

Bioeconomy in action in eastern Africa

High-level policy dialogue on bioeconomy in Burundi

The East African Community (EAC) Secretariat in Arusha, Tanzania published a regional bioeconomy strategy for East Africa in December 2022 – the first of its kind in Africa, and second only after the European Union. As part of implementing the strategy, *icipe* BiInnovate Africa and partners held a high-level policy dialogue on bioeconomy on 17 October 2023, in Bujumbura, Burundi, under the theme *“National bioeconomy strategies: paving the future growth path for Burundi and Eastern Africa”*. The partners included the East African Science and Technology Commission (EASTECO), the Stockholm Environment Institute (SEI) – Africa Centre, and the Ministry of National Education and Scientific Research, Republic of Burundi through the National Commission for Science, Technology and Innovation (NCSTI). The forum called for and endorsed the need for Burundi to develop a national bioeconomy strategy based on the EAC regional bioeconomy strategy. It also called for partnerships with Burundi as it prepares its national bioeconomy strategy. The bioeconomy in Burundi aligns well with Burundi’s vision as an emerging country in 2040 and a developed country in 2060, which identifies value addition to natural resources



Pictured top: A group photo of the various stakeholders who participated in the high-level policy dialogue on bioeconomy held in Bujumbura, Burundi, on 17 October 2023.

Pictured bottom left: Prof Frederic Bangirirama, Permanent Secretary of the Ministry of National Education and Scientific Research, Burundi, giving an opening remark on behalf of Prof François Havyarimana, Minister of National Education and Scientific Research, Burundi, at the high-level policy dialogue on bioeconomy held in Bujumbura, Burundi. Pictured bottom right: Participants at the high-level policy dialogue on bioeconomy.

as one of the ways to diversify sources of economic growth. The forum brought together over 70 in-person participants including key stakeholders in Burundi, regional experts including members of the BiInnovate Africa Programme Advisory Committee, and BiInnovate Africa innovation project partners to share experiences, best practices, and lessons learned in developing and implementing national bioeconomy strategies. Read the **communique** on this [link](#), and the **press release** on this [link](#).

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Eighteenth BioInnovate Africa Programme Advisory Committee (PAC) meeting

The PAC held its 18th meeting in-person in Bujumbura, Burundi, on 16-18 October 2023. The meeting discussed strategies for resource mobilisation and opportunities for partnerships that can be leveraged upon by BioInnovate Africa to strengthen the development of a sustainable bioeconomy in eastern Africa. The PAC also visited Karire Products Limited biorefinery and eco-village for essential oils that is located in Bubanza, 40 km north of

Bujumbura. Karire Products specialises on plant extracts for prevention of malaria in eastern Africa. It was one of the projects supported by BioInnovate Africa. The PAC also interacted with team leaders of the new innovation projects being supported by BioInnovate Africa. The team leaders made presentations to the PAC about their respective projects and received feedback to improve their projects.



Pictured left and center: The PAC and other guests being taken through a guided tour of Karire Products Limited biorefinery and eco-village by Ms Ginette Karirekinyana, Founder and Director of Karire Products Limited. Pictured right: Dr Julius Ecuru, Manager, BioInnovate Africa, giving remarks during the visit to Bubanza.

Launch of BioInnovate Africa supported project on Rhizobia-mycorrhizae-based biofertilizer for smallholders farmers in East Africa

A BioInnovate Africa supported project on rhizobia-mycorrhizae-based biofertilizer for smallholders farmers in East Africa, led by Dr Bintu Ndusha at the Evangelical University in Africa in Democratic Republic of the Congo (DR Congo), was launched in Bujumbura, Burundi on 17 October 2023. Project partners include Prof Jeanine Ndhokubwayo of Hope Africa University in Burundi, Prof Richard Onwonga of University of Nairobi in Kenya, and Dr Syldie Bizimana of ITRACOM/ FOMI private fertilizer company in Burundi. The event took place at ITRACOM/ FOMI company and was attended by more than 30 guests including BioInnovate Africa Programme Advisory Committee, BioInnovate Africa project team leaders, and representatives from the ministry of agriculture and environment in Burundi. The project will develop a rhizobia-mycorrhiza biofertilizer from beneficial microorganisms combined with organic waste, manure, biological sludge and agricultural by-products.

Pictured top: Dr Syldie Bizimana, Research & Innovation Director, ITRACOM, giving welcome remarks at the launch of BioInnovate Africa supported project on rhizobia-mycorrhizae-based biofertilizer for smallholders farmers in East Africa. Pictured bottom right: The team members of the project.



Fostering partnerships for a just and sustainable bioeconomy in East Africa



A group photo of participants of the workshop for non-governmental organizations (NGOs) working within East Africa.

The Roundtable on Sustainable Biomaterials (RSB) in collaboration with *icipe* BioInnovate Africa and Solidaridad held a workshop in Nairobi, Kenya, on 26 October 2023, for non-governmental organizations (NGOs) working within East Africa. The theme of the workshop was “Fostering Partnerships with NGOs in Kenya for a sustainable bioeconomy in East Africa”. The workshop discussed the role of East Africa in the mitigation of climate change towards a transition to a just and sustainable bio-circular economy. Read more about the workshop on this [link](#).

Bioeconomy in action in East Africa, moving from strategy to implementation

On 16 – 17 November 2023, the Stockholm Environment Institute (SEI) – Africa Centre in collaboration with *icipe* BioInnovate Africa, and the East African Science and Technology Commission (EASTECO) convened a hybrid workshop on bioeconomy, with the participants attending in-person at the World Agroforestry Centre (ICRA Campus), in Nairobi, Kenya. The theme of the workshop

was “Bioeconomy in Action in East Africa, Latin America and Asia”. The workshop enabled sharing of lessons from similar countries and bioeconomy actors from tropical parts of the world such as Latin America, Southeast Asia and East Africa, and discussed scenarios and pathways for implementing bioeconomy in eastern Africa. Read more about the workshop on this [link](#).

BioInnovate Africa annual review meeting

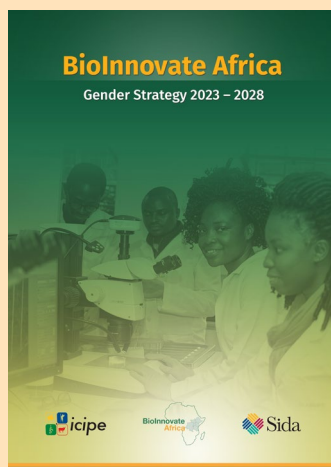
On 21 November 2023, Dr Daniel Tiveau from the Swedish International Development Cooperation Agency (Sida), held a virtual meeting with *icipe* and BioInnovate Africa team. The meeting discussed the implementation progress of BioInnovate Africa, including plans for 2024. The meeting also served as an introductory meeting between *icipe*, BioInnovate Africa and Dr Tiveau, who has taken over from Dr Claes Kjellstrom, and is the programme manager/specialist and advisor for environmental research, Africa Department, at Sida.



BA-FAN training on grant proposal writing and entrepreneurship

On 11 - 12 October 2023, the BioInnovate Africa Fellowship Alumnae Network (BA-FAN), which was established in 2020, held a virtual training on grant proposal writing and entrepreneurship. The training equipped the fellows with skills to develop and write an effective grant proposal, as well as best practices and essentials entrepreneurship skills for effective grants management. The training facilitators included Prof Ruth Oniang'o, BioInnovate Africa Programme Advisory Committee (PAC) member and Founder and Director

of Rural Outreach Africa; Ms. Shira Mukiibi, Business Development Manager, BioInnovate Africa; Dr Sarah Mubiru, a team leader of phase II BioInnovate Africa supported project and Founder and Managing Director of Aroma Honey Toffee Limited; and Dr Kebede Abegaz Ali of Hawassa University. BA-FAN enables past and present BioInnovate Africa women fellows to collaborate with each other and strengthen their capacities for bioinnovation and bioentrepreneurship.



Enhancing gender integration in BioInnovate Africa

BioInnovate Africa undertook a gender analysis between the period of January to June 2023, to enhance gender mainstreaming in its interventions. The analysis provided an understanding of women's and men's needs and capacities to participate in any given interventions, and highlighted the different ways in which the genders would benefit from the interventions. The analysis informed the development of a five-year gender strategy (2023-2028) and Action Plan (2023-2024) to enable BioInnovate Africa to systematically integrate a gender responsive innovation agenda. The strategic objectives include enhancing BioInnovate Africa internal culture, capacity for design, planning, implementation, and reporting on gender-responsive by the staff; and improving the ability of addressing gender issues in the supported projects. Read the gender strategy on this [link](#).

Selection of cohort IV students, partnership with Dartmouth college on technoeconomic analyses

icipe BioInnovate Africa and the Thayer School of Engineering at Dartmouth College, USA, are collaborating to build capacity for technoeconomic analysis (TEA) of innovation projects in eastern Africa, through a six-month fully sponsored tailor-made online course. The course was jointly established in 2019 and aims at providing human resource development to assess potential economic feasibilities, bottlenecks and to identify further research and development requirements during early stages of biobased technologies, with real world application being in the developing country setting. On 7 December 2023, a total of 12 students from universities in BioInnovate Africa participating countries were competitively selected by the Thayer School of Engineering, USA to undertake the course. They all constitute the fourth cohort of TEA

students and will commence their online course in January 2024. The students include: Emice Kioko, from Kenyatta University, Kenya; Zenebe Sahile, from Arba Minch University, Ethiopia; Cornelius Chen-Chen, from University of Cape Town, Uganda; Michael Magiri, from Meru University of Science and Technology, Kenya; Goshu Tefera, from Hawassa University, Ethiopia; Alice Owiti, from University of Nairobi, Kenya; Seth Mutuba, from University of Nairobi, Kenya; Vincent Onyango, from Machakos University, Kenya; Eric Kariuki, from Machakos University, Kenya; Gideon Kirui, from Jomo Kenyatta University of Agriculture and Technology, Kenya; Kevin Nabukeera, from Makerere University, Uganda; and Stacy Musau, from University of Nairobi, Kenya.

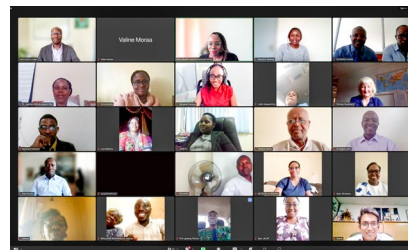
Research collaboration on carbon farming in East Africa

icipe BioInnovate Africa is collaborating with the University of Bonn, Germany, to research the economics of carbon sequestration in African agriculture. The research seeks to explore the opportunities and challenges of involving smallholder farmers in East Africa in emerging agricultural carbon markets to contribute to climate change mitigation through the adoption of sustainable land management practices, referred to as carbon farming. This type of farming involves increasing carbon sequestration in

soils and plants while reducing or avoiding greenhouse gas (GHG) emissions in agricultural production. Carbon farming is linked to important policy efforts such as the development and expansion of a sustainable bioeconomy. The research addresses the pressing global challenge of achieving the net-zero CO₂ emissions by 2050 as aligned with the Paris Agreement on Climate Change, by unlocking the potential of natural climate solutions in the pursuit of net-zero emissions. Read more on this [link](#).

Financial, administration, and procurement management training

On 19 - 20 September 2023, BioInnovate Africa held a virtual training workshop on financial, administration and procurement management to strengthen capacities and enable effective delivery of its newly supported projects. The training was facilitated by *icipe* and BioInnovate Africa Programme Management Office (PMO), and the participants included team leaders, finance and administration personnel of the BioInnovate Africa supported projects. The training provided a platform to share experiences, best practices, and lessons learned for successful implementation of donor funded projects, which sharpened the skills of the participants on financial reporting, auditing, and organisational policies and procedures for procurement.



Pictorial



On 11 – 12 July 2023, Johan Sävström, Science Communicator/Research Advisor at Sida, paid a visit to *icipe* Duduville campus as well as other project sites supported by the Centre, and interviewed some of the researchers funded by Sida, including those supported by BioInnovate Africa. Read the article on this [link](#).

Taller virtual
Bioeconomía en acción
Sesión 2: Bioeconomía en el Sudeste Asiático y África
Julio 26, 2023 - 9am (GMT-5) | MincienciasCanalOficial

Sarun Sumriddetchkajorn
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On 26 – 28 July 2023, Dr Julius Ecuru, manager, BioInnovate Africa, participated as a speaker in a workshop that was held under the theme “*Bioeconomy in action: Sustainability Pathways in Latin America through Learnings from Asia and Africa*”. The workshop was organized by the Colombian Ministry of Science, Technology and Innovation and the Stockholm Environment Institute (SEI) Centre of Latin America, in Bogotá, Colombia with the objective of exchanging international and national experiences on how the bioeconomy can be promoted as a driver for sustainable development, and to learn about the experiences, achievements, challenges and current actions on the regional bioeconomy strategy in Eastern Africa.

Opportunity

Call for Applications

BioInnovate Africa Fellowship for Women Scientists, 2024

[Read more](#)



BioInnovate Africa is supported by the Swedish International Development Cooperation Agency (Sida) and managed by the International Centre of Insect Physiology and Ecology (*icipe*) in Nairobi, Kenya.



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