

Prof. Richard Onwonga, Chairman LARMAT Participating in the High-Level Policy Dialogue on Bioeconomy for Burundi and East Africa and the Inception Workshop for the Project Rhizobia-Mycorrhizae Biofertilizers

Preamble: The East African Community in collaboration with partners Stockholm Environmental Institute, Bioinnovate Africa, among others, have combined efforts to develop policies to support bioeconomy for Africa. The policy dialogue, titled "National Bioeconomy Strategies: Paving the Future Growth Path for East Africa" is a collaborative effort between BioInnovate Africa/ International Centre of Insect Physiology and Ecology (*icipe*), the East African Science and Technology Commission, the Stockholm Environment Institute – Africa Centre, and the Ministry of National Education and Scientific Research, Republic of Burundi. The high-level policy dialogue on bioeconomy was held on 17th October 2023 in Bujumbura, Burundi, and coincided with the project inception workshop for the project “Rhizobia-Mycorrhizae-Based Bio-Fertilizer for Improved East African Smallholder’s Farmers’ Livelihood” The project is supported by Bioinnovate Africa and Prof. Richard Onwonga, from the University of Nairobi is a Co-PI to the project. The Occasion also provided a perfect opportunity for the official launch of the project by the Bioinnovate Programme Advisory Committee team.

The High-Level Policy Dialogue on Bioeconomy for Burundi and East Africa

Sub Saharan Africa: The concept of bioeconomy is centered on scientific research, knowledge, and innovation to support the *sustainable production and use of biological resources to create innovative products, processes, and services for all economic sectors*. This is against the background of the fact that Sub-Saharan Africa, has a rich biological diversity, and a relatively large proportion of arable land, and is well positioned to tap these opportunities for building a competitive but sustainable bioeconomy. The latter is seen as one of the ways of diversifying sources of growth through value addition to biological resources and linking production to new markets.

Opportunities for development bioeconomy for East Africa: It is noted that the development of a bioeconomy in Eastern Africa, though still in its early stages, presents opportunities for the region to leverage its biological resources to achieve sustainable economic growth. It will support regulatory and policy developments, create more investment opportunities in research and development, and enhance the industrial and biomanufacturing capacity of the region. The bioeconomy further plays a crucial role in mitigating climate change, adapting to its impacts, and conserving biodiversity.

The policy dialogue: This policy dialogue was aimed at discussing the importance of national bioeconomy strategies for future economic growth in Eastern Africa, with a focus on Burundi. It brought together key stakeholders in Burundi, regional experts including members of the BioInnovate Africa Programme Advisory Committee, and BioInnovate Africa innovation project partners to share experiences, best practices, and lessons learned in developing and implementing national bioeconomy strategies. By exploring the potential of the bioeconomy and identifying ways to overcome societal challenges, this policy dialogue aims to contribute to the development of a sustainable and inclusive bioeconomy in Burundi and Eastern Africa.

Objectives of the high-level policy dialogue:The objectives of the high level policy dialogue were; (i) Outline the importance of national bioeconomy strategies capitalizing on the efforts of the East African Regional Bioeconomy Strategy (ii) Share experiences, best practices, and lessons learned for the preparation and implementation of national bioeconomy strategies and (iii) Discuss a roadmap for the development of a national bioeconomy strategy for Burundi.

Expected outcomes: The policy dialogue was expected to create awareness about the importance of national bioeconomy strategies in supporting East Africa’s sustainable economic growth path and provide a platform for participants to share experiences and lessons learned in the national

bioeconomy strategy formulation and implementation process. Further, the steps for developing a national bioeconomy strategy for Burundi were discussed



Participants at the high-level policy dialogue Meeting – inset are Prof. Richard Onwonga and three of our PhD graduants Dr. Bintu, Dr. Chepkemoi and Dr. Lutta

Rhizobia-Mycorrhizae-Based Bio-Fertilizer for Improved East African Smallholder's Farmers' Livelihood: Project Inception Workshop

Background: In Eastern Africa, and in particular the Democratic Republic of Congo, Burundi and Kenya, most households depend on agriculture for their livelihood, employment, and income generation. Despite the importance of agriculture in these countries, its productivity remains very low compared to the rest of the continent. This is attributable to the poor soil fertility coupled with poor management practices and lack of sustainable sources of fertilizers. Efforts to enhance soil fertility by respective governments have often focused on application of synthetic fertilizers. These fertilizers, in the absence of government subsidies, are exorbitant to smallholder farmers and have been widely reported to cause soil degradation, environmental pollution and GHG emissions. Alternative approaches to enhancing soil fertility and increasing agricultural productivity are thus Welcomed.

The Current Project “**Rhizobia-Mycorrhizae-Based Bio-Fertilizer for Improved East African Smallholder's Farmers' Livelihood**” has been mooted to address the challenge of low soil fertility through in East Africa through producing and availing a highly effective bio fertilizer - Rhizobia-mycorrhiza biofertilizers. The biofertilizer will be suited for use in diverse crops and agroecological conditions and thence providing a sustainable solution for enhancing agricultural productivity in East Africa.

This project is supported by Bioinnovate Africa Programme that is funded by the Swedish International Development Cooperation Agency (Sida) with ICIPE (International Centre of Insect Physiology and Ecology) being the implementing agency. For more information about Bioinnovate Africa visit: <https://bioinnovate-africa.org>

This project will jointly be executed by four organizations in three countries, members of Eastern Africa Community, namely the Universite Evangelique en Afrique located in Democratic Republic of Congo as leading institution, The Hope Africa University located in Burundi, the University of Nairobi located in Kenya and the agro-mineral fertilizer private company ITRACOM-fertilisant known as FOMI located also in Burundi.

The inception meeting brought together the project team and stakeholders to introduce and discuss the new project in the context of declining soil fertility in East Africa. The different stakeholders shared experiences, best practices, and lessons learned within the biofertilizers value chain. The inception workshop further assisted the project team in mapping out a sustainable and inclusive pathway for biofertilizers value chain in DR Congo, Kenya and Burundi, a key output of the project.

Objectives of the workshop: The overall objective of the inception workshop was to bring to speed stakeholders on the importance of the project, project activities and outputs, and create a sense of ownership for informed adoption of project products. Specifically, the objectives of this workshop are to: (a) Outline the importance, the objectives, the outputs of the rhizobia-mycorrhiza project (b) Share experiences, best practices, and lessons learned within bio fertilizers value chain (c) Discuss a roadmap for the implementation and development of an effective bio fertilizer for different categories of farmers.

Expected outcomes: (a) Creating awareness about the importance of alternative sources of fertilizer e.g., The rhizobia-mycorrhiza bio fertilizer to support the agricultural production, food and nutrition security and household's income (b) Further, the steps for developing joint action for production of adapted and bio product for improved livelihood in East Africa (c) Create a sense of ownership of the project and interest in its implementation.



Rhizobia Project implementation team members from L-R; Front Prof. Victor Barantota (Vice Chancellor Hope Africa University), Dr. Jeanette Co-Pi (Hope Africa University), Dr. Bintu PI (UEA), Dr. Bizimana – Co-PI (FOMI), DR. Janeth Chepkemioi-Project Research Assistant (UoN). R-L (Back row) Prof. Richard Onwonga – Co-PI (UoN), Prof. Rodrigue Basengere - Deputy Vice Chancellor (UAE) and Mr. Simon Ntirampeba – Managing director (FOMI).

Conclusion

The Combined activities went as per plan and a communique on the ensuing deliberations will be shared in due course