

Innovation Africa

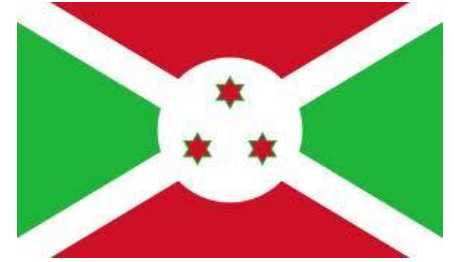
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Investing in Research, Promoting a Scientific Culture

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INVESTING IN RESEARCH AND PROMOTING A SCIENTIFIC CULTURE

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REPUBLIC OF BURUNDI

Burundi location



INTRODUCTION

1. Motivation:

- The conviction towards science has to serve as a tool for human development;
- The conviction for the science to be efficient is that it has to act upon the concrete and upon the real life of the population .
- Thus, the development of science, technology and research will contribute to the socio-economic development of the population. In fact, a population educated therein is indeed a real motor of prosperity of the whole country.

Research objectives

2. In Burundi, the global objective of Science, Technology and Innovation is to contribute to the socio-economic development of Burundians in taking into accounts their needs.
3. The specific objectives are:
 - To assure a coordination of research centered on the development of Burundi
 - To increase the value of the available assets and to fill the existing hiatus in all key domains to promote Science, Technology and Research (STR)

Research objectives (continued)

- To focus on Science, Technology and Research (STR) in the solving of the major problems of Burundi.
- To make Science, Technology and Research (STR) a tool for the country and local communities' development.

II Research Organization in Burundi

- The Minister for Higher Education and Scientific Research is the governmental level to coordinate the Research Policy.
- Research in Burundi is organized at institutions of higher education, mainly at the University of Burundi and Research Centers as ISABU, IRAZ, CNTA, etc.
- The Directorate of Research at the University of Burundi is responsible for coordinating all research activities such as:
 - Research planning and management of research projects funded by the University of Burundi and other donors

II Research organization in Burundi (Continued)

- Monitoring and evaluation of research centers and laboratories;
 - Publication of the Scientific review of the University
 - Publication of the course syllabus;
 - Support and monitoring of field research (papers, workshops, excursions);
 - Organization of seminars, national and international conferences, etc..
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- The other research is being conducted outside higher education institutions in some institutions and centers of research(e.g. ISABU, CNTA, IRAZ).

III. Major Outcomes/Results

1. The scientific research contributes to the socio-economic innovation. For examples:

1° At the Faculty of Agricultural Sciences at the University of Burundi, the following areas are covered by projects in progress:

- edible fungi,
- improvement of rice production in Eastern and Southern Africa,
- in vitro culture of plants, in varietal improvement upland rice,
- biological control studies

Major Outcomes/Results (Continued)

2° At the Faculty of Medicine of the University of Burundi, research topics are mainly clinical. The major themes that have been published are on:

- Malaria, particularly physiopathological studies of severe malaria
- HIV/AIDS.

Major Outcomes/Results(Continued)

3 ° At the Faculty of Science of the University of Burundi, laboratories of physics, biology and chemistry are currently able to provide services to various Burundian societies.

We can mention some examples:
-measurement of air, water and soil pollution in the field of environment;
-control of the quality of edible oils.

Major Outcomes/Results(Continued)

- 4° National center for food Technology (CNTA) is under the administrative responsibility of the Ministry of Agriculture. CNTA's mission is to promote research and development of food technology and the transfert and dissemination of these technologies to small enterprises.
- 5° The Institute of Agronomic Sciences in Burundi (ISABU) is also under the administrative responsibility of the Ministry of Agriculture and Livestock.

This Institute has been created in 1962 and it is the largest research institute of Burundi. Its research interests focus on maize, rice, cassava, potatoes, etc.

IV. Strategic Plan to promote scientific research

1. The National policy and strategic Action Plan of the NATIC
2. The National Policy of agricultural research: centers of research and food transformation
3. The 30/12/2011 Law on the reorganization of higher education in Burundi was voted by the Parliament. It is an eloquent sign of the promotion of scientific culture. It specifies in particular the criteria to have access to higher education, the functioning of public and private universities, the creation, approval of courses, accreditation of training programs, the requirements of higher learning institutions(i.e. library, laboratories, quality assurance, scientific centers), the support of private higher education, sanctions and penalties, staff of higher education, etc.

Strategic Plan to promote scientific research (continued)

4. The setting up of the **General Directorate of Science, Technology and Research** also reflects an attention of the Government to coordinate activities in this area.

It comprises two Departments (Directorates) as well as the Department of Scientific Research and the Department of the Promotion of Science, Technology and Innovation.

Strategic Plan to promote scientific research (continued)

The **General Directorate of Science, Technology and Research** has the mandate to:

- Bring its input in designing, planning and implementing the national policy on Science, Technology and Research ;
- Implement programmes designed to promote Science, Innovation and transfer of technologies ;
- Identify national scientific capacity and establish an up to date database of scientific competencies ;
- Actively participate in the dissemination of Science and technical information among all sectors directly or indirectly involved in research ;
- Organize forums bringing together key researchers and research beneficiaries ;

Strategic Plan to promote scientific research (continued)

The **General Directorate of Science, Technology and Research** has the mandate to:

- Collaborate with the National Commission for Science, Technology and Research (in the process of establishment) ;
- Implement decision by the latter for the well being of the whole population;
- Monitor and coordinate activities carried out by research centres and institutions either inside or outside the ministry to ensure they abide by the set standards and are market - driven;
- To overview the financial law as regards research funding ;
- Promote the High quality Scientific publications ;

Strategic Plan to promote scientific research (continued)

The **General Directorate of Science, Technology and Research** has the mandate to:

- Set up and maintain a network of information and research outcomes exchange among research centres and institutions;
- Help researchers initiate innovation;
- Monitor and evaluate activities funded through the innovation and research resources;
- Organize forums aimed at disseminating research results ;
- Organize all stakeholders meetings bringing together Policy makers, academia, national, regional and international research organizations, donors, beneficiaries, and soon.

Strategic Plan to promote scientific research (continued)

5. The Agronomic Campus Project and food technology at the university of Burundi
6. The Project of Numerical Campus for the e-training and e-research
7. The Project of the creation of polytechnic institutes for the training and research in applied sciences

Strategic Plan to promote scientific research (continued)

8. The Ministry of Higher Education and Scientific Research is putting in place the National Policy of Science, Technology, Research and Innovation and its Action Plan as well.

A National Commission for Science, Technology and Innovation will ensure the implementation of this policy under the coordination of the Minister for Higher Education and Scientific Research.

A National Centre of Scientific Research and a National Fund for Scientific Research will be set up.

V. Challenges

1. Budgets, Budgets, Budgets for research are obviously very low in Burundian research institutions. With sufficient Budget, we can:
 - Develop Human resources capacities for research;
 - Have laboratory equipments and chemical products;
 - Have reference center, that would serve as a National Council for Scientific Research (CNRS), to coordinate research at the national and regional levels.

CONCLUSION

- As you see, Burundi faces many challenges;
- But, it is committed to promote Science, Technology and Innovation (ICT).
- It needs support and collaboration.
- So, I invite everybody, especially the investors to join us in implementing Burundi Government collaborative activities and projects in ICT solutions for Education and employment.

THANK YOU FOR YOUR ATTENTION

MURAKOZE