

CO-DESIGN OF A SCENARIO OF BIOMASS VALORIZATION WITHIN A CIRCULAR APPROACH ON REUNION ISLAND

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INTRODUCTION

The geographical situation combined with the current increase of agricultural inputs prices challenge the viability of outermost islands farms. The use of local resources in a circular way appears as a way to help to address these issues. Nevertheless, technical and organizational lock-in makes changes difficult to achieve.

GABIR PROJECT

From 2017 to 2020, the GABiR project proposed a territorial approach of biomass in agriculture (at the island level) based on the circular economy paradigm. After an analysis of the territorial metabolism making an inventory of the assets and flows of recoverable biomasses in agriculture, five case-studies were undertaken with local actors for the co-conception of organizational biomass scenarios.



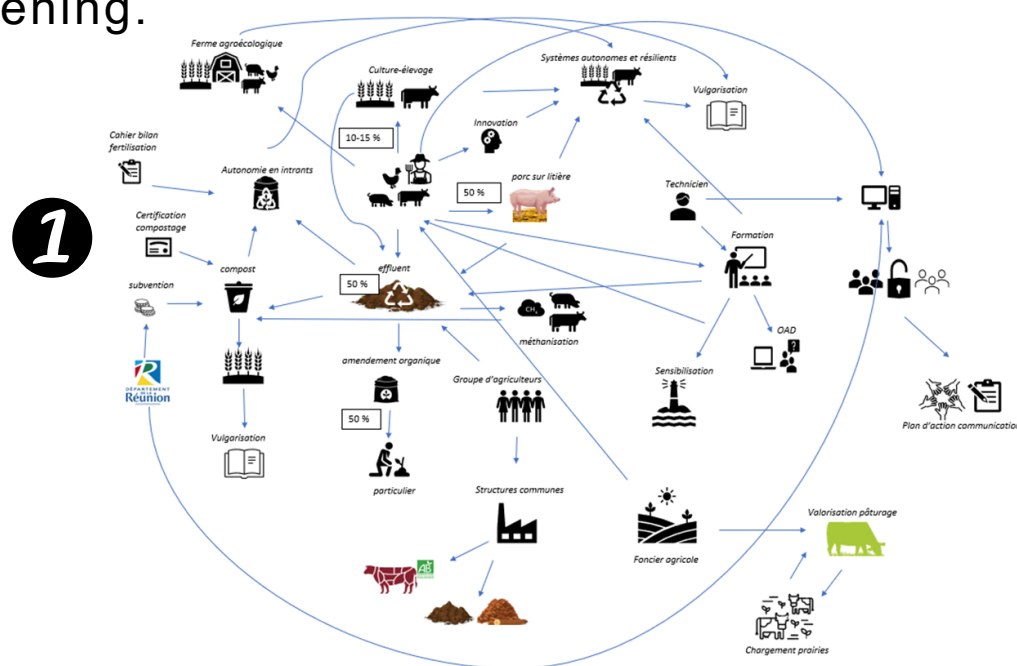
Highlights

→ Composting manure with green waste is a lever to (i) lower manure spreading constraints, (ii) meet the need for biomass that can be used in organic farming, and (iii) higher the use of green waste in agriculture.

→ Biomass recycle in agriculture is already high, among the biomass flows, 83% of the downstream flows are recycled in agriculture.

CONVER PROJECT

From 2020 to 2023, the CONVER project allowed us to (1) build-up with multiple actors a territorial agroecological transition pathway at the municipality level; (2) set up on-farm experiments to develop composting manure with green waste and test the interest of composts on meadows and market gardening.



Highlights

- Need to improve biomass management to reduce inputs
- Transformation of systems toward more agroecological ones

- Successful development of farm co-composts
- Amending and fertilizing interest of co-compost on crops and meadows

CONCLUSION

These Participatory Action-Research projects allowed the production of technical references and organisational answers to build up a circular biomass valorization at the territorial level. Moreover, this project also highlighted controversies and competition related with actor's biomass use strategies.