshop. A similar regional branch of INQUA has already been established in East Africa (EAQUA).

6.7.1.9 International Geosphere - Biosphere Programme (IGBP)

ICSU ROA was actively involved in the 4th IGBP Congress that was held in Cape Town, South Africa on 05-09 May 2008. One of the main objectives of the congress was to develop ways for IGBP to apply Earth Systems Science and improve IGBP relevance to civil society, the private sector and the policy community.

ICSU ROA played important roles in the organization of this Congress. Sospeter Muhongo was a member of the Local Organising Committee and he assisted in the identification of African speakers and attendees to the Congress. Achuo Enow was a co-convenor of the workshop on, “Interactions between Global Environmental Change, Food System activities and Food Security in Africa.” This workshop was organized in collaboration with GECAFS, COMESA and FANRPAN.

The congress was attended by 380 delegates from 65 countries covering all geographic regions of the world. ICSU ROA was represented at the congress by Bongani Mahlalela and Achuo Enow while Francis Gudyanga represented ICSU RCA.

6.7.1.10 International Network for the Availability of Scientific Publications (INASP)

ICSU ROA is collaborating with the International Network for the Availability of Scientific Publications (INASP) to promote the production of, and accessibility to scientific publications by African researchers. The Director of ICSU ROA held a meeting with the Executive Director and the Director of Programmes of INASP on 02 May 2008 in Johannesburg, South Africa, to chart out strategies of increasing the number of scientific publications produced in Africa; and how to facilitate access by African scientists and researchers, and especially students, to valuable scientific information published in learned international journals.

6.7.1.11 ICSU National Secretariat, South Africa (ICSU SA)

ICSU ROA continued to lend regular support to the South African National Member of ICSU (ICSU SA) in the organisation of most of its activities. For example, ICSU ROA attended the Annual workshops of the Chairs of ICSU SA National Committees in May 2008 and February 2009. These workshops offered a unique opportunity for the ICSU SA National Committee Chairs to exchange views with, and seek advice and guidance from ICSU ROA.

ICSU ROA has also contributed to facilitating ICSU SA's Africa outreach initiatives. For example, with the support of ICSU ROA, the South African Society for Basic and Clinical Pharmacology (SASBCP) has secured seed funding from IUPHAR and from the ICSU Secretariat (Paris) to establish an African Research Training Initiative in Pharmacology. SASBCP is South Africa's affiliating body to IUPHAR.

6.7.2 Activities with other Partners and Networks

During the 2008/09 financial year, ICSU ROA continued to work together with its traditional partners while also establishing new partnerships and networks. A few examples of such activities are presented below.

6.7.2.1 Interlink Project

The Inter-link project is in its second and last year. One of the major events of the project that took place during the 2008/09 financial year was the Europe-Africa workshop in Brussels, Belgium on 06-07 November 2008. The purpose of the workshop was to bring together African environmental researchers to brain-storm on Africa's environment research priorities and propose to the EU, research themes of interest to Africa, that could be included in future calls of the 7th Framework Programme. ICSU ROA's four science plans, particularly the ones on Global Environmental Change (including Climate Change and Adaptation) and on Natural and Human-induced Hazards and Disasters, were important resource documents for the brain-storming exercise. ICSU ROA was represented at the meeting by Achuo Enow and Daniel Nyanganyura.

African partners in the Interlink consortium have established a network of African environmental scientists. A workshop has been planned for July 2009 to bring together

members of the network to brain-storm on the preparation of a project proposal to respond to the next EU FP7 call on the Environment theme.

6.7.2.2 FANRPAN

ICSU ROA has continued to partner with FANRPAN, particularly in leading the implementation of the GECAFS-SAF project on food security in Southern Africa. As member of the Project Steering Committee, ICSU ROA joined FANRPAN to approach the NRF and DST for negotiations on hosting the GECAFS-SAF project coordinator.

ICSU ROA also attended the FANRPAN stakeholders meeting in Lilongwe, Malawi on 01 -07 September 2008 and contributed in panel discussions and in drafting the resolutions of the meeting. Achuo Enow represented ICSU ROA at the meeting.

6.7.2.3 THORPEX-Africa

ICSU ROA established a new partnership with the African component of “**The Observatory system Research and Predictability Experiment (THORPEX)**” during the 2008/09 financial year. THORPEX is a World Meteorological Organisation/World Weather Research Programme (WMO/WWRP) project which aims to mitigate the adverse effects of high-impact weather events by improving observing systems and their assimilation in models, predictability and information support to the users. To respond to the specific needs of the continent, an African plan for the WWRP/THORPEX project has been proposed by the THORPEX African Regional Committee (THORPEX-Africa).

ICSU ROA participated in the planning workshop of WWRP/THORPEX Africa which was held in Pretoria, South Africa on 30 June – 03 July 2008. The purpose of the workshop was to complete the draft of the African Implementation Plan of the WWRP/THORPEX project. Achuo Enow, representing ICSU ROA at the workshop, presented the ICSU ROA science plans and discussed ways of collaboration between ICSU ROA and THORPEX Africa to drive the science of climate change on the continent.

ICSU ROA has been invited to partner with THORPEX-Africa, WMO/WWRP/THORPEX and the THORPEX Interactive Grand Model Ensemble-based Limited Area Modelling Systems (TIGGE-LAM) on a project proposal in response to a call from the ACP Science and Technology program. The proposed project is on “Building a Multidisciplinary Network and Enhanced Research Capacity to Increase the Resilience of Africa’s Development to Climate Extremes and Other High-Impact Weather Events.” The project will involve African Regional Specialized Meteorological Centres and meteorological services in West, Central, East and Southern Africa; and other European institutes involved in TIGGE-LAMs working groups. A significant component of the project will be dedicated to training (users, fore-casters, researchers) and skills development in order to improve predictability of high-impact weather in Africa. The role of ICSU ROA is to foster research collaboration and partnership, taking advantage of its existing network; and to leverage with its relevant projects to THORPEX-Africa.

6.7.2.4 African Monsoon Multi-disciplinary Analysis (AMMA) Project

ICSU ROA recently established a new partnership with the AMMA Project. Representatives of the AMMA Project attended and made very useful inputs at the International Workshop of

Experts in Global Environmental Change (including Climate Change and Adaptation) which was organised by ICSU ROA in Pretoria, South Africa on 09 – 11 February 2009.

The AMMA project team and staff of the ICSU ROA Secretariat held an important side meeting to discuss areas of collaboration. ICSU ROA was invited to the AMMA – Africa meeting held in Ouagadougou, Burkina Faso on 25 – 27 February 2009. Daniel Nyanganyura represented ICSU ROA at the meeting and was invited to give a keynote presentation on ICSU ROA projects.

6.7.2.5 Electronic Geophysical Year (eGY)

The Electronic Geophysical Year (eGY) is a voluntary organization and collaboration whose purpose is to focus effort on a 21st Century e-Science approach to issues of data stewardship (open access, preservation, discovery and rescue of data; capacity building; and outreach). The initiative is intended to achieve a major step forward in geoscience capability, knowledge, and usage throughout the world for the benefit of humanity by accelerating the adoption of modern and visionary practices for managing and sharing data and information.

The African component of the initiative (eGY-Africa) is particularly concerned with improving internet capabilities in African universities and institutions; and reducing the digital divide for the scientific community in Africa. ICSU ROA is committed to this course and is collaborating with eGY to achieve its goals.

The eGY activities focus on organising workshops and meetings to stimulate and provide a focus for bottom-up action by scientific communities; promote communication and networking among scientists, educators and policy makers; and establish links between the international scientific community and funding bodies.

Daniel Nyanganyura represents ICSU ROA on the eGY-Africa Committee.

6.8 Strategic Partnerships

6.8.1 African Development Bank

ICSU ROA is in the initial stages of establishing a working relationship with the African Development Bank (AfDB). AfDB is supporting several activities on the continent that address some of the issues raised in the ICSU ROA science plans. In particular, AfDB is committed to promoting capacity building, especially among the youth. The AfDB's strategy for Higher Education, Science and Technology in Africa aims at reforming and transforming higher education systems in Africa to energize and unlock the minds for brighter economic prospects. Key pre-occupations of the AfDB in this regard include (i) strengthening national and regional centres of excellence in the areas of agriculture and livestock, health sciences and health delivery support services, engineering, business enterprise, training of teachers and educational managers; (ii) energy; (iii) building and/or rehabilitating the existing science and technology infrastructure, including tertiary education institutions; and (iv) linking higher education, science and technology to the productive sector.

AfDB took active part in the one-day symposium on STI in Africa during the 29th ICSU General Assembly in Mozambique in October 2008. Abdul B Kamara who represented the

AfDB at the symposium and the dialogue that followed, made valuable contributions on how to promote STI for socio-economic development in Africa.

6.8.2 European Science Foundation

A partnership was established between ICSU, the European Science Foundation (ESF), the Netherlands Academy of Sciences (KNAW) and the Network of African Science Academies (NASAC) to organise a series of Frontier Research Conferences alternately between Africa and Europe. Funding for this initiative is provided mainly by ESF and ICSU. The role of ICSU in implementing the activities of the partnership is led by its Regional Office for Africa.

The first in this series of Conferences was scheduled to hold in Cape Town on 04 – 09 April 2009, on the theme: “Infectious Diseases: From Basic to Translational Research”. ICSU ROA, with the support of ICSU RCA, facilitated the identification of the African Conference co-Chair, Prof Iqbal Parker (South Africa). The European co-Chair of the Conference is Prof Monique Capron (France).

These high-level science conferences have the support of the Royal Society (UK), the British Academy, the Royal Swedish Academy of Sciences, the Institute of France Academy of Sciences, the Swiss National Science Foundation, and other European institutions.

A call for registration to the Conference received a huge response from African and European scientists. It is estimated that the Conference will be attended by more than 100 delegates from the two continents.

6.8.3 International Foundation for Science

ICSU ROA has maintained a good working relationship with the International Foundation for Science (IFS). IFS took active part in the one-day symposium on STI in Africa during the 29th ICSU General Assembly in Mozambique in October 2008. IFS also provided financial assistance to ICSU ROA to sponsor former IFS grantees to attend the 29th ICSU GA and its Associated Events.

6.8.4 Royal Society (UK)

The Royal Society has continued to support ICSU activities in Africa, particularly through the payment of Annual ICSU Membership dues for some African National Members, and annual subscription fees of African professional societies affiliated to ICSU Unions. Details of the contributions paid for 2009 (during the 2008/09 financial year) are shown in Tables 1 and 2.

6.8.5 Swedish International Development Agency (SIDA)

ICSU ROA has strengthened its collaboration with the Swedish International Development Agency (SIDA) through a series of dialogues that have resulted in a strong buy-in of ICSU ROA projects by SIDA. As an outcome of this, SIDA supported the organisation of the 29th ICSU General Assembly and its Associated Events by providing ICSU ROA with the sum of US\$223,216 to facilitate the participation of African delegates not supported by the ICSU Secretariat in Paris. The funds were also used to invite 11 African science and technology ministers and/or their representatives, and heads of ICSU ROA’s partner organisations on the continent. SIDA has also pledged support for the ICSU ROA projects.

Table 1: Royal Society support of African membership to ICSU family Bodies (2009)

	ICSU Body	Country	Affiliating organisation/institution	Amount
1	IGBP	Botswana	Botswana Global Environmental Change Committee	€ 530
2	IGBP	Cameroon	IGBP National committee	€ 530
3	IGBP	DR Congo	IGBP-IHDP/RD-Congo Committee	€ 530
4	IGBP	Kenya	Kenya National Academy of Arts & Science	€ 530
5	INQUA	East Africa	Eastern African Quaternary Research Association	€ 508
6	IUGG	DR Congo	Centre de Recherche en Geophysique, DRC	\$1750
7	IUGG	Ghana	IUGG-Ghana	\$1750
8	IUPS	Nigeria	Physiological Society of Nigeria	222\$
9	IUFoST	Benin	International Centre for Applied Research in Food and Nutrition, Benin	\$350
10	IUFoST	Ghana	Ghana Institute of Nutrition and Food Technology	\$350
11	IUFoST	Kenya	Kenya Union of Food Science and Technology	\$350

Table 2: Royal Society payment of ICSU African National Membership dues for 2009

	Country	Affiliating organisation/institution	Amount
1	Ethiopia	Ethiopian Science and Technology Agency	€ 1000
2	Kenya	Kenya National Academy of Arts & Science	€ 1000
3	Malawi	National Research Council of Malawi	€ 1000
4	Nigeria	Nigerian Academy of Sciences	€ 1000
5	Mozambique	Scientific Research Association of Mozambique (AICIMO)	€ 1000

6.8.6 German Academic Exchange Service (DAAD)

The German Academic Exchange Service (DAAD) has remained a strong partner of ICSU ROA and has continued to provide financial support to ICSU ROA activities. DAAD sponsored the participation of five of its alumni at the International Workshop of Experts in Health and Human Well-being in Pretoria, South Africa on 25 -27 August 2008; as well as the participation of Dominic Makawiti (ICSU RCA) at the 29th ICSU General Assembly in Mozambique.

6.8.7 German Research Foundation (DFG)

A new partnership is in the making between ICSU ROA and the German Research Foundation (DFG). DFG is the ICSU National Member for Germany. On 26 February 2009, Sospeter Muhongo held a long and fruitful discussion with Christoph Mühlberg from the DFG on the possibilities for the DFG to provide ICSU ROA with financial support to implement the projects developed from its 4 science plans.

6.8.8 USA National Academies

ICSU ROA has approached the National Academies of the United States of America (USA) for establishing a working partnership. The USA National Academies invited Sospeter Muhongo to attend its annual meeting (16-17 April 2008) where he gave a presentation on the 4 ICSU ROA science plans. The meeting was also used to chart out possible ways of collaboration between African and American scientists in the implementation of the ICSU ROA science plans. The opportunity was also used to introduce ICSU ROA's science plans to the US National Science Foundation (NSF). In both cases, the response was very positive and the American scientists and their institutions are willing to collaborate with ICSU ROA.

6.8.9 Japan International Cooperation Agency (JICA)

ICSU ROA has approached the Japan International Cooperation Agency (JICA) for partnership in implementing the projects developed from its four science plans. JICA has informally indicated its willingness to contribute to the implementation of ICSU ROA projects, provided ICSU ROA finds Japanese research institutions to partner with. ICSU ROA is working on this initiative.

6.8.10 Other New Partnerships

ICSU ROA has approached new potential partners. These new partnerships are all aimed at collaboration in the implementation of the ICSU ROA projects. In the 2008/09 financial year ICSU ROA has approached the following potential partners:

- The Commonwealth Foundation;
- The Nordic Development Fund;
- The United States Agency for International Development (USAID); and
- The Research Council of Norway (RCN).

6.9 Interaction with Intergovernmental Bodies

In the 2008/09 financial year, ICSU ROA continued interacting with national government institutions as well as intergovernmental bodies to ensure that science is integrated into policy development and that relevant policies and decision-making processes take into account both scientific knowledge and the needs of science. Some activities carried out in this endeavour during the year under review are highlighted below.

6.9.1 African Union (AU)

The African Union (AU) is an important strategic partner of ICSU ROA and the two organisations are involved in several joint ventures. The AU Commission recently created the African Science and Technology Cluster composed of AU/NEPAD, UNECA, UNESCO and ICSU ROA. The inaugural meeting of the cluster was held in Addis Ababa, Ethiopia on 18 July 2008.

ICSU ROA joined the AU Scientific, Technical and Research Commission (AU-STRC) to organise a workshop on Energy Technology policy in Pretoria, South Africa on 12 – 14 February 2009. Francis Gudyanga was invited to open the workshop with a keynote lecture. Sospeter Muhongo officiated at the opening and closing ceremonies of the workshop.

ICSU ROA was involved in organising the meeting on Technology Planning and Technological Governance in Africa. This meeting, initiated by the AU Commission, was held in Nairobi Kenya on 24 - 27 February 2009.

ICSU ROA is also collaborating with the AU, UNECA, and the government of South Africa (DST and NRF) to organise a workshop on “Commercialisation of Research and Development in Africa: Challenges and Opportunities”. The workshop was scheduled to take place in Pretoria, South Africa on 13 -15 July 2009.

ICSU ROA has been nominated as a member of the Advisory Committee for the African Union Scientific Award Programme. The Advisory Committee is the supreme body of the Awards Programme and is chaired by His Excellency, the Commissioner of Human Resources, Science and Technology. Sospeter Muhongo sits on the Steering Committee of the African Union awards of science and technology whose prime mission is to promote the development of science and technology on the continent.

6.9.2 United Nations Economic Commission for Africa (UNECA)

ICSU ROA has continued to work closely with UNECA during the 2008/09 financial year. UNECA was invited to the Associated Events of the 29th ICSU General Assembly in October 2008. Miss Aida Opoku-Mensa, Director of the ICT, Science and Technology Division (ISTD) at UNECA, was very resourceful and made very valuable contributions during the symposium and dialogue on Science, Technology and Innovation in Africa.

ICSU ROA has been invited to take part in the first meeting of the Committee on Development Information, Science and Technology (CODIST-I) organised by UNECA on 28 April – 01 May 2009 in Addis Ababa, Ethiopia. At this meeting, Sospeter Muhongo will deliver a keynote lecture on “Challenges and Opportunities for Science, Technology and Innovation in the Changing Global Economy”. A scientific exhibition has been organised by UNECA in conjunction with the CODIST-I meeting on 27 – 30 April 2009. ICSU ROA will participate in the exhibition. The ICSU ROA exhibition booth will be manned by Daniel Nyanganyura and Bongani Mahlalela.

6.9.3 UNESCO

UNESCO Regional Office in Nairobi continues to collaborate very closely with ICSU ROA and provides financial support to many of ICSU ROA activities. For example, UNESCO provided the sum of US\$ 6,000 to support the organisation of the International Workshop of Experts in Health and Human Well-being which was organised by ICSU ROA in August 2008. The same amount was provided to support the organisation of the International Workshop of Experts in Global Environmental Change (including Climate Change and Adaptation), held in Pretoria, South Africa on 09 – 11 February 2009.

ICSU ROA is also very involved in activities organised by UNESCO. Sospeter Muhongo was invited to the African conference on Biotechnology in Tripoli, Libya on 22-24 June 2008

organised by UNESCO. At the Conference he gave a keynote presentation on, “challenges for scientific research in Africa.” He is also invited to sit on the Organizing Committee of UNESCO’s conference in Dakar, Senegal (10-13 November 2008) on the theme, “African Higher Education: the new dynamics of higher education in Africa.”

ICSU ROA will join UNESCO and ANSTI in organising the Third African Regional Conference of Vice Chancellors, Provosts and Deans of Science, Engineering and Technology (COVIDSET 2009) in Kampala, Uganda on 23 – 26 November 2009.

6.9.4 Regional Economic Communities

ICSU ROA has continued to work with the Regional Economic Communities (RECs) on the continent to promote evidence-based policy- and decision-making. During the 2008/09 financial year, ICSU ROA participated in some activities organised by the RECs. For example, ICSU ROA was invited to take part in a large-scale web-based survey into the state of public science in the 14 countries of the Southern Africa Development Community (SADC). The purpose of the survey was to examine the extent to which researchers in the SADC countries participate in knowledge production and dissemination activities, as well as the unique nature and challenges of their research environments.

The Director of ICSU ROA has also been invited to deliver a lecture on “the role of ICSU in fostering regional networks” at the SADC Region Workshop for National Academies and Universities organised by the Southern African Regional University Association (SARUA) on 5-6 May 2009 in Pretoria, South Africa. The purpose of the workshop is to explore ways in which SADC can strengthen the role of universities and scholars in the national and international arena in terms of linkages with national science and technology organizations, SADC, ICSU, and AU/NEPAD, amongst other organizations; strengthen existing national academies, and create new ones or establish networks to cater for countries without capabilities to establish academies; and strengthen the role of NASAC in the African policy making arena.

6.10 Interaction with Diplomatic Missions in South Africa

ICSU ROA has interacted with the embassies of China, France, Germany, Japan and the USA in Pretoria and discussed its mission of promoting STI for the socio-economic development of Africa. During such interactions, ICSU ROA has submitted its 4 science plans and engaged discussions on exploring ways in which institutions and companies from their respective countries could partner with ICSU ROA in the implementation of the projects being developed from the 4 science plans. These embassies have all expressed willingness to cooperate with ICSU ROA in the implementation of its projects.

6.11 Fundraising Activities

ICSU ROA has been able to generate extra-budgetary funding to finance some of its activities, notably the international workshop of experts in Health and Human Well-being in August 2008; the International Workshop of experts in Global Environmental Change (including Climate Change and Adaptation) in February 2009; and the 29th ICSU General

Assembly and its Associated Events, held in Mozambique in October 2008. Funds for these events were raised from financial donations and /or in-kind contributions by the following organisations (see details in the financial statement – section 7.2):

1. International Workshop of Experts in Health and Human Well-being:
 - i. UNESCO (Nairobi office)
 - ii. National Research Foundation (NRF), South Africa
 - iii. German Academic Exchange Service (DAAD)
2. International Workshop of Experts in Global Environmental Change (including Climate Change and Adaptation):
 - i. UNESCO (Nairobi office)
 - ii. National Research Foundation (NRF), South Africa
3. 29th ICSU GA and Associated Events:
 - i. Swedish International Development Agency (SIDA)
 - ii. National Research Foundation (NRF), South Africa
 - iii. German Academic Exchange Service (DAAD)
 - iv. International Foundation for Science (IFS)

7 FINANCIAL REPORT

7.1 2008/09 ICSU ROA Budget

The expected financial resources and expenditure of ICSU ROA for 2008/09 as per its approved budget are presented in Table 3.

Table 3. Activity-based budget estimate for 2008/09

Description	Budget 2008/09 (ZAR)
INCOME	
South African Government (DST) allocation 2008/09	2,000,000
NRF contribution 2008/9 for salaries of four staff	1,369,849
ICSU Paris subvention (€35,000)	350,000
INT-ER-LINK / EU FP6 (€7,724)	77,240
IUGG contribution (US\$50,000)	350,000
UNESCO contribution (US\$25,000)	175,000
Anticipated proceeds from workshop (registration)	28,000
Anticipated external funding for workshops	480,000
Anticipated ICSU funding for GA activities	700,000
TOTAL PROJECTED CASH INCOME	5,530,089
In-kind Contribution from NRF	500,000
TOTAL PROJECTED INCOME	6,030,089
RUNNING EXPENSES	
ICSU ROA running cost (excluding salaries)	171,000
Preparation of projects	631,970
Workshops (Health & Human Well-being, Global Change)	828,200
Fundraising for ICSU ROA projects	108,600
ICSU RCA meetings (2 meetings)	340,000
Interlink Project	77,240
Other meetings and conferences	184,380
ICSU ROA staff recruitment and training	86,980
ICSU 29 th General Assembly	959,670
Total Projected Running Expenses	3,388,040
Salaries (5 persons)	2,142,049
TOTAL PROJECTED EXPENDITURE	5,530,089
In-kind contribution* from NRF (estimate)	500,000
TOTAL PROJECTED COST	6,030,089

7.2 Actual 2008/09 ICSU ROA Income and Expenditure Statement

The actual income and expenditure of ICSU ROA during the 2008/09 financial year are shown in Table 4. The report of the independent auditors contracted by the NRF (internal document of the NRF not meant for distribution) validates this financial statement and shows that the records of income and expenditure of ICSU ROA are clean and sound. The audit report shows that, like in previous years, ICSU ROA managed its financial resources very efficiently. It is worth noting that during the financial year under review, ICSU ROA mobilised a significant amount of extra-budgetary funding for some of its activities. In particular, ICSU ROA received a grant of over 2 Million Rand from SIDA to organise the Associated Events of the 29th ICS GA. This grant was managed in a separate cost centre and it is not included in the statement presented here. The audit report for this grant is presented in Annex C

Table 4. ICSU ROA 2008/09 Statement of Income and Expenditure

Description	Income (ZAR)	Expenditure (ZAR)
Brought Forward 2007/08	540,288	
UNESCO	103,886	
DAAD	71,035	
International Foundation for Science (IFS)	110,191	
H&D Workshop, Kampala (2007)	19,382	
NRF Allocation to ICSU ROA	1,387,157	
DST Funding	2,000,000	
ICSU Subvention	422,303	
Registration fees (Workshops)	12,622	
Running Expenses:		
I. External Audit Fees		17,100
II. Computer Consumables		541
III. Conferences & Workshops		278,954
IV. Services: Technical		244,937
V. Marketing		1,254
VI. Medical: Other		2,053
VII. Bank Charges		3,254
VIII. Printing & Stationery		132,958
IX. Recruitment and Training		49,999
X. Refreshments		6,712
XI. Repairs and Maintenance		1,665
XII. Subsistence and Travel (Staff)		683,270
XIII. Subsistence & travel (non staff, for workshops and meetings)		729,028
XIV. Telephone Faxes and Post		33,009
XV. Purchases (One Laptop)		19,152
XVI. Salaries (ICSU ROA Staff)		1,982,503
Total	4,666,864	4,186,389
Balance	480,475	

ANNEXES

Annex A

Staff of ICSU ROA Secretariat

Name	Position	Date of employment
Sospeter Muhongo (Tanzania) s.muhongo@icsu-africa.org	Regional Director	01 June 2005
Kathy Potgieter (South Africa) k.potgieter@icsu-africa.org	Personal Assistant	01 October 2005
Achuo Enow (Cameroon) a.enow@icsu-africa.org	Programme Specialist	27 March 2006
Bongani Mahlalela (South Africa) b.mahlalela@icsu-africa.org	Liaison Officer	01 October 2007
Daniel Nyanganyura d.nyanganyura@icsu-africa.org	Programme Specialist	01 August 2008

Composition of the ICSU Regional Committee for Africa

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Independent Audit Report on SIDA Grant to ICSU ROA for Associated Events of the 29th ICSU GA

Report of the Independent Auditors on agreed upon procedures in connection with the income and expenditure of the International Council for Science Regional Office for Africa - SIDA Contribution to ICSU general assembly in Mozambique for the period 01 April 2008 to 31 March 2009

To: Professor Albert van Jaarsveld, CEO National Research Foundation

We have performed the procedures agreed with you and described below in connection with the income and expenditure of the International Council for Science Regional Office for Africa- SIDA Contribution to ICSU general assembly in Mozambique. The income and expenditure statement is set out in the attached report.

Our engagement was undertaken in accordance with the International Standards on Related Services applicable to agreed upon procedures. The determination of the adequacy or otherwise of the procedures agreed to be performed is the responsibility of the management of the National Research Foundation. It is our responsibility to report on funds received and expenditure incurred regarding the agreement.

The procedures are summarised as follows:

- Agree the income received from the Swedish International Development Cooperation Agency (SIDA) as indicated on the Statement of Income and Expenditure to the contract between the National Research Foundation and SIDA.
- Trace the money received by the National Research Foundation to their bank statements.
- Agree on a test basis, the expense amounts as per the Statement of Income and Expenditure to supporting documentation.
- Test the mathematical accuracy of the Statement of Income and Expenditure.

FINDINGS

We report our findings below:

- Agreed the income as per the Statement of Income and Expenditure is as per the contract between the National Research Foundation and SIDA. No exceptions were noted.
- Traced the money received by the National Research Foundation to their bank account. No exceptions were noted.
- Agreed expense selections to supporting documentation and proof of payment. Printing costs in the general ledger is R95 616. Printing costs in the Statement of Income and Expenditure is R96 467 resulting in a difference of R851.
- Tested the mathematical accuracy of the statement of income and expenditure. No exceptions were noted.

Because the above procedures do not constitute either an audit or a review made in accordance with the International Auditing Standards, we do not express an assurance in connection with the income and expenditure of the International Council for Science Regional Office for Africa- SIDA Contribution to ICSU general assembly in Mozambique for the period 01 April 2008 to 31 March 2009.

Had we performed additional procedures or had we performed an audit or review of the financial statements in accordance with the International Auditing Standards, other matters might have come to our attention that would have been reported to you.

Our report is solely for the purposes set out in the first paragraph of this report and for your information, and is not to be used for any other purpose, nor to be distributed to any other parties. This report relates only to the accounts and items specified above, and do not extend to any financial statements of the National Research Foundation, taken as a whole.

Auditor-General

Pretoria

2 October 2009



AUDITOR - GENERAL
SOUTH AFRICA

Auditing to build public confidence

**NATIONAL RESEARCH FOUNDATION
ICSU REGIONAL OFFICE FOR AFRICA (ICSU ROA)**

**SIDA CONTRIBUTION TO ICSU GENERAL ASSEMBLY IN MOZAMBIQUE : 13 -24 OCTOBER 2008
INCOME AND EXPENDITURE STATEMENT FOR THE YEAR ENDED 31 MARCH 2009**

	ZAR	USD
INCOME RECEIVED		
Swedish International Development Cooperation Agency	2,017,873	223,216
 TOTAL EXPENDITURE	 2,256,846	 249,651
Audit fees	20,000	2,212
Bank charges	2,613	289
Conference accommodation costs	520,791	57,610
Conference catering	374,200	41,394
Conference transport of delegates	141,190	15,618
Conference book publication	290,543	32,140
Marketing costs	7,843	868
Printing	96,467	10,671
Travel and Subsistence - ICSU Africa staff	107,116	11,849
Travel and Subsistence -Sponsored ICSU delegates	696,083	77,000
 DEFICIT TO BE FUNDED BY ICSU ROA	 <u><u>-238,973</u></u>	 <u><u>-26,435</u></u>