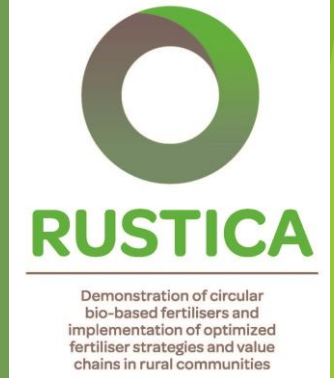


POLICY BRIEF 4

Circular bio-based fertilisers in a global context



Key challenges

- EU sustainable food strategies impact global agriculture through policy, regulation, and cooperation.
- Locally adapted bio-based fertiliser technologies are essential for food security in the Global South.
- International cooperation should prioritise contextual research, innovation, and supportive policies.
- Global regulatory differences complicate International BBF trade, hindering efforts to balance nutrient demand and supply.

CURRENT CONTEXT

EU strategies

- ✓ EU green Deal and F2F strategies aim to make the EU's food systems sustainable, focusing on reducing synthetic fertiliser use and encouraging bio-based alternatives.

Global cooperation

- ✓ The EU promotes sustainable food production globally through international partnerships and funding R&I to drive climate mitigation and sustainable practices.

Trade and standards

- ✓ EU trade agreements help extend environmental standards abroad.
- ✓ The 2022 EU FPR sets standards and strict guidelines for BBF in the EU market.



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PROBLEMS ENCOUNTERED

REGIONAL VARIABILITY - Production and use of circular bio-based fertilisers vary significantly across regions due to differences in fertiliser needs and availability of residue feedstock.

COOPERATION POTENTIAL - Geographic mismatches between nutrient-rich residue hotspots and nutrient-poor regions create opportunities for international cooperation to balance resources.

TRADE CHALLENGES - Discrepancies in global fertiliser regulations complicate international trade of bio-based fertilisers.

NUTRIENT RECOVERY GAPS - Insufficient nutrient recovery from residues and waste limits human nutrition, farmer incomes, and the availability of affordable agricultural inputs.

LOCAL ADAPTATION BARRIERS - Limited development of locally adapted technologies, business models, and supportive policies hinders effective BBF use and local value chain development.



POLICY BRIEF 4

Circular bio-based fertilisers in a global context

RECOMMENDATIONS TO POLICY MAKERS



Adapt bio-based fertiliser **technologies and value chains to local contexts**, ensuring solutions fit regional resources, capacities, and market needs.



Develop cost-effective solutions for **specific residue streams and target crops**, addressing challenges such as limited residue availability and infrastructure gaps.



Establish a regulatory framework that ensures a **level playing field** to facilitate international cooperation and trade in bio-based fertiliser components and blends.



Balance support for **international trade and local supply chains**, facilitating cooperation through material and knowledge transfer and streamlined regulation.

