

BIOECONOMY INNOVATIONS AND INVESTMENTS FORUM

for tackling food loss and waste, and unsustainable agrifood systems



25-27 November 2025

Amari Bangkok, Thailand

847 Phetchaburi Rd, Khwaeng Thanon Phaya Thai,
Ratchathewi, Bangkok 10400



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Background

Bioeconomy strategies allow catalyzing the transition to more efficient and responsible agrifood value chains, while reducing pressures on the global environment (like climate change, and biodiversity loss) concurrently. Global interest in bioeconomy is accelerating but cooperation remains fragmented, prompting calls for more coherence and cooperation. Multilateral initiatives are advancing principles, metrics and other critical issues. The G20 Initiative on Bioeconomy, for example, agreed on ten high-level principles to guide the development of sustainable, inclusive, and innovation-driven bioeconomy pathways. The attention to bioeconomy has been growing; COP30 (Brazil) features bioeconomy. Likewise, the focus of the next Climate Technology Progress Report 2025 of UNEP is on bioeconomy.

Cutting food loss and waste (FLW) and enhancing circularity are strategic entry points for bioeconomy. Innovative technologies are rapidly emerging, and several countries in Asia and the Pacific such as China, Thailand, Malaysia, Japan, the Republic of Korea, and India have taken significant steps forward on this. At the regional level, these efforts are complemented by frameworks such as the Framework for Circular Economy for the ASEAN Economic Community and the ASEAN Action Plan on Sustainable Agriculture. Also, bioeconomy is a key element of Goal 2 of the Jaipur Declaration on 3R and Circular Economy (2025-2035), guiding Asia-Pacific's transition to a circular economy. FAO has been strengthening efforts to advance bioeconomy for agrifood system transformation. It is a Programme Priority Area under the "Better Environment" pillar of FAO's Strategic Framework 2022–2031.

The Forum

The Bioeconomy Innovations and Investments Forum is being organized to contribute to the above initiatives towards the transformation of agrifood systems through results-driven and programmatic approaches with more policy coherence and cooperation in the region. This hybrid Forum will provide a platform to exchange knowledge and experiences on bioeconomy innovations, including for reducing FLW, strengthen capacity among stakeholders, and connect innovators with investors to facilitate replication and scaling up of successful bioeconomy solutions for agrifood system transformation.



Objectives

To provide a for sharing bioeconomy innovations and approaches that tackle FLW and unsustainable agrifood systems.



To build capacity among stakeholders, including governments, private sector, civil society, investors, researchers, and academics.



To connect innovators with investors for potential replication and scaling up of bioeconomy solutions across all agricultural sectors (crops, livestock, fisheries, forestry).

Themes

The Forum will address key issues related to food loss and waste and bioeconomy applications across all agricultural sectors—crops, livestock, fisheries, and forestry—that are relevant for ensuring sustainability. Examples of innovations include:

Theme	Illustrative Examples	Relevant Sector(s)
Circular Resource Use and Waste Valorization	<i>Textiles from Banana pseudostems, Eco-leather from fish skin with plant extracts, Transforming coconut husk into biodegradable packaging, Converting fish waste into fertilizer, animal feed or algae production, Using Black soldier fly (BSF) to convert organic waste into protein feed for poultry and aquaculture, Rice straw transformation into bioenergy pellets to avoid open crop burning and reducing methane, Livestock manure to biogas solutions</i>	Crops, Fisheries, Livestock
Bio-based products and sustainable materials	<i>Bamboo composites for green construction, Bio based polymers from animal byproducts</i>	Crops, Fisheries, Forestry, Livestock
Innovative value chains and production systems	<i>Hydroponics/Aquaponics systems, Circular economy business models, Bio-refineries for crop/livestock residues, High value non-wood forestry product such as Marula Nut Oil</i>	Crops, Forestry, Livestock, Fisheries
Pollution reduction and sustainable inputs Crops, Livestocks,	<i>Microbial applications to replace residue burning, Natural insecticides and fertilizers from botanicals, Seaweed based bioplastics, Bamboo for alternatives to plastics, Recycled/bioplastic product substitutes, Methane reducing feed additives seaweed based formulation for ruminants</i>	Crops, Livestock, Fisheries
Ecosystem restoration and Bio remediation	<i>Duckweed based wastewater treatment in aquaculture, Phytoremediation of soil contaminants, Bio and phytoremediation of contaminated agrifood systems</i>	Crops, Fisheries

Expected Outputs

Demonstrated impact and business cases of innovations and best practices in addressing FLW and promoting sustainable bioeconomy.

Increased government interest in advancing initiatives on FLW and bioeconomy.

Identified collaboration opportunities with international financial institutions (IFIs) and donors to mobilize investments for scaling innovations.

Expanded networking opportunities between innovators and investors.



Tentative Agenda

DAY 1

Session 1: The Big Picture

09:00 AM – 13:30 PM

- Welcome Remarks: **Alue Dohong**, *Assistant Director-General, FAO*
- Welcome remarks: **Vinaroj Subsongasuk**, *Permanent Secretary, Ministry of Agriculture and Cooperative, Thailand*
- Special remarks: **H.E. Faiyaz Murshid Kazi**, *Ambassador of the People's Republic of Bangladesh to the Kingdom of Thailand*
- Special remarks: **H.E. Millicent Cruz Paredes**, *Ambassador of the Republic of the Philippines to the Kingdom of Thailand*

Photo break

- Global Initiatives in Bioeconomy: **Lev Neretin**, *Senior Natural Resources Officer, FAO, Rome*
- Bioeconomy Pathways for Valorizing FLW: **Meeta Punjabi Mehta**, *Senior Food Systems Officer, FAO, Bangkok*
- What to expect in BIIF 2025: **Illias Animon**, *Forestry Officer, FAO, Bangkok*
- Global and cross-regional initiatives: **Francis Johnson**, *Senior Research Fellow, Stockholm Environment Institute*
- Global Bioeconomy Summit- regionalization, EU strategy: **Patrick Barret**, *Ministry of Agriculture, Ireland*
- Message from COP 30 and bioeconomy directions in Brazil: **Valeria Burmeister Martins**, *Department of Agriculture Innovation, Ministry of Agriculture and Livestock, Brazil*

Coffee Break

- Directions in Bioeconomy in Southeast Asia: **Dian Sukmajaya**, *Deputy Director, ASEAN Secretariat*
- Transforming food systems in SE-Asia: the challenge of food loss and waste: **Chloe Pottinger-Glass**, *Stockholm Environment Institute, Asia Center*
- The Jaipur Declaration on 3R and Asia-Pacific's transition to bioeconomy: **Choudhury Rudra Charan Mohanty**, *Environment Programme Coordinator, UNCRD, Japan*
- COP30 and 2025 Climate Technology Progress Report: **Monica López Conlon**, *UNEP*
- Directions of bioeconomy and trade: Insights from the UK-UNCTAD SMEP Programme: **Henrique Pacini**, *Economic Affairs Officer, UNCTAD*
- Japan's strategies for promoting research and innovations for sustainable food systems: cases of bioeconomy technologies: **Miyuki Liyama**, *Japan International Research Center for Agricultural Sciences (JIRCAS), Japan*
- Directions of bioeconomy in Lao PDR and sustainable multifunctional landscapes management: **Simone Vongkhamho**, *Director, NAFRI, Lao PDR*
- Directions of bioeconomy and circular economy in agriculture in Viet Nam: **Mai Van Trinh**, *Director of Institute for Agricultural Environment, Viet Nam*
- The Bioeconomy Landscape in Malaysia; Current and Future Trends: **Faizal Hamid**, *Malaysian Bioeconomy Corporation*
- Directions of bioeconomy in India and relevance of biological resources: **Sajith Babu**, *State Coordinator, Ayush, India*

Lunch Break

Tentative Agenda

- Strengthening quality of planting materials for bioeconomy: **Sithichoke Tangphatsornruang**, *Deputy Executive Director of BIOTEC*
- Bridging Indigenous wisdom and value chain Innovations: **Jianchu Xu**, *Global Lead in Bioeconomy and China Country Director, CIFOR-ICRAF*
- Linking technological innovation and regional development for advancing bioeconomy: **Ulrich Schurr**, *Director, Institute of Plant Sciences at Forschungszentrum Jülich, Germany*

Session 2: Showcasing Bioeconomy Innovations for Sustainable Food and Agriculture

13:30 PM - 17:30 PM

Session 2.1 - Food and feed

- Transforming underutilized biomass into high-value livestock inputs: **Ayush Adhikari**, *Nepal Polytechnic Institute, Purbanchal University, Nepal*
- Using Black Soldier Fly to create a sustainable, forward-thinking bioeconomy solution: **Akash Naoghare**, *KHOJ, India*
- Insect-related innovations in Malaysia: **Salamahafifi Yusnaieny**, *Malaysia*
- Circularity approaches for food waste management in Sri Lanka: **Suneth Bandara**, *Sri Lanka*
- Decentralised, circular economy based insect innovations in Myanmar: **David Allan**, *Spectrum - Sustainable Development Knowledge Network, Myanmar*

Session 2.2 - Fibre, Fuel and Others

- Banana stems to textiles in Pakistan and Viet Nam: **Marilique Nijmeijer**, *FAO*
- Converting cassava waste into fiber: **Warinthorn Songkasiri**, *Director, Biotec, Thailand*
- Using agro-waste to capture carbon and generate continuous energy in Thailand: **Pasinee Tangsuriyapaian**, *Enable Earth, Thailand*
- Biological fabrication to prepare structural composites for the mushroom cultivation: **Charoenpong Songdechakrai**, *Mush Composites, Thailand*

Session 2.3 - Agriculture and Livestock

- Innovative functional ingredients for animal health and sustainability: **Luciana Rossi**, *Professor, Department of Veterinary Medicine and Animal Sciences University of Milan, Italy*
- Crop residue management with microbes: **Wichien Yongmanitchai**, *Kasetsart University, Thailand*
- Livestock waste to biochar in Indonesia: **Bangun Adi Wijaya**, *PT Pagatan Usaha Makmur, Indonesia*
- Restoring soil, and reviving life through soil rehabilitation: **Tan Mee Yeow**, *Tan Lan Agri Venture Sdn. Bhd. (CropX Bio+), Malaysia*

Session 2.4 - Fisheries, Aquaculture and Forestry

- Innovations with non-wood forest products: **Nola Andaya**, *Livelihoods and Markets Adviser, NWFP EP*
- Mass timber related innovations: **Henri Bailleres**, *General Manager for Forests to Timber Products*
- Bamboo innovations: substituting plastics in China: **Changhua Fang**, *International Centre for Bamboo and Rattan, National Forestry and Grassland Administration, China*
- Valorization of Sea Cucumber processing waste into eco-friendly Saponin-based Soap Products: **G.A. Parami Ranthilini**, *University of Sri Jayewardenepura, Sri Lanka*
- Turning marine discards into high-value, market-ready bioproducts: **Sk Md Saeef Ul Hoque Chishty**, *IUCN Bangladesh*
- A bioeconomy model for sustainable aquaculture in the Philippines: **Elisa Claire Sy**, *E-Primate, Philippines*

Day 1 Closing and Wrapping up

Tentative Agenda

DAY 2

Session 3: Enabling Environment and Investments

09:00 AM – 12:25 PM

Session 3.1 - Support for Innovations: Policies, initiatives, partnerships, collaborations

- Research and innovation policies on smart and sustainable agriculture in Thailand: **Sirinporn Daengphuag**, *Policy Specialist, The Office of National Higher Education, Science, Research and Innovation Policy Council, Thailand*
- Sustainable biomass and agricultural diversification: Brazil's pathways for a bio-based economy: **Valeria Burmeister Martins**, *Departamento of Agriculture Innovation, Ministry of Agriculture and Livestock, Brazil*
- Partnerships on and benefit sharing with the Indigenous Peoples for inclusive bioeconomy: **Songphonsak Ratanawilailak**, *Pgakenyaw Association for Sustainable Development, Thailand*
- Strengthening the roles of associations for a sustainable bioeconomy: **Sate Sampattagul**, *Director of UNISERV, Chiang Mai University*
- Biorefinery platforms for industrial partnerships and technology transfer: **Navadol Laosiripojana**, *Director, the Joint Graduate School of Energy and Environment, Thailand*
- Bioeconomy and evolving industrialization: **Yvonne Lokko**, *Unit Head, Agro Innovation and Bioeconomy, (UNIDO)*
- Advancing education for bioeconomy: **Ahmed Fahmi**, *Chief of Scient Unit, UNESCO Regional office for APAC*
- Empowering stakeholders on circular approaches in bioeconomy: **Debaranjan Pujahari**, *Sattva, India*
- Strengthening connections among innovators and investors to accelerate bioeconomy businesses: **Michael Phillips**, *Co-Founder / CEO, FutureFish*
- Policy approaches to harness business and investment for sustainable economies: **Jonathan Tsuen Yip Wong**, *Chief of Innovation, Enterprise and Investment Trade, Investment and Innovation Division, UNESCAP*

Session 3.2 - Support for Innovations: Financing and Investments Landscapes

- Directions in GCF funding and linkages with bioeconomy: **Daniel Farcy**, *Green Climate Fund*
- JICA and bioeconomy related investments: **Hanai Akane**, *Director, Nature Conservation Team 1, Global Environmental Department, JICA*
- International dimension of the 2025 EU Bioeconomy Strategy: **Michael Bucki**, *Counsellor, Delegation of the European Union to Thailand*
- Turning agriculture finance for bioeconomy development: **Anupa Rimal**, *Lead Environment and Climate Specialist for Asia Pacific, IFAD*
- Hand in Hand initiative and bioeconomy investments at scale: **Xiaoruo Jiang**, *Senior Policy Officer, FAO*
- Supporting projects with carbon benefits: **Pimtawan Panyatham**, *South Pole*
- Private sector investments for enhancing feedstock: **Sanjiv Louis**, *New Forests*

Session 4: Plenary Discussions on the Regional Initiatives

12:25 - 13:00 PM

- Bioeconomy Innovations and Investments Forum's Communiqué
- Publications on Bioeconomy (for consultation)
- Bioeconomy for Sustainable Transformation (BEST) in Food and Agriculture
- Regional Bioeconomy Innovations and Investments Platform

Lunch Break and Exhibition

Tentative Agenda

Session 5: Business to Business Network for Actions (led by Malaysian Bioeconomy Corporation)

14:00 – 17:00 PM

- Exhibitor 1: AFFIA- Asian Food and Feed Insect Association (Insects), Thailand
- Exhibitor 2: Earthbound Co., Ltd (Leaf-based materials for automotive interiors, premium packaging, wallpaper), Bangladesh
- Exhibitor 3: Tan Lan Agri Venture Sdn Bhd (Bio-organic fertilizer for soil rehabilitation, treatment and fertilization; CropX Bio), Malaysia
- Exhibitor 4: Koshroom (model which can use waste materials like spent mushroom substrate and aquatic weeds are reused as valuable resources to create products such as Fertisoil), Thailand
- Exhibitor 5: Reclimate Sdn Bhd (Biomass and Biochar), Singapore
- Exhibitor 6: Agroecology, soil and plant health and sustainable land management (live soil and compost analysis, a rapid soil testing technology (12 parameters in under 30 minutes), a compost tea brewer, and an AI-generated picture book on sustainable farming practices, along with some visual materials)
- Exhibitor 7: Rume Vetcare Sdn Bhd (animal feed mesh and pellet totally from palm by product), Malaysia
- Exhibitor 8: Dunita International Sdn Bhd (multi vitamin), Malaysia
- Exhibitor 9: Mentari Alam Eko (MAEKO) Sdn Bhd (IoT sensors and the CarbonTrack digital platform), Malaysia
- Exhibitor 21: Mananasi Fiber (Pineapple-leaves based fiber to textile-grade fibres and nutrient-rich compost), Kenya
- Exhibitor 22: UPCYDE (VerdeSKIN and VerdeFORM), Thailand
- Exhibitor 23: BIOTEC (Fresh cassava roots, Cassava pulp (processing residue), Clean cellulose extracted from the pulp), Thailand
- Exhibitor 24: Ecologic Circle (compostable food packaging and tableware giving farmers a disincentive to burn as well as a climate friendly alternative to consumption of plastic), Thailand
- Exhibitor 25: Free The Seed (durable packaging material), Malaysia
- Exhibitor 26: Enable Earth (biochar (from animal-feed corn residues for soil), Thailand
- Exhibitor 27: C energy solutions (Biogas digester), Thailand
- Exhibitor 28: Altarize (micro-cement, bio bricks), Thailand
- Exhibitor 29: Modgut Co., Ltd. (Probiotics), Thailand
- Exhibitor 30: Palm fiber Sdn Bhd (high-dietary fiber supplements), Malaysia



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- Exhibitor 10: SUSTAIN BIZ (Wolffia Farm Demo and Wolffia Products relating to Food for the sustainable future, Food for Insecurity), Thailand
- Exhibitor 11: UniFAHS (bacteriophage based cocktails), Thailand
- Exhibitor 12: Oil Paaktadha (wine, ancient rice), Thailand
- Exhibitor 13: BIOTEC (Cassava Valorization Technology; Hydrocyclones in cassava starch production), Thailand
- Exhibitor 14: Mush Composites (Innato Biotech CO.,LTD.) (Mycelium-based composite tiles (Mush Art Tiles), Thailand
- Exhibitor 15: CESRA (Biochar), Thailand
- Exhibitor 16: Siam Agri Supply Co.Ltd. (Soil digest), Thailand
- Exhibitor 17: Coco Agriculture Co., Ltd. (coconut fiber or coco peat), Thailand
- Exhibitor 18: Jayawardhanapura University (Eco-friendly soap), Sri Lanka
- Exhibitor 19: VNI Scientific Sdn Bhd (Bio-based Products and Sustainable Materials VNI's innovations transform renewable natural resources (palm crops and rainforest herbs) into value-added bio-based skincare products, replacing synthetic materials with sustainable biotechnology solutions), Malaysia
- Exhibitor 20: Atomis Inc. + Yachiyo Engineering Co., Ltd. (YEC), Japan (Next-generation high-pressure gas container "CubiTan®", which enables the storage and transport of bio-methane), Japan
- Exhibitor 31: Marine Treasure Biotech Sdn Bhd (fish based amino-biofertiliser), Malaysia
- Exhibitor 32: Bina BioX (lastic replacement for chemical-based foams, interiors, art and coasters, bioceramics), Malaysia
- Exhibitor 33: Malaysian Bioeconomy Corporation
- Exhibitor 34: FAO (different images of bioeconomy, communication materials), Thailand
- Exhibitor 35: UNCTAD (communication materials)
- Exhibitor 36: Royal Forest Department (value added forest products), Thailand
- Exhibitor 37: RECOFTC (value added community forestry products), Thailand
- Exhibitor 38: VIP interhealth company Ltd. (Innovative supplements for better health), Thailand
- Exhibitor 39: Forecast Agrotech Innovations Pvt.Ltd, India
- Exhibitor 40: Social Forestry, FAO, Thailand
- Exhibitor 41: Vigor Agribiotech Solutions Sdn. Bhd. (Microbial-based biofertilizer and biocontrol products), Malaysia
- Exhibitor 42: Asian Institute of Technology (FINH (Future Intelligent Nutritional Harvest)
- Exhibitor 43: Nuplas Solutions Sdn. Bhd

17:00-17:15 | Ways forward and closure



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