



Info Note

BIOBASED INNOVATION AND ENTREPRENEURSHIP BOOTCAMP (BIEB)

Making Ideas Investable

September 2025

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Key Highlights

- **Nurturing the next generation of innovators:** 20 early career scientists primarily, MSc and PhD graduates from 10 countries were competitively selected from scientific networks of BioInnovate Africa and the Regional Scholarship and Innovation Fund (Rsif) to participate in the inaugural Biobased Innovation and Entrepreneurship Bootcamp (BIEB).
- **From lab to market:** The bootcamp equipped participants with practical skills to design commercialisation pathways for their innovative biobased ideas while also engaging directly with potential consumers of their proposed products and services in Nairobi, Kenya.
- **Learning from real world success:** Participants visited leading biobased companies and a regional policy agency in Arusha, Tanzania gaining firsthand insights into how bioeconomy products and policy instruments are being implemented in practice.
- **Pitching for potential investments:** The bootcamp culminated in a high-energy pitch event at icipe's Duduville campus in Nairobi. Each participant had three minutes to showcase the commercial potential of their biobased innovative idea to a distinguished panel of judges that included investors, scientists, private sector representatives, enterprise support organisation, development partners, and policy actors.
- **Building momentum for Africa's bioeconomy:** The bootcamp underscored the vital role of bridging science, business and investment in driving a sustainable bioeconomy. It was strongly recommended as a platform for empowering young and early-career scientists to contribute to biobased industrial development and create jobs for the region.



1. Background

BioInnovate Africa established a **BioVenture hub** at *icipe*'s Duduville campus. The hub enables the scientific community at *icipe* to package innovative biobased ideas to become investable ventures thereby encouraging entrepreneurial thinking among scientists and post-graduate students at *icipe* campus. Onboarded teams develop ventures from their biobased innovative ideas for an incubation period of 9 to 12 months during which, they get opportunities to network and exchange knowledge with science and business experts in the fields of innovation and business.

Thematic areas are:

- i. Value addition to agroproduce.
- ii. Agrowaste/biowaste conversion.
- iii. Bioeconomy policy analysis.

The inaugural Biobased Innovation and Entrepreneurship Bootcamp (BIEB) was organised under the auspices of the BioVenture hub, specifically for the youth primarily early-career and/or graduate students (MSc and PhD) in BioInnovate Africa and the Regional Scholarship and Innovation Fund (Rsif) scientific network in Africa. The bootcamp enabled the participants to package their innovative biobased ideas into investable projects.

2. Why a Biobased Innovation and Entrepreneurship Bootcamp?

As Africa's bioeconomy continues to grow, there is an urgent need for innovative biobased products and services that tackle pressing continental challenges in food security, health, climate change and sustainable industrialisation. While the continent's academic and scientific communities are generating groundbreaking discoveries, many lack the entrepreneurial thinking and practical skills to translate research outputs into market-ready solutions. The bootcamp addressed this gap by equipping young early-career scientists

with the tools to bridge science, enterprise and investments – thereby accelerating open innovation, creating a pipeline of investable bioeconomy projects and nurturing a new generation of entrepreneurial scientists and/or innovators poised to drive inclusive growth across the region. As such, BioInnovate Africa conducted a BIEB that span 10 days from 28 July 2025 to 7 August 2025 under the theme 'Making ideas investable'.



3. Bootcamp Location and Participants

The main venue of the BIEB was *icipe* main campus (Duduville) in Nairobi, Kenya. While at *icipe*, participants were part of a collaborative, peer-to-peer, focused learning environment and had opportunities to share their experiences with the innovation ecosystem at *icipe* campus. Field visits to a university, successful biobased companies and a regional policy agency were conducted in Arusha, Tanzania.

A total of 20 participants (10 of whom were women) attended the bootcamp and they were nationals of 10 African countries namely, Burundi, Chad, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Malawi, Rwanda, Tanzania and Uganda. The participants were competitively selected from the networks of BioInnovate Africa and Rsif through a closed call application process. Specifically, 15 participants were selected from BioInnovate Africa network of partner institutions while 5 participants were selected from Rsif network of alumni scholars. An abstract and profile of each of the participants can be accessed at this link [HERE](#).

20

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African countries
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10 of them were women



4. Bootcamp Highlights

The bootcamp was conducted based on an inhouse curriculum structured in three segments namely, learning workshops, field visits and a pitch event held as follows:

- i. **Learning workshops: 28 July 2025 to 1 August 2025**
Field visits: 4 to 5 August 2025
- ii. **Debrief from field visits: 6 August 2025**
- iii. **Pitch event: 7 August 2025**

The participants were organised in six (6) thematic groups based on bioeconomy fields of their innovative ideas namely, Biopesticides, Biomaterials, Biopharmaceuticals, Food and Nutrition, Biodiversity and Biomimicry and Wastewater treatment systems.

Learning Workshops

The workshop sessions covered topics that led to venture and/or innovation project development namely, customer discovery, value proposition, basic financials, intellectual property (IP), navigating regulatory requirements and investor dialogue. Participants also got an opportunity to directly engage with potential customers of proposed biobased products and services within Nairobi and to visit two (2) BioInnovate Africa supported projects implemented by *icipe* namely, Fungal biopesticides and Hot water disinfestation. Additionally, participants visited *icipe* Africa Reference Laboratory for Bee Health and the Insectary.

Workshop sessions commenced with a 30-45 minute-talk delivered by speakers invited from *icipe*/BioInnovate Africa network of partners with specialised expertise in each topic and with technical support of *icipe* staff. The experts were from Growth Africa, WWF Kenya, Villgro Africa, BioLinx Africa, Kenya Industrial Properties Institute (KIPI), Kenya Climate Ventures (KCV) and Biotope by VIB. Following each talk, participants delved deeper into practical application of the learning to build their own commercial pathways with the help of relevant tools. Energizers and ice breakers delivered by *icipe* staff helped to increase motivation and fostered a team spirit among the participants or 'bootcampers' as they were normally referred to.



Field visits

Participants gained real-world exposure to an innovation ecosystem in Arusha, Tanzania, engaging with academia, industry and policy institutions under BioInnovate Africa and Rsif network. Field visits included the Nelson Mandela African Institution of Science and Technology (NM-AIST), flagship biobased enterprises such as A-to-Z Group of companies and ENV SOL Technology Company Limited, both implementing innovative bioeconomy solutions as well as the East African Community (EAC) headquarters through its Science and Technology Commission (EASTECO), which plays a key role in advancing bioeconomy growth across the region. Participants gained firsthand experience of the role of academia



in driving innovation, the principles of product development and commercialisation, the deployment of innovative waste management solutions and the policy and regional integration issues shaping science and innovation.

Pitch event

The bootcamp concluded with a grand finale of a Pitch event where each of the 20 participants showcased their packaged innovative biobased ideas to an audience of investors, scientists, private sector representatives, enterprise support organisation, development partners, and policy actors invited to participate at the event. A panel of judges provided constructive feedback to each of the participants

highlighting strengths and areas of improvement and/or further research topics for each of the packaged innovative ideas. During the event, *icipe* management – represented by Dr Julius Ecuru, also the Manager of Research, Innovation and Coordination Unit at *icipe*, reaffirmed its commitment towards advancing innovation based on cutting edge scientific discoveries that address regional and global challenges. The event concluded with a networking cocktail reception to further deepen strategic collaboration opportunities.



5. Key Outcomes and Next steps

At the end of the bootcamp, each of the participants had prepared the following for each of their innovative ideas:

- a. **A pre-tested customer profile**
- b. **A refined value proposition and competitor matrix**
- c. **A preliminary IP strategy**
- d. **A preliminary financial model**
- e. **A Pitch deck**

Additionally, the bootcampers formed their own informal network to deepen collaboration, share experiences across sectors and update each other on advancements in the bioeconomy and funding opportunities to expand their work.

The panel of judges will provide detailed feedback on each of the 20 biobased innovative ideas, from which, 5 (five) promising ideas will be selected to receive follow-on mentorship support and funding to transition them towards the market through BioInnovate Africa's BioVenture hub.

6. Conclusion and Recommendation

The Biobased Innovation and Entrepreneurship Bootcamp (BIEB) underscored the critical role of innovation ecosystem actors in fostering entrepreneurial mindsets among Africa's scientific community. It offered participants peer-to-peer learning, hands-on engagement, and valuable networking opportunities, while also serving as a platform to showcase scientific breakthroughs with strong commercial potential and societal impact. By linking science to markets and funding opportunities, BIEB demonstrated how biobased innovations can contribute to advancing the continent's bioeconomy.

Importantly, the bootcamp was recognized as a powerful mechanism for empowering young early-career scientists to become entrepreneurial leaders (especially women) capable of driving the development of Africa's biobased industries.

Looking ahead, future bootcamps could deepen impact by allocating more time to entrepreneurship workshops through a pre-bootcamp orientation, and by engaging a broader pool of investors during the pitch event to build momentum for investment in Africa's bioeconomy.

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- Shira Mukiibi is the Business Development Manager at BioInnovate Africa, *icipe*
- Cynthia Orango is the Research and Innovation Grants Officer at Rsif, *icipe*
- Valine N. Moraa is Communications Officer at BioInnovate Africa, *icipe*
- Julius Ecuru is Manager at BioInnovate Africa, *icipe*

Design and layout: Brian Mwashii



For more information about BioInnovate Africa, please contact:

The Manager, BioInnovate Africa

International Centre of Insect Physiology and Ecology (*icipe*)

P.O. Box 30772-00100 Nairobi, Kenya

Tel: +254 (20) 863-2433

Email: bioinnovate@icipe.org



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