

Measures against marine plastic litter in Small Island Developing States (SIDS)

Plastic waste that ends up in the oceans as marine litter is a tangible and urgent environmental pressure reaching even the most remote parts of the global oceans. It affects marine life from plankton to whales and turtles to albatrosses. Public awareness on how the modern lifestyle and the use of plastics in all sectors of society has influenced the marine ecosystems in the last decades is growing, and an emerging discourse about countermeasures of all types can be seen in policies enacted by authorities in national, regional, and international policy arenas. Different coastal areas have launched Regional Action Plans (RAP) on marine litter that provide structured measures that need to be taken and general advice adapted to the respective region. However, the scale of the problem is not only global in dimension; it also cuts across all sectors in society. Until the use of materials in society becomes sustainable, plastic waste will continue to flow into the seas.

The special vulnerability of SIDS to marine litter

SIDS are a set of island nations located in the Caribbean Sea, the Pacific Ocean, and the so-called AIMS region (Atlantic, Indian Ocean, and South China Sea). They are characterised by their small size, isolated location, exposedness, and limited resources. Not all SIDS are islands, and Belize, Papua New Guinea, Guyana, and Suriname are considered SIDS based on the same structural disadvantages. SIDS also tend to have a high biodiversity and are often home to endemic species found only in a single place on Earth. In addition, SIDS are home to an exceptional cultural diversity and heritage.

SIDS are exposed to concentrations of plastic litter that often are disproportionate to their own consumption and populations due to a combination of being located near the so-called ocean gyres, which are known to accumulate marine litter, and due to often sub-performing waste collection and treatment systems. SIDS are also especially vulnerable to impacts of marine plastic litter because such litter might lead to lower revenues from the tourism and fishing industries that their economies largely depend on. Finally, their remote locations constitute a significant challenge in organising inter-island logistics, and their limited resources lead to bigger challenges regarding the management of plastic litter compared to their mainland counterparts.

In a new report SIME gives a review of impacts and measures of marine litter in SIDS

In a recent report, commissioned by the Swedish Agency for Marine and Water Management (SwAM), the Swedish Institute for the Marine Environment (SIME) presents a brief review of impacts and measures of marine plastic litter in SIDS. SIME presents how marine plastic litter reaches the most remote parts of the oceans, such as some of the small island states, and how SIDS are especially vulnerable to environmental impacts such as climate change and marine litter. The origin and composition of marine plastic litter and its environmental and economic impacts are described. Finally, measures are discussed that can be launched to mitigate the problem, both from state agencies and private corporations. Here, measures from existing RAPs on marine litter are reviewed and examples of private initiatives are mentioned. Further, the corresponding legal framework is given and side effects of marine litter measures on the Sustainable Development Goals of the UN are debated. An overview of current and recommended additional measures in the report are presented below.

Legal and political frameworks

The legal framework for preventing and managing marine litter is present on all levels of governance, from international to national and local rules and regulations. It can also be found within many areas of law and with different types of legal effects. Global agreements that aim at the protection of ecosystems and marine species and biodiversity are highly related to the issue of marine litter. Apart from binding agreements, there are a number of declarations and recommendations relevant to marine litter on SIDS. Multilateral agreements require party states to take actions, but because these requirements are often generally formulated, their achievements depend on the choices and participation of all parties.

Policy measures proposed by regional action plans

There exist 18 Regional Seas programmes under the United Nations Environmental Program (UNEP). The aim of this programme is to protect the marine environment through a shared approach across state borders where neighbouring countries work together for the protection of the oceans and seas. Some of the Regional Seas programmes have written strategies to guide actions and efforts against marine litter. Supported by UNEP, the member governments of the respective region agreed on a political agenda for the management of marine litter, the RAPs. The contents of different action plans show strong similarities, commonly including measures of legislation, best practise, best techniques, education/awareness, and voluntary agreements. Most measures suggested by RAPs are aimed at downstream processes (i.e. when the material has already escaped controlled material flows), while fewer measures address the problem upstream. Therefore, additional projects and measures are necessary to solve such a global problem.

Voluntary and commercial initiatives

Plastic litter is a problem that comes from numerous sources and affects many parts of society. While the important role of government agencies in solving the problem is evident, marine litter is not only a matter of management or government, but also of governance. Governance takes place in networks, is typically multilateral, and requires collaboration. Single actors cannot address the issue of plastic marine litter, and what is needed is an array of actions, from the local to the global level, that tackle the issue in a coordinated manner. Most of the measures suggested in RAPs and the current work against marine litter involve not only government managers, but also businesses, NGOs, and voluntary initiatives.

Recommended additional measures

In the report, SIME concludes that there is much work to be done to solve the problem of marine litter. Competence and enthusiasm for the issue on SIDS as well as elsewhere is growing, but there is still a long way to go. The issue cannot be solved nationally or even regionally alone, and solutions will require international cooperation. A set of recommendations to combat marine litter that might be especially valuable for SIDS and other developing countries are highlighted below. The recommendations concern additional measures from the prevention of marine litter to clean-up operations and recycling.

1. Prevention of litter from entering the ocean and thus reaching SIDS, by supporting cooperation in regional and international agreements

There are a number of fora where countries (bilaterally or in cooperative groups), NGOs, and others can work with and support initiatives by SIDS to include measures against marine litter in regional and international agreements and processes. This could include regional and international cooperation on things like international tourism certifications and regulation, shipping, fisheries, and packaging standards (e.g. Principle 7 of the Cleaner Pacific 2025).

2. *Ensuring that plastic material that reaches SIDS is not released into the environment, by technical cooperation and support for local waste management and recycling*

There are excellent opportunities for cooperation not only among countries, but also across different sectors of society (including business and research) to develop new cost-efficient and robust solutions of waste management technologies, including through financing, support for infrastructure, exchange of experiences, and perhaps international scholarships and visiting scholar programmes in the field of waste management and recycling (in line with, for example, Principle 13 of the Cleaner Pacific 2025).

3. *Ensuring that waste that reaches the environment is collected where appropriate, by support to beach clean-up campaigns and other remediation measures*

There are many good examples (in both SIDS and elsewhere) of how clean-up campaigns can be organised and maintained. Beach cleaning can be done on a voluntary basis, or it can be part of a business activity. There are excellent possibilities for international organisations, NGOs, businesses, and nations to cooperate with SIDS financially and logistically and with regard to standards to facilitate things like sustainable networks of beach litter clean-up operations. However, it should be noted that while there are many suggestions for field clean-up techniques, the environmental side effects of these are still little studied.

4. *Ensuring that waste that has been collected has a value, by developing of recycling markets and opportunities*

There are many ways that countries, businesses, researchers, and international organisations can cooperate to develop the economic value of products emanating from recycling and waste management, preferably through developing local/regional uses. This could, for example, be in the form of financing and support for infrastructure, exchange of experiences, and perhaps international scholarships and visiting scholar programmes. Alternative ways to facilitate infrastructure for selling collected material to plastic industries abroad should also be developed. In this context, cooperation with the plastics industry is important to decide on recycling industry standards in order to increase the value of collected material, while at the same time not setting such standards so high that they prevent material collected on SIDS from being used.

5. *Making plastic litter a global issue that receives global attention, by systematic communication on the negative impact of plastic litter*

Because plastic litter is distributed by ocean currents around the globe, any long-term solutions need to acknowledge the global dimensions of the issue. Therefore, international cooperation bodies such as the UN have an important role for communication and for reaching agreements. In addition to commitments from all nations, teaching materials could be shared and adapted to the respective local situation of each region.

6. *Strengthening interregional exchanges*

Strengthen interregional exchanges within RAPs and other regional initiatives to foster their enhancement and publicity.

7. *Support to the development of local multi-stakeholder fora to assess impact of marine litter*

Support the development of local multi-stakeholder fora (e.g., with representatives of fishing activities, the tourism industry, and waste management organisations) in order to assess the actual impact of plastic litter on local communities.

8. *Setting up international financial schemes that support upscaling of local initiatives*

Set up international financial schemes that support an upscaling and internationalisation of successful local initiatives in the realms of prevention, reuse, and recycling of plastic litter.

9. *Stressing the multiple connections with the Agenda 2030 objectives*

Stress the multiple connections that exist between the prevention and mitigation of plastic litter and UN SDGs in order to promote initiatives against the problem.

This text is based upon the following report made by Swedish Institute for the Marine Environment (SIME): Marine plastic litter on small island developing states (SIDS): Impacts and measures. Report no. 2017:4. Authors: Lachmann F., Almroth B. C., Baumann H., Broström G., Corvellec H., Gipperth L., Hassellöv M., Karlsson T. and Nilsson P.

The report was commissioned by the Swedish Agency for Marine and Water Management (SwAM), as a background report before The Ocean Conference in New York in June 2017 in support of the work to conserve and sustainably use the oceans, seas and marine resources for sustainable development, target 14.1 in Agenda 2030. The views and positions contained in the report do not necessarily reflect the view by SwAM.

The report is published here: www.havochvatten.se/en/initiativesforsdg14