

A partnership between the NRF and ICSU ROA

**Proposal
for
Development of a Workplan
for
The African Diaspora Brain Gain
Project**

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1 INTRODUCTION

The socio-economic developmental capacity and subsequent poverty reduction in every community is heavily dependent on the appropriate application of science, technology and innovation (STI) within that community. In a continuously evolving world, sustainable development requires constant engagement of innovative research in science, engineering and technology (SET). Such an engagement requires the presence of both human and infrastructural capabilities which are often inadequate in the developing countries, especially in Sub-Saharan Africa. All African countries have been forced to rely on a very limited pool of highly skilled scientists, engineers and technologists due to various political and economic reasons. A significant proportion of skilled African human capital is working and living outside the continent, mostly in Europe and North America. This one-way flow of skills outside the African continent (and also from elsewhere) is generally termed as the "BRAIN DRAIN".

The main salient characteristic of globalisation is the capability to generate and acquire innovative scientific knowledge for socio-economic development of individual nations or regions of the world. Those nations without the capability, knowledge and resources to take appropriate timely actions are less likely to survive the surge of globalisation and technological innovation. The developing world has numerous disadvantages in this endeavour due to limited availability of both human and financial capital. One of the strategic remedies for this disadvantageous situation for Africa is the strategic mobilisation as well as repatriation of well-trained and skilled Africans who are working and living outside their countries of origin (i.e. in the Diaspora). This would amount to converting "**brain drain**" into "**brain gain.**" China, India, Pakistan and Malaysia, to mention a few examples, have particularly been successful in this venture.

In Africa, the African Union (AU) has recently identified the African Diaspora as custodian of valuable skills and expertise that should be involved in the continent's development initiatives and programmes. However, several isolated attempts by individual governments have failed to sufficiently mobilise scientists of the African Diaspora to contribute intellectually and practically to the development of their respective home countries, and/or get them to return to their home countries. Yet, a good number of these African scientists operating outside Africa have indicated interest to contribute to the development of their home countries in one way or the other. A few African countries, such as Nigeria, Ghana, South Africa, Rwanda, Uganda and Kenya have embarked on various Diaspora engagement efforts but with very little success.

The ICSU Regional Office for Africa (ICSU ROA) in partnership with the NRF has developed this proposal for the establishment of a project that will tap the African Diaspora for the benefit of Africa.

The development of this project should align itself with the ICSU strategic plan of 2006-11 and in particular the following four priority areas which have been identified by the ICSU ROA and for which science plans are in the process of being developed:

- (i) Health and human well-being;
- (ii) Sustainable energy;
- (iii) Global change; and
- (iv) Natural and human-induced hazards and disasters.

The relevance of the Diaspora project in this regard is that the execution of the four science plans will require active participation of a wide range of highly skilled scientists, engineers and technologists as well as scientific organizations and institutions both from within and outside Africa. African experts in the Diaspora can play a crucial role in the implementation of these four science plans. It is anticipated that well designed science plans could provide great inspiration to African scientists in the Diaspora to contribute to the socio-economic development of the continent in various practical ways.

2 PURPOSE OF PROPOSAL

The total exercise has got to be seen in two parts as presented in section 5. This proposal is part of "Part 1" and its purpose is to:

- Seek further input and guidance from the ICSU Regional Committee for Africa on development of the **African Diaspora Brain Gain Project** as conceptualized herein;
- Secure funding for this part of the project;
- Serve as input for the development of the more comprehensive work-plan as indicated in the illustration in section 5;

3 OBJECTIVES OF THE PROJECT

The main objectives of the African Diaspora Brain Gain Project are:

- (i) Identification of African scientists, engineers and technologists based outside the continent (the African Diaspora) and to build links and a database of these experts.
- (ii) Facilitation of sustainable deployment of the African Diaspora for the socio-economic development of the continent.
- (iii) Facilitation of the creation of an environment in Africa conducive to the mobilisation and return of African SETs from the Diaspora.
- (iv) Utilization of national, regional and international S&T institutional infrastructure and capacity facilitated by the presence of Africans in the Diaspora.
- (v) Mobilise African intellectual capacity towards the realisation and implementation of the science plans for Africa being developed by the ICSU ROA.

The overall objective of the project is to mobilise the African SET Diaspora to advance knowledge-based acceleration of economic growth and subsequent development in Africa, with the resultant reduction in poverty and improvement of the quality of life of the people on the continent.

4 APPROACH FOR DEVELOPMENT OF THE PROJECT

This section essentially deals with Part 1 of the process as illustrated in section 5 of the document.

The exercise will primarily be a desk-top study led by a consultant who will be assigned the responsibility of developing a work-plan for the Diaspora Project. The key elements of the **Terms of Reference (ToR)** for the consultant will be:

- (i) To review past and current Diaspora initiatives taking place in Sub-Saharan Africa. This will include taking stock of the major key players in this endeavour.
- (ii) To identify local, regional and international sources of information on the African experts in the Diaspora.

- (iii) To propose a mechanism for creation of a database of the African experts in the Diaspora.
- (iv) To study success cases of Diaspora brain-gain by other developing countries.
- (v) To establish a library of knowledge on the Diaspora and Diaspora initiatives, for the ICSU ROA.
- (vi) To determine the conditions conducive to the mobilisation and return of African SETs in the Diaspora.
- (vii) To propose ways by which the African experts in the Diaspora can be involved in the implementation of the four priority areas and other programmes of the ICSU Regional Office for Africa.
- (viii) To propose a budget for scientific activities (e.g. implementation of the four priority areas of the ICSU Regional Office for Africa) involving the deployment of the African experts in the Diaspora.
- (ix) To propose a mechanism for guidance and assurance that the Diaspora Project of the ICSU ROA and NRF is complementary to (and not duplicating) other similar initiatives taking place in the Sub-Saharan Africa.
- (x) To develop a work-plan which reports findings and provides recommendations on the establishment of the **African Diaspora Brain-Gain Project**.
- (xi) To recommend funding sources for the Brain-Gain Project.

5 ENVISAGED PROCESS AND SCHEDULE

The illustration below presents at a high level, the process to be followed, also indicating key points at which it can be decided whether-or-not to continue with the exercise.

Parts & Period	Action	Responsibility
Part 1 Proposal & Work-plan 7 months	Develop proposal	ICSU ROA & NRF
	↓	
	Secure funding for proposal	ICSU ROA & NRF
	↓	
	Contract consultant	ICSU ROA
	↓	
	Improve proposal	Consultant
Part 2 Project 60 months = 5 years	↓	
	Conduct study	Consultant
	↓	
	Develop work-plan	Consultant
	↓	
	Approve work-plan	ICSU RCA
	STOP / GO ?	
	Secure funding for Diaspora Project	ICSU RCA
	↓	
	Roll-out Project	ICSU ROA
	↓	
	Review Project	ICSU RCA
	STOP / GO ?	

6 LOCATION

The project will be located at the ICSU Regional Office for Africa, currently accommodated at the National Research Foundation (NRF) in Pretoria, South Africa.

7 DELIVERABLES FROM CONSULTANT

The deliverable from the consultant will be a **Work-plan** to be approved by the ICSU RCA, which will include:

- Report on findings;
- Recommendations on the establishment of the African Diaspora Brain-Gain Project;
- Suggestions of budget for the project;
- Suggestions of sources of funding for the project;

8 EXPECTED BENEFITS FROM PROJECT

The benefits expected to be accrued from the Diaspora project include:

- a) Laying of the foundation for feasible, efficient and sustained contribution of African experts abroad to scientific, technological and socio-economic development of the continent.
- b) Facilitation of capacity building programs in Africa through the participation of African experts in the Diaspora or their host institutions in tertiary education (offer of training opportunities and scholarships), professional training (tailored courses and internships), research cooperation in new horizons of science, technology and innovations, and provision of research infrastructure including equipment, literature and funding.
- c) Laying new grounds for partnerships between training, research, innovation and practical application of STI products by African organisations and companies and those outside the continent.
- d) Provision of a forum for African experts to plough back (into national economies) family and national investments which were incurred to train and sustain their expertise before their departure in search for greener pastures.
- e) Facilitation of the utilization of the existing human capital and research infrastructures (including financial resources) available in the countries of residence of Africans in the Diaspora for the purpose of socio-economic development of the continent.
- f) Promotion of the impact of an African voice on global processes by providing a broad database that facilitates identification of African

candidates for membership to specialized international scientific programmes, organizations and committees.

- g) Improvement of employment opportunities for Africans through established connections and dissemination of information and lobbying for international jobs.
- h) Facilitation of solicitation of investments in sectors that improve human well-being in Africa such as: agriculture, fisheries, mining and manufacturing; education and health; tourism, sports and entertainment; telecommunication and transport.
- i) Enhancing the geo-political infrastructure and influence of the African continent on global issues through up-to-date monitoring of regional and international matters related to STI, global economy and politics.
- j) A strengthening of the NRF's Focus on Africa strategic priority.

9 BUDGET

The budget in this proposal is for Part 1 of this exercise, i.e. for the consultant to be able to do the work to produce the Work-plan for the establishment of the African Brain-Gain Diaspora Project. Budgets for the actual project will be presented by the consultant as part of the Work-plan. Note therefore that this is a budget for a period of approximately 6 months. The categories in the budget below are per the NRF categorization since the ICSU ROA is supported through the NRF's financial processes & systems.

Category	Cost (R)
Books & journals	10,000
Computer requisites	14,000
Conferences	3,000
Fees for services	180,000
Other expenses	7,000
Printing & stationary	5,000
Recruitment & training	15,000
Refreshments	5,000
Subsistence & travel	55,000
Telephone, faxes & post	10,000
Total Cost	304,000

Brief descriptions of what is considered in some of the categories:

Books & journals

Acquisition of any publications relevant to the project, that may be necessary.

Computer requisites

For a laptop computer.

Conferences

Consultant may need to register at one or more conferences or seminars that may assist in gathering knowledge for the project.

Fees for services

Fees to contract the consultant and administrative support if necessary.

Recruitment & training

Cost of recruitment of the consultant and support assistance.

Subsistence & travel

For local and international travel: Local travel will mainly be for networking, meeting and access to information purposes. International travel is primarily intended to enable visits to no more than three developing countries which have succeeded well in mobilizing their Diaspora for purposes as intended through this project (e.g. China, India, Pakistan and Malaysia). The purpose of the visits will be to gain deeper understanding of how it has worked for them. International travel is also considered for appropriate interactions with other African countries beyond South Africa where the Consultant will be based.