



Biosciences innovation policy analysis

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Background

Science, technology and innovation (STI) policies are currently at the heart of national development discussions in Africa. In eastern Africa, governments are beginning to actively support STI development including modern biosciences as tool for modernizing agriculture and ensuring environmental sustainability. In all eastern African countries STI policies are beginning to take root with most of the countries at varying stages of developing and/or implementing requisite policy framework. This renewed emphasis on STI as a driver for economic growth and development reflects the African Union (AU) commitment to advancing S&T in continent and in some ways addresses the goals of AU/NEPAD Africa's Science and Technology Consolidated Plan of Action, 2006-2010.

Advances in the field of biosciences affords the region the opportunity to fully exploit the genetic potential and improve crop productivity, presents new agro-processing opportunities to diversify smallholder production, increasing demand for local crops, thereby improving rural livelihoods. It also provides an opportunity for the agro-processing industries to be more efficient and competitive by converting agro-waste into value-added products such as feed, bio-energy and other valuable products while at the same time reducing environmental impact. However, for bioscience research and innovations activities in the eastern Africa region to be effectively integrated into socio-economic development, there has to be an enabling environment to enhance the uptake of these innovations.



Even though the necessary organizations and policy systems are in place in most of the eastern Africa countries, policy coordination between different branches of government is often lacking. In addition there is need for interventions addressing a number of important regional policy challenges affecting bioscience innovations which include among others limited access to new, affordable eco-friendly technologies for crop production and agro-processing; difficulties in information and biological resources exchange and their equitable utilization; in adequate sustainable financing and incentives for value addition activities for the private sector and that promotes a bio-entrepreneurship culture .

The Bio-resources innovation policy analysis project was supported to provide the necessary policy support services to the Bio-Innovate projects and assist them to translate research efforts into tangible innovations for the market by providing the link among key actors at the appropriate time in the innovation cycle. These links will differ according to the type of technology innovations – agricultural, environmental and industrial.



The Project goal

The goal of this project is to provide policy support services necessary to move research ideas and products to the market, and ultimately contribute to a vibrant bio-economy in eastern Africa. In collaboration with the Program Management Office, the project will target specific policy intervention and support services that allow Bio-Innovate projects to successfully bring their technologies and business ideas to the market including: (i) identifying and evaluating policy support needs of the projects in participating countries; (ii) establishing a forum for interaction and exchange of ideas on bioscience innovations and policies in eastern Africa; (iii) providing policy support tools for biosciences innovations and related activities in the region.

Achievements

- 1 A review of the status of STI policy development in the region to establish the extent to which these policies generally support bioscience innovations has been conducted and reported.
- 2 Mapping and analyses of Bio-Innovate stakeholders to help identify policy limitations facing uptake of biosciences innovations within the region and the key value chain actors completed.
- 3 Intellectual property audit for five technologies under development to determine patentability potential and to assess whether there is need to conduct freedom to operate analyses conducted.
- 4 An introductory 2-day training course on entrepreneurship skills including technology

licensing, intellectual property law among other business topics conducted for Bio-Innovate scientists.

- 5 Science communication skills training manual for Bio-Innovate scientists developed and training on how to incorporate communication along the innovations cycle conducted.
- 6 Policy papers on "Policies and regulatory incentives for innovations in waste and wastewater management in eastern Africa" and "Development, regulation and use of Biopesticides in eastern Africa" will be published.

Participating countries, institutions and organizations

Uganda National Council for Science and Technology

Ministry of Science and Technology, Ethiopia

Kenya National Council for Science and Technology

Department of Science and Technology, Ministry of Education, Rwanda

Tanzania Commission for Science and Technology

Addis Ababa University, Ethiopia

African Technology Policy Studies Network

International Service for the Acquisition of Agri-biotech Applications

International Livestock Research Institute

Stockholm Environmental Institute



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