

Country	Mozambique					
Population	350,000					
Title of policy or practice	Quelimane Municipality Compost Centre					
Subtitle (optional)	An example of Food Circular Economy: transforming organic waste coming from municipal markets into compost useful to agro-ecological food production					
URL video	https://drive.google.com/drive/folders/1ZiZFBkAiU6C2KPVoDLif7Y2XvCAV2Vvr?usp=sharing					
Category	06 – FW		SDGs		2 – 11 – 13	
Year of start	2018		Year of end		ongoing	
Actors involvement	Municipal departments	Public institutions	NGOs CSOs	Research centers	Private sectors	International bodies
	3	1	2			3
Budget	€400,000					
Brief description	<p>Context: Quelimane city has 350,000 inhabitants and it provides them with fresh food through 14 markets receiving and selling fresh production from surrounding rural areas. There was a great deal of food waste in some markets of the city which used to be discarded and three containers of six cubic meter each were required to remove the organic waste to the dumping site. The Municipality with the support of local and international stakeholders has then installed a Composting Centre where the waste is taken and transformed into compost. Waste is brought through trucks but a pilot experience has been done to bring it also through cargo-bikes. The compost produced is distributed among peasants and farmers as well as a new pilot is ongoing focused also on increasing the municipal plant nursery capacity using it.</p> <p>Needs: Reducing the total amount of solid waste being taken to the dumping site improving beneficial solid waste management capacity; Finding a solution for reusing food waste and transform it in useful compost to fertilize agricultural areas.</p> <p>Reasons: as a mechanism to demonstrate that food solid waste can be used to produce organic compost to fertilize agricultural areas instead of being just thrown away.</p> <p>Beneficiaries: Peasants from the Zambezia Province Peasants Union and other local interested farmers; Quelimane Municipality and its inhabitants.</p> <p>Objectives of the Practice: Use organic waste as a raw material to produce compost in the Municipal Composting Centre; experience a circular economy model.</p> <p>Lesson Learnt: The bio fertilizers have a wide acceptance rate and demand and more groups are interested in developing this activity. The small-scale experience showed successfully the possibility of extracting biogas from the composting process.</p> <p>Outcomes: Food waste is reduced; Improve soil quality to increase agricultural productivity; Improve soil quality and availability for plant production in the municipal nursery.</p>					
Innovation	<p>This practice provides an innovative approach as the current composting centre in Quelimane city is the first to be installed and operated in the Zambezia province and probably in the northern area of Mozambique. We consider also innovative for the area to have this example of circular economy as the compost is used then for the improvement of soil fertility both for agricultural production as well as for municipal plant nursery. Compost centre is managed both by technicians but also from youth volunteering, enlarging then the sensitization capacity of the municipality in terms of food waste.</p> <p>As part of the innovative component it is also worth mentioning that a pilot experience of food waste</p>					

	<p>collection from the markets include the use of five cargo bikes: the Quelimane Municipality provides sacks to the local market sellers for organic waste collection and then Cargo bicycles pass through the markets for sack collection and retrieval to the Compost Centre.</p>
Impact	<p>MUFPP Indicator 41 food waste re-use: Tons of food waste collected: $450\text{kg/week} \times 4 \times 12 = 21,600\text{ kg/year} = 21.6\text{ ton/year}$ Tons of compost produced: $300\text{ kg/week} \times 4 \times 12 = 14.4\text{ ton/year}$ Tons of compost distributed: 90% of the amount produced is directed to the peasants, the other 10% is used to internally enrich the soil intended to seedling production for local afforestation and urban ornamentation Number of plants grown in the municipal nursery using locally produced compost: 6000 seedlings/year- seedling production for afforestation and urban ornamentation. Social impact: The food waste action takes into consideration the vulnerable people and gender dimension as part of the compost is distributed to farmers for food production. Gender dimension: 90% women and family representatives Vulnerable people: the majority of the beneficiaries are local peasants. Environmental impact: The compost centre helps to reduce the GHG emission to the atmosphere; it contributes to the reduction of aquifers and soil pollution. The compost is then used also for reforestation purposes. Economic impact: aim of the municipality is to reduce the amount of waste going to the field and is not expecting a financial return now. Kind of a financial return is given by the possibility of growing plants in the municipal nursery without purchasing compost. Another indirect financial benefit is related to the farmers that receive compost useful for increasing and improving their food production.</p>
Inclusion	<p>Food systems Fields of Action: Dimensions considered: On the design and implementation of food waste actions we considered the food production and sustainable diets and nutrition action. therefore, there is an holistic and synergetic approach, which considers different MUFPP categories. Actors and stakeholders Involvement: Quelimane Municipality, Local peasants, AJAQUE and AACECS; Territorial Inclusion and Scale of Intervention: Specific neighbourhoods: local farmers from Quelimane and Nicoadala districts; Whole cities: the final agricultural products are sold in local markets for everyone</p>
Challenges and learning needs	<p>Challenges to implement and scale up the practice: lack of strong food waste policies, financial barrier, lack of commitment from the personnel who is operating the composting lab, how to convince the NGOs, international Organizations and other enterprises to finance and execute the composting activity. Learning needs to implement and scale up the practice: How to accelerate the composting process in the composting centre.</p>