



THE UNITED REPUBLIC OF TANZANIA

THE NATIONAL INNOVATION SYSTEMS REFORM

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THE NATIONAL SCIENCE, TECHNOLOGY AND INNOVATION SYSTEMS REVIEW

Introduction

The government of the United Republic of Tanzania puts particular emphasis on strengthening and promotion of its National Innovation Systems (NIS) as a means to spearhead the national development agenda. So far this sector has not contributed much into the national development process. The major reason for this situation is the obscurity of the existing innovation systems that may not be appropriately mainstreamed into the national development agenda. Therefore, this entails the need to undertake a review of the existing NSTIS in order to enable the Government to establish a national science, technology and innovation structure that will be more responsive to the national development agenda.

Consequently, in June 2007 the Government of the United Republic of Tanzania (URT) requested the United Nations Educational Scientific and Cultural Organization (UNESCO) to assist in preparing appropriate ground to undertaking the NIS review. UNESCO has accepted an invitation from the Government of Tanzania to take the lead role in developing a Plan of Action for that Government in the area of Science, Technology and Innovation. It will be UNESCO's intention to catalyze a multidonor activity to conduct an international review of Tanzania national and regional systems of innovation, using a tested methodology which has been successfully applied in major countries such as the People's Republic of China, South Africa and, most recently, Chile.

The project is designed to provide assistance to the Government of the United Republic of Tanzania in a pre-investment analysis of the performance of her Science and Technology Policies, Programmes and Institutions in the country with a view of identifying measures to revitalize and reposition the science, technology and Innovation systems and increase its effectiveness in meeting society needs particularly to economic competitiveness.

The execution of the proposed review will take advantage of an analytical methodology developed and used by Mullin Consulting Ltd which is based on the assessment of the performance of key 'functions of a national system of innovation' and it will also include use of a survey tool used to assist major governmental S&T institutions to conduct self-evaluations of their performance. It is expected that the review : team will hold discussions with the private sector and

possible outcomes of the review may include suggestions as to the nature of follow-up inquiries in this critical area – the private (business) sector.

The National Innovation Systems reform process

Main Thrust of the Tanzania's NIS Reform Project and Process is to provide a Broad Science, Technology and Innovation Frame work for future competitive and sustainable socio-economic development. -Tanzania has excellent macro-economic policies for development (eg M ku kuta, Mini – Tiger Plan etc). The country urgently requires a broad Science and technology framework on the basis of which to articulate and elaborate the science, and technology (including innovation) dimensions needed to realize the macro-economic goals and objectives enshrined in the main policy documents proclaimed in the country.

In recent .years the country has achieved a level of macro economic stability that, if it has to drive it to a sustainable growth path would require injection of a dose of innovation. Without this much of the macro economic gains achieved over the years through the implementation of sound economic policies (eg Economic, financial, institutional reforms etc) would be wiped out This threat and danger is more real now given the high price increases of foddil fuels and food products globally. Without stepping up efficiency and productivity in the productive and service sectors in the local economy – through innovation (broadly defined), there will be no sutained broad based growth and development. The National Innovation Systems review must be carried out in order to draw up a STI Action plan for implementation to revitalize the national economy.

OBJECTIVES

The overall objective of this reform process is to achieve competitive and sustainable growth and development as means to:

- (i) Build a knowledge and competitive national economy so as to improve conditions of living of the vast majority of the people in Tanzania;
- (ii) Build and foster local human resources capacity for enhancing local research and innovation capabilities for sustainable development of the country

With this the government will be assuring Tanzanians that the national innovation systems can contribute more positively and significantly to the country's socio-economic development.

Activities carried out so far

Among the initial responses of UNESCO was to commission a Team of Experts that carried out a study visit to the Republic of South Africa in February 2008. The study visit had the following objectives:

- i) To consult senior government and industry officials on their experience in the conduct of the comprehensive review of the national science and innovation system of South Africa
- ii) To familiarize with the rationale, challenges and benefits of undertaking a review of the science system, as well as the good practices for conducting and managing the review process.

The study visit report that the Team submitted to the Government indicates – a number of lessons that Tanzania could learn from what South Africa did before, during and after the review and what, structure, the South African Government has instituted to mainstream its science, technology and innovation systems. The report indicates the need for Tanzania to undertake a comprehensive review of its science, technology and innovation systems as a matter of priority. Tanzania cannot establish the innovation system based on the South African model since the socio-economic situation in each of the two countries is quite different. Therefore, the review will enable the Government to establish what really exists in Tanzania that constitutes the national innovation systems and therefore what needs to be done to institute a more elaborate structure, and promoting an innovation culture in the country.

Main Activities of the NIS Project

To kick start the implementation of the programme, the Ministry of Communication, Science and Technology convened a consultative meeting of select number of stakeholders to discuss a number of pertinent and strategic issues relating the project design and its implementation: The meeting held in May 2008, was also attended by a representative from UNESCO Headquarters (Prof. Folarin Osotmehin). The meetings came out with a framework of the reform structure agreed by both representative of the Government of Tanzania and the representative of UNESCO. A team of National experts is now working on the Concept paper.

The team is tasked with the identification of the project activities and subsequent elaboration of the budgetary items which will be extremely useful in a number of other ways, but especially in providing a basis for:

- (i) Developing a timeline of activities for project implementation (or prospectus of activities for implementation); and
- (iii) Facilitating monitoring and evaluation of project implementation overtime.

Within the agreed framework there will be "the main flagship project" that is the reform process and other projects (stand alone projects within the program). It is anticipated that the main flagship project will be implemented over a 2-2 1/2 years period beginning July 2008. Implementation of the stand alone projects within the program and the recommendations of the main flagship project may well take beyond the anticipated two year period. The NIS Project should pursue a number of related specific objectives including:

- Consulting widely amongst stakeholders in the project
- Carrying out baseline studies on S&T for development in the country
- Carrying out Sensitization Workshops for those who will be involved in the NIS Project Execution
- Carrying out self evaluation of the Institutions and elements of NIS in Tanzania
- Preparation of the National Background Paper
- Organizing a High Level Policy Dialogue Meeting
- Engagement of External Reviewers or Consultants (Peer Reviewing)
- Development of Short term Action Plans of S T & I Activities (Policy Briefs)
- Presentation of the Review Process Recommendations (STI Action plan).

The review needs to be premised on the following issues:

- Development of a comprehensive concept paper and guidelines for the review
- Undertaking a situation analysis of the existing set up of the national science, technology and innovation systems so as to be able to establish background materials and an appropriate starting point for the review
- Establishment of financing mechanisms for the review
- Establishment of the management structure for the review process, before, during and after the review
- Identification and establishment of an independent review team and process

At every stage of the review, there should be adequate stakeholder involvement