

Tuvalu

Status: Tuvalu is a Least Developed Country. It is eligible for Australian Government ODA

Population: 11,052 (2020 Tuvalu Country Review estimate) with 54% living on Funafuti¹

Accessibility: Logistics. Flights in from Fiji to Tarawa 2 per week. Need boat to travel to 8 outer islands. Around 4 weeks to cover all islands.

Statistics around Waste (including plastic waste data)

| | Coastal population | Waste generation rate [kg/person/day] | % Plastic in waste stream | % Inadequately managed waste | Waste generation [kg/day] | Plastic waste generation [kg/day] | Inadequately managed plastic waste [kg/day] | Plastic waste littered [kg/day] | Mismanaged plastic waste [kg/person/day] | Mismanaged plastic waste in 2010 [tonnes] | Mismanaged plastic waste in 2025 [tonnes] | |
|--------|--------------------|---------------------------------------|---------------------------|------------------------------|---------------------------|-----------------------------------|---|---------------------------------|--|---|---|--|
| Tuvalu | 11,563 | 1.2 | 12 | 73 | 13,876 | 1,658 | 1,218 | 33 | 0.108 | 457 | 861 | |

Source Jambek 2016

An estimated 12% of Tuvalu's waste stream is made up of plastic. The islands of Tuvalu have a combined coastline of 24km, and a recent study (Jenna et al., 2015) indicates a daily plastic waste generation of approximately 1.7 tonnes (t). Of this, an estimated 1.3t is mismanaged, entering the marine environment through release from uncontained disposal sites or by direct littering. An estimated 457t of plastic waste were released in the waters around Tuvalu in 2010, forming marine debris. If not addressed, the amount is expected to rise to 861t by 2025.²

The 2017 waste survey report estimated Tuvalu's daily waste generation at .42kg per person per day – 60% green waste; 15% nappies; 7% plastics; 5% paper; 4% metals and glass; 2% textiles and 3% other (The global average is 0.74 kg per person per day). According to a World Bank study, daily per capita waste generation is estimated at 1.2kg (World Bank, 2012).

The one official dumpsite operating beyond capacity. A lack of topsoil to compact and bury waste at the one open landfill that is already full, leaves plastic waste vulnerable to being blown into the ocean. Plastic recyclables are not currently segregated, collected or exported. As Tuvalu's landfills are not lined, there is potential for leachate from decomposing materials entering the groundwater and lagoon water impacting water quality.

Single-use disposable diapers have been identified as a waste issue in Tuvalu who have implemented import controls to assist with the management of single-use disposable diapers, the only known measures of their kind in the world.

One of Tuvalu's challenges is the cost of shipping commodities of low value like plastic waste over long distances to recycling markets Tuvalu does not have serviced by Swire Shipping that would allow it to export its waste under the Taka Moana Arrangement.

Legal/Policy framework to address single use plastics Tuvalu has a number of Laws regulating single use plastics. *Waste Management Act 2017* The Minister, acting on the advice of Cabinet, may make Regulations for the proper management and regulation of wastes. Regulations may provide for prescribe litter and waste control measures and standards; regulating and controlling all aspects of the collection, disposal and treatment of sanitary wastes, including septic sludges, disposable nappies and other such wastes'; prohibit the importation, use or sale of any items which generate wastes, or restrict such items so that the generation of wastes is minimised. *Waste Management (Prohibition on the Use of Single Plastics)*

¹ National Population and Housing Min Census 2017

² <https://www.theprief.org/sites/default/files/documents/tuvalu.pdf>

Regulation 2019 Prohibits the importation, manufacture, sale or distribution of certain single use plastic which have adverse effects on the environment. These include plastic bags, PET water and beverage bottles less than 1.5L, plastic straws, plastic ice blocks or pouches, polystyrene plates and containers, plastic cutlery and plastic cling film. *Litter Waste Management (Littering and Disposal) Regulation 2018* provide for controls on litter and wastes and establish related offences. *Environment Protection Act 2019* The Department of Environment is responsible where waste pollutes the environment. Pollution covers substances which may result in deleterious effects or harm to living resources and ecosystems and hazards to human health. This would cover introduction of plastic waste. *Ozone Layer Protection Act* bans the importation and manufacture of plastic foam. *Falekaupule Act* (as amended to 2008) regulates the composition, operation, and functions of local governance. All islands are governed by a traditional council of elders: the Falekaupule. The Falekaupule is a law-making body with powers to make by-laws. To further strengthen the institutional system to address gaps in waste management, each outer island has either passed or is processing the passing of new waste bylaws based on the national waste law. Pollution Act 2008 prohibits the discharge from ships of oils, garbage, and sewerage into the sea; empowers the harbour master to provide reception facilities for these materials at port; and gives effect to a number of international conventions for the prevention of marine pollution.

Single Use Plastic policy: The *Tuvalu Integrated Waste Policy and Action plan* has as its first guiding principle - Reduce, Reuse, Recycle, and Return. Priority actions under the TIWP-AP include strengthening law enforcement to reduce the prevalence of illegal dumping and burning of waste; banning the import of single use plastics such as small water bottles and plastic cutlery; public awareness programs that focus on “reduce, reuse, recycle and recover”; diverting waste from land fill through operating the recycling centre.

The government operates a baler used for crushing aluminium cans. PET bottles are often reused for homemade drinks; however, no formal plastic recycling is or was previously in place. Larger containers are often reused for gardening and pig food storage before being sent to dump sites.

| | Single Use Plastic Policy | Dedicated Single Use Plastic Orders, Acts and Regulations | | | | | | | Economic Instruments to internalise costs | | | | | Recycling | National Campaigns targeting SUP | R&D Alternatives |
|--------|---------------------------|---|--------------------|--------|---------------------------|---------------------|-----|------------------------------------|---|-------------------|----------|------|--------------------|-----------|----------------------------------|------------------|
| | | Plastic bags | Polystyrene plates | Straws | Styrofoam food Containers | Cups plates cutlery | PET | Plastic Ice blocks pouches nappies | Container Deposit Scheme | Levy Plastic Bags | Duty SUP | ARDC | Single Use Diapers | | | |
| Tuvalu | | | | | | | | | | | | | | | | |

Economic Instruments: MNRE is considering feasibility of Advance Recovery Fee & Deposit (ARFD) Systems economic instruments being promoted by PacWastePlus.

A levy of AUD0.05c (USD0.03c) has been added to each single-use disposable diaper imported under the *Waste Management (Levy Deposit) Regulation 2019*. This levy is in operation and the government is utilising the income to undertake in-country product testing with an eco-friendly / compostable single-use diaper supplier. The government intends to utilise the income from the waste levy to subsidise the import of certified Compostable Diapers.

Institutional capacity: Tuvalu is described as having very good institutional structures to support implementation. The country has a well-developed waste management infrastructure involving officers across several government departments with differentiated roles. The Department of Waste Management and the local government Kaupules are responsible for both regulatory and operational functions for waste management. The Department of Environment also has regulatory powers with respect to pollution and hazardous waste.

Enforcement and compliance: The greatest needs in relation to strengthening the legislative frameworks governing waste management were support for implementation, compliance and the enforcement of laws. There have been fines and actions against individuals for illegal waste dumping or littering but it is difficult to locate records of the outcomes of these prosecutions and whether these offences have become less

frequent. Six out of eight islands have waste bylaws. However, there is little progress with the implementation because of the capacity of local councils (Kaupule) to enforce.

The report³ notes that government enforcement of waste management-related legislation, regulations, and policies are “generally weak”.

Community Governance and organisation: Government had conducted campaigns to collect plastic targeting children (example excursion towards inlets collecting 25 bags of plastic bottles and bags).

Public Awareness- communities/villagers: The 2nd Review of the IWPAP conducted in 2019 found that the merits of proper waste management and shared responsibility of managing waste not understood by many. The top three bad public behaviors that were identified included the burning of wastes, public littering and dumping in the lagoon. The review also reported however that there was evidence of “significant progress” in several areas.

Public Awareness, schools and involvement of youth The IWPAP said that the involvement of women, youth and other groups of society in waste management are not fully explored and needs to be strengthened. The inherent skills of women to attend to finer details, and the strong desire to alleviate economic condition and protect the health of the family can be utilized to promote waste activities that can reduce environmental and health impacts. The youth also had the potential to drive changes. Other willing community groups would likely prefer a clean environment. Stakeholders in some outer islands believe that, with the current state of littering in the islands, a clean-up campaign will help stir up the community to get involved in managing wastes. Moreso, by putting public litter bins and enforcing by-laws, there will be cleaner coastal environment and communities will realise the social benefits of having beautiful surroundings.

Tourism: Tuvalu has been described as a tourist free zone. Only about 1600 tourists visit Tuvalu each year (mostly from Fiji, Australia and New Zealand) plus a few expats (mostly foreign aid workers).

Private Sector: To date, the private sector has played a very small role in solid waste management and recycling in Tuvalu. Anecdotal evidence suggests that the lack of consultation leading up to the regulations to ban certain use plastics was unpopular given its top down approach and there is a need to bring the business community on board to ensure compliance with the ban and circumvention of the ban through importation and distribution of other single use plastics not picked up at the point of entry (importation).

Summary Overview

- POLP EOI addresses gaps in legislation (need to include definitions, include more single use plastics etc... identified in the Fuller/Farrelly *The Strengths and Weaknesses of Pacific Islands Plastic Pollution Policy Frameworks* gap analysis.
- Compliance and enforcement is generally weak with littering and burning accepted practices.
- Top-down manner of legislation was unwelcomed by many business operators. Solutions needed to fix leakages which account for SUPs entering the country through customs and business acceptance and buy in.
- Potential to reuse waste through technology (extruders) recycle plastics and find markets to send recycled products (separate to the Te Vaka Moana scheme)
- Efficient Waste Management Unit in operation and good prospects of POLP pilot success.

³ Second annual review of the implementation status of the country's *Integrated Waste Policy and Action Plan 2017-2026*.