

Economic consequences of unmanaged plastics and the economic opportunities in the WIO region

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Abstract

Theoretically, if economic enterprises compete for plastic waste, they will remove all plastics from the environment and stop plastics from terrestrial/land environments from entering the seas. Creating an enabling environment is needed to promote economic enterprises dealing with waste, and also make it easy for people collecting waste, and sell their waste. This will improve the economic standing of people from these communities. The state of knowledge of the economics and plastic value chains using empirical evidence and data were not sufficient, and therefore this area needs to be better understood, and even included in educational programmes going forward. There was also a need to look at the cost of plastics to human and environmental health, as air, water and food consumed is contaminated by plastics. Plastics have affected different sectors including climate, agriculture, fisheries, vessels, tourism, and real estate value. Plastics have also been reported to trap rainwater, thus causing breeding grounds for insect vectors and disease. Plastic pollution is found in every level of the value chain. Greenhouse gas emissions are produced at every level of the chain too, aggravating climate change. Inaction leads to the increase of human, economic and environmental costs. However, there are economic activities that emerge from marine litter and microplastic recycling. Informal collectors play a fundamental role in saving the environment, and they also contribute to funds in their communities. They should thus be protected in future. South Africa has over 60,000 informal collectors. Since most plastics are non-recyclable, plastic alternatives should be used more. There is therefore a need to develop technology to help with this. Therefore, this paper recommends:

- Increasing waste management enterprises
- Data are sparse so it is recommended that the tables provided should be used as a foundation for building databases
- Lack of empirical information calls for more intensive research
- State of knowledge of plastic polymers, manufacturing, the industry and enterprises needs to be boosted by training courses
- Plastic products need to be designed for recycling
- Economic considerations must become core aspects of national and regional action plans
- Opportunities for enterprises should be expanded to include non-recyclable plastics.
- The Roles of informal collectors should be expanded and supported in future
- Those involved in the plastic industry should become part of a structured network to share ideas.

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