Call For Abstracts and Papers

The 1st East Africa Bioinput Conference, 2027

Scaling Bioinputs for Sustainable Food Systems and Climate Resilience.

Date: 10th – 12th February 2027. Venue: KICC, Nairobi, Kenya

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1. Background and Rationale

More than 40% of soils across East Africa are degraded, and crop productivity on smallholder farms in sub-Saharan Africa is estimated to be declining by approximately 4% annually. Heavy reliance on imported synthetic fertilizers, covering an estimated 80% of the continent's requirements, has exposed farmers to price volatility and geopolitical supply shocks. Yet, these inputs often treat the symptoms rather than the underlying causes of declining soil health. At the same time, declining soil health, climate variability, biodiversity loss, rising input costs and food safety concerns continue to constrain the productivity, profitability and resilience of smallholder farming systems, highlighting the need for integrated, locally appropriate and sustainable approaches to soil fertility management, crop protection, food safety and agricultural production.

On a positive side, a new generation of East African enterprises is demonstrating that bioinputs including compost, manure-based amendments, biochar, microbial inoculants, biofertilizers, biostimulants, biopesticides and biofungicides, can be produced profitably from local organic waste streams. At the same time, policy support for these solutions is gaining momentum through national Agroecology and Regenerative Agriculture Strategies and the Africa Fertilizer and Soil Health Action Plan 2024-2034. In Kenya, the National Agroecology Strategy for Food System Transformation (NAS-FST) 2024-2033 provides an important policy framework for advancing agroecological approaches to food-system transformation, including sustainable soil health management, use of local and renewable resources, knowledge co-creation and more inclusive food systems. Similar momentum is evident across the region, including Uganda's National Agroecology Strategy (2023/24-2028/29), Tanzania's National Ecological Organic Agriculture Strategy (NEOAS) 2023-2030, and Ethiopia's National Agroecology Strategy for Food System Transformation (2026-2040); all of which emphasize sustainable soil management, biodiversity conservation, climate resilience, reduced dependence on inorganic agricultural inputs, and the scaling of agroecological innovations and enterprises. The commitment is further reinforced with the passing of a resolution formally recognizing agroecology as a strategic priority for sustainable agriculture, natural-resource management and food-system transformation across the region by the East African Legislative Assembly (EALA).

Despite this momentum, the bio-input sector remains at an early stage, constrained by limited context-specific evidence on bio-input efficacy, safety, quality, consistency and adoption, fragmented regulatory and institutional frameworks, and underdeveloped markets, enterprises, and financing pathways. There are also important evidence gaps concerning the environmental, climate, productivity, soil-health and biodiversity outcomes of different bio-inputs, as well as the conditions under which bio-inputs can effectively complement other soil fertility and crop management practices. This Call for Papers invites original research, evidence, innovations, policy analyses and rigorously documented practice and enterprise experiences that addresses these gaps and informs the transition to a resilient, farmer-centered bioinput sector anchored in agroecology, Integrated Soil Fertility Management (ISFM) and food systems transformation across Kenya, Uganda, Tanzania, Ethiopia, and the wider East African region.

Contributions that strengthen the scientific, policy and practical foundations for the responsible development, adoption, commercialization and scaling of bio-inputs are particularly encouraged.

2. Objectives of the Call

i. To generate and synthesize rigorous, practice, policy and investment-relevant evidence on the production, efficacy, adoption, governance and commercialization and scaling of bioinputs in East Africa; drawing from research, farmer innovation and industry experince
ii. Strengthen the scientific and policy foundation for bioinput development and use by informing product standards and certification systems, and enabling policy, institutional and regulatory reforms that support quality assurance, safety and market growth.
iii. Identify pathways for responsible scaling and investment in locally led bioinput enterprises, advancing agroecological transitions, Integrated Soil Fertility Management (ISFM) and broader sustainable food-system transformation across East Africa.

3. Thematic Areas

We invite papers that address gaps and opportunities under the following three themes. The areas of focus listed under each theme are indicative and not exhaustive, and contributions addressing related topics are also welcome.

3.1 Research, Evidence and Practice on Bioinputs
(Production, Testing and Adoption through Agroecology and Food Systems Transformation)

3.1.1 Bioinput Science, Innovation and Product Development - aiming at advancing the scientific foundations, innovation, and technological development of bioinput.

- Microbiology, microbial ecology, biotechnology and plant-microbe interactions
- Innovation in bio-input discovery, development and application.
- Digital technologies and approaches supporting bio-input research, development and adoption.
- Agronomic efficacy: effect size, yield response, application rates for compost, manure, biochar, inoculants, and biopesticides across soil types and agroecological zones.
- Feedstock and biomass availability, quality, logistics, and sustainable sourcing that avoids trade-offs with soil cover, fodder and soil carbon.

3.1.2 Bio-inputs, Agroecology, Soil Health and Sustainable Food Systems - aiming to explore the role of bioinputs in agroecological transitions, Integrated Soil Fertility Management (ISFM), food safety and sustainable food-system transformation.

- Bio-inputs within ISFM and agroecological transitions and integrated soil, crop and water management practices.
- Soil health, soil biodiversity, nutrient cycling and soil microbiome
- Climate resilience, carbon sequestration, greenhouse gas emissions, biodiversity and ecosystem services.
- Food safety, including risks, residues, contaminants and safe use of bio-inputs.

3.1.3 Farmer innovation, Adoption, and Scaling Pathway - aiming at understanding how bioinputs are adopted, adapted and scaled in practice through farmer-led innovation, participatory research, extension systems, and inclusive knowledge-sharing.

- Drivers and barriers to farmer awareness, confidence, and adoption; on-farm validation, farmer experimentation and participatory research models.
- Local and indigenous knowledge, extension and advisory systems, including gender, youth and social inclusion in bio-input adoption.
- Economic performance, cost-effectiveness, willingness to pay, scaling and dis-adoption
- Farmer- and practitioner-led innovation: locally developed and adapted composting systems, manure handling and treatment methods, biochar kilns and retorts, and botanical extract and biopesticide preparation
- Fabrication of low-cost equipment, tools and production units, and the adaptation of designs to locally available materials, skills and budgets
- On-farm validation and farmer experimentation: plot comparison, multi-season observation, and farmer-held records as evidence
- Generating credible evidence where laboratory access is limited or costly, including documented failure, inconsistency and what was learned from it
- Demonstration and exhibition of farm-level innovations - working equipment, production processes and finished products - with the evidence base for any performance claim disclosed

3.2 Policy, Regulatory and Institutional Frameworks for Bioinputs

3.2.1 Regulation, standards, quality assurance and certification

- Registration, certification, and quality-assurance pathways (e.g., KEBS, PCPB) and their implications for local producers and farmer protection.
- Product standards, efficacy testing, laboratory capacity, quality control, safety, traceability and post-market surveillance.
- Product stewardship and responsible use of bio-inputs.

3.2.2 Policy, institutional coordination and incentives

- Reorientation of input subsidies and incentives toward locally produced organic inputs; policy coherence across agriculture, environment, climate, waste management and industrial development.
- Institutional arrangements and policy instruments, linking research bodies, regulators, county governments, and industry associations, and supporting research, innovation, production, adoption and commercialization of bio-inputs, including incentives, public procurement and public-private partnerships.

3.2.3 Regional harmonization, trade and governance

- Regional harmonisation of standards and cross-border approvals across East Africa.
- Regional institutional coordination and governance mechanisms to support harmonized regulation and development of the bio-input sector.

3.3 Commercialization, Markets, Enterprise Development and Investments in Bioinputs

3.3.1 Production, manufacturing and supply chains

- Viable business and enterprise models, including decentralized production hubs and MSME development from local waste streams.
- Feedstock sourcing, supply chains, logistics, storage and last-mile distribution including agro-dealer networks,
- Local manufacturing, processing, formulation and technology transfer

3.3.2 Markets, enterprise development, demand and business models

- pricing competitiveness against imported synthetics, and demand-creation approaches (demonstration farms, farmer field schools, digital advisory).

- Inclusive market systems for women- and youth-led enterprises, cooperatives, and smallholder farmers.
- Documented case studies of existing production and business models, including quality assurance and product refinement.

3.3.3 Investment, financing and risk mitigation

- Financing instruments - grants, concessional capital, guarantees, working capital, results-based finance, and carbon/ecosystem-service revenues - and investment readiness of bioinput enterprises.
- Blended finance, impact investment and risk mitigation.
- Financial viability and investment readiness of bio-input enterprises.

4. Who should submit?

The conference seeks to move beyond the conventional academic conference model by creating a space where research, evidence, policy and practice come together. We invite contributions from those generating, applying testing, adapting and scaling knowledge and solutions in the bioinput sector. Farmers, farmer organizations and industry are not simply participants or audiences. They are knowledge holders and innovators whose experiences, challenges, failures, and lessons from practice are essential to shaping the future of the bioinputs sector.

We therefore encourage submissions that share insights and evidence from practice, as well as research. Contributions may draw on scientific studies of farmer innovation, enterprise development, product development, technology, extension, implementation, policy, regulation, markets or community knowledge. If you are generating evidence, developing solutions, testing ideas, producing bioinputs, supporting adoption, or shaping the enabling environment for bio-inputs, we want to hear from you. We particularly encourage submissions from:

- Farmers, farmer groups, cooperatives and producer organizations
- Community-based organizations and farmer field schools
- Extension agents, agrodealers and technical advisors
- Small and medium enterprises producing bio-inputs
- Fabricators and makers of production equipment
- Researchers, students and academic institutions
- Regulators, standards bodies and policy actors
- NGOs, development programs and financing institutions

Submission guidelines

- ***Evidence from Research***

For: researchers, students, institutions, and programs with structured study results.
Submit: a structured abstract of 600 words, clearly indicating: (i) title; (ii) thematic area and sub-thematic area/s; (iii) background/problem statement; (iv) the objectives or research questions, (v) methodology/approach, (vi) key findings/ results or documented experience, (vii) conclusions and policy or practice implications.
Author name/s, affiliations, and corresponding authors' contact details should also be provided.
Formats: oral presentation or poster.

- ***Evidence from the Farm***

For: farmers, farmer groups, cooperatives, extension agents, enterprises and practitioners.
This does not require an academic abstract. Instead, tell us about your experience by answering these five questions:

1. **What did you make, test, or use?** Describe the bioinput, technology or practice.
2. **Where and for how long?** Indicate the location, scale (e.g. farm size or number of farmers, and duration or number of seasons.
3. **What did you do?** Explain how you made it, how you applied it, what you compared it against, if applicable
4. **What happened?** Share the results and how you observed them. What changed, and how did you know? Yields, soil, pests, cost, labor, time – whatever you observed and recorded.
5. **What would you tell another farmer?** What worked, what did not, what you would do differently.

Length: about one page of writing, **or** a voice recording of up to 3 minutes, **or** a video of up to 3 minutes. Photographs, farm records, notebooks and sketches are highly encouraged. **Formats:** oral presentation, poster, farmer-to-farmer roundtable, or demonstration session.

- ***Innovation on Show***

For: producers, enterprises, cooperatives, fabricators and innovators with something to exhibit or demonstrate.
Submit: a short description covering:

1. What the product, equipment or innovation is
2. Who makes it, and at what scale
3. What problem it solves, for which farms
4. What evidence you have that it works
5. What you need at the exhibition – space, table, power, water, or outdoor area

We particularly welcome: composting systems and equipment; manure handling and treatment technologies; biochar kilns, retorts and production units; biopesticide and botanical extract products; microbial inoculants; soil testing tools; packaging, storage and distribution innovations; and locally fabricated machinery.

5. Review Process and Key Dates

All submission formats will undergo peer review using criteria established by the Technical Abstracts and Papers Committee drawn from consortium and partner institutions. Reviews will assess relevance to the conference themes, technical/scientific quality, methodological rigour, originality, strength of evidence, relevance to East Africa and/or potential for impact and scaling. Accepted abstracts may be selected for oral or poster presentation based on the review scores, thematic balance and conference requirements. Those whose abstract will be accepted, will be requested to submit a full paper by **4th December 2026** to be presented at the conference and considered for publication in an edited volume / special issue.

- **Call opens: 5th October, 2026**
- **Abstract submission deadline: 1st December, 2026**
- **Notification of accepted abstracts: 17th December, 2026**
- **Submission of full paper: 1st January, 2027**

6. Submissions and Enquiries

Submit abstracts and papers through the platform using the link **https://1steastafricabioinputsconference.bibakenya.org/abstracts** . For any enquiries, contact the organisers through **eabioinputsconference@gmail.com** **and +254725510576**