

**End of mission statement**  
**Official visit of the United Nations Special Rapporteur on toxics and human rights,**  
**Marcos A. Orellana**  
**to the Independent State of Samoa**  
**(30 October to 8 November 2024)**

Apia, 8 November 2024

Today, I conclude my country visit to the independent State of Samoa. I would like to express my sincere appreciation to the Government for its invitation and excellent cooperation, prior and during this visit.

Over the course of my visit, I had the privilege of engaging with the Prime Minister and Minister of Foreign Affairs and Trade, the Minister for Natural Resources and Environment, Chief Executive Officers and staff of a large number of ministries. I held meetings with the Office of the Ombudsman, several development partners of Samoa and the United Nations Country Team. I engaged with community representatives, civil society organizations, youth, academia, private enterprises.

I would like to warmly thank them all for the open and sincere discussions that we had as well as their warm welcome.

I visited the facilities in the Matautu Port as well as the Tafaigata landfill. My intended visit to Savaii was unfortunately cancelled due to the two days of official holidays announced during my visit.

## **Introduction**

As a Small Island Developing State, Samoa has to face many challenges in various fields, including in relation to finance and trade. In addition, it has to face the triple planetary crisis of climate change, toxic pollution, and the loss of biodiversity. The country is highly dependent on imports. Samoa is also limited in resources and capacity. In this context, cooperation is key internationally as well as regionally, for instance, through the 2050 Strategy for the Blue Pacific Continent and the Pacific UN Sustainable Development Cooperation Framework (2023-2027).

Samoa's small size and population (225,681 in 2023) makes economies of scale for disposal or recycling of certain waste streams non-existent. The official development assistance (ODA) plays a significant role in national economy.

Ocean and marine life is crucial for the survival of Samoa. For example, the concept of "the blue economy" seeks to understand and better manage the many aspects of oceanic sustainability, ranging from sustainable fisheries to ecosystem health to preventing pollution, which requires collaboration across borders and sectors.

Samoa has ratified many international human rights instruments, while some of the key ones remain unratified, including the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD). In view of the indivisibility and interdependence of all human rights, the lack of recognition and justiciability of economic, social and cultural rights in particular can negatively impact the right to a clean, healthy and sustainable environment.

## Good practices and promising plans

Let me start by pointing out some positive points.

Samoa has ratified and reports regularly on all the major multilateral environmental agreements (MEAs) on chemicals and waste as well as regional instruments such as the Noumea and Waigani Conventions. At the international level, the country has shown leadership on environmental issues, including through the chairing of the Alliance of Small Island States (AOSIS). It hosts the Secretariat of the Pacific Regional Environment Programme (SPREP), a crucial actor for the protection of the environment in the Pacific region. Since 2022, Samoa, together with other islands, has announced its opposition to deep-sea mining and has called for a moratorium on this industry. Samoa's leadership in the Intergovernmental Negotiating Committee on a legally binding instrument on plastics pollution has been crucial for focusing on people, communities and their human rights.

I heard about good “return schemes” like the Moana taka partnership,<sup>1</sup> or the partnership between local and foreign companies to take all discarded toner or ink from Samoa.

Under clause 21 of the Waste Management Act of 2010, a person who imports into Samoa any toxic or hazardous wastes, except in compliance with international obligations applying to Samoa, commits an offence and is liable to punitive action.

During my visit, I was informed of a number of promising plans at national level as well.

After two years of consultation with the private sector and other stakeholders, Samoa is intending to introduce a waste levy on a number of items including, PET plastic bottles and aluminium cans. I was informed that the intention of the Government is to expand coverage to other items if this scheme functions well.

I also understand that discussions are taking place to put in place protections for people that “blow the whistle” on substantial and specific danger to public health and safety, including unsafe workplaces and environmental issues.

I was told that the creation of a new division of the Supreme Court is being considered to look specifically at environment issues. I commend such forward thinking and look forward to its fruition for strengthened environmental justice in Samoa.

## Pesticides

Agriculture constitutes two-fifths of Samoa's gross domestic product (GDP)<sup>2</sup> and nearly two-thirds of the workforce.<sup>3</sup> However, production does not meet local demand, and large quantities of highly processed food are imported.

In many discussions, the issue of lack of data has been raised. For instance, while there may be some data on the import of pesticides, there is almost no data on their use, the exposure of workers and communities, the effect on water, soil, among other key issues.

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<sup>1</sup> <https://www.sprep.org/sites/default/files/documents/publications/moana-taka-partnership.pdf>

<sup>2</sup> \$ 934,100,336 in 2023 according to the World Bank.

<sup>3</sup> The total workforce is of 55,960 in 2022 according to the Bureau of statistics ([https://www.sbs.gov.ws/documents/social/LFS/2022\\_SLFCLS\\_Report.pdf](https://www.sbs.gov.ws/documents/social/LFS/2022_SLFCLS_Report.pdf))

There is an ongoing debate on the use of paraquat in Samoa. Paraquat is a fast-acting herbicide. It is also highly hazardous. There is a wide range of scientific studies showing the numerous health hazards due to exposure to paraquat, including Parkinson's disease and multiple types of cancers. Paraquat has been banned in 67 countries. Sadly enough, some of the countries producing paraquat have banned it for use in their country but continue to produce it and sell it abroad. This double standard means that exporting governments do not believe in equal rights to life and health of their nationals and those where they are exporting the product to.

The importing, licensing, selling, and inadequate monitoring of the use of paraquat in Samoa is extensive and has been described by some as borderline criminal. Unfortunately, Paraquat has also been used by some for suicide and even a recent murder. Between 2004 to 2018, 74 deaths were caused by paraquat, the youngest being a 12-year-old girl (in 2015).

Despite the demands for a ban of paraquat by civil society organizations working on health and environmental policies, the Government has argued that there is insufficient conclusive evidence of paraquat's significant toxicity. This is at odds with the scientific studies and bans in many countries. The Government has pointed out to the lack of efficient, less harmful, same-price or less expensive alternatives. However, I was informed that Fiji has banned paraquat in January 2020 and uses alternative products that are less harmful for people and the environment.

Correct handling of toxic products is crucial for safety. During my stay, I came to the conclusion that people using these products are not aware of their impact on health and the environment and do not have proper training and guidance in handling and using these products. It also seems that the permits for buying these products are easy to obtain.

I would distinguish two sorts of pesticides: the highly hazardous ones, like paraquat and glyphosate, and those that are less harmful. The first ones need to be replaced by the second ones. But, during a visit to a community, I asked: "how were you dealing with weeds when these products were not existent"? I was told: "we used knives and mechanical tools. It was more labour intensive. So people turned to these pesticides for convenience". I recognize that some pesticides can help produce higher yields in agricultural practices. But Samoa needs to replace the highly hazardous ones with less harmful ones and then also move towards application of integrated pest management.<sup>4</sup> For other purposes, like weeds nearby houses, people may come back to less harmful ways. Behavioural changes are necessary. Convenience is comfortable but may cause disabilities and serious illnesses, including cancers.

## Plastics

For thousands of years, Samoans have been relying on their knowledge and closeness to nature in a way that kept them thriving and the environment healthy. It is clear that the import of cheap and non sustainable items and packaging, in particular made out of plastic, leads to an ecological catastrophe in a place where this pollution cannot be processed and contained. Microplastics permeate the environment, the plants, the fish, the soils, among others. This means that on the top of the food pyramid, humans ingest microplastic particles, which in the course of life accumulate in the body.

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<sup>4</sup> According to a description from the University of the South Pacific, "IPM constitutes a series of pest control tactics and strategies toward more sustainable agriculture, natural resources, and urban and rural health and well-being." See, <https://www.usp.ac.fj/handbookandcalendar2024/course-descriptions/school-of-agriculture-geography-environment-oceans-and-natural-sciences-sageons/>

Samoa has taken steps to address the issue of plastics. The 2018 Waste (Plastic Bag) Management Regulations (amended in 2020) bans the importation, sale, distribution, and use of certain single-use plastics: plastic shopping bags, plastic packing bags, plastic straws, and Polystyrene (Styrofoam) food containers and cups. The Ministry of Natural Resources and Environment (MNRE) inspects retail outlets to ensure compliance.

Yet, more needs to be done. A significant amount of cheap and quickly unusable items (toys, brooms, etc.) are being imported, which exacerbate the amount of wastes that the country needs to manage.

Small islands face real constraints in a global economy, and so are dependent on product design and specifications established in plastic producing countries. This is one aspect that highlights the importance of negotiations on a legally binding international agreement on plastic pollution.

At the same time, some good practices that have been reversed send an equivocal message regionally and contribute to the mountain of plastic piling up in Samoa. For example, while Samoa was one of the few countries where soft drinks had been bottled locally into reusable glass bottles, in 2021, Coca Cola company replaced the glass bottles with plastic bottles from other countries in the region. Not only such move is ecologically unsound in terms of carbon emissions, but it also contributes to the plastic problem of a small island. In this particular case, it seems that the profit of the company is far more important for it than the environment and health of the people of Samoa. I may take up this case with the company itself.

In this context, I am concerned that States where plastic producers are based are not doing their part. I am also very concerned about the negotiations to produce a legally binding instrument on plastic pollution, which now risks shifting responsibility from plastic producing States to developing States that lack the capacity or resources to confront the global plastic scourge.

In this regard, I call on the Government of Samoa and all other States to conclude a legally binding instrument on plastic pollution that secures accountability of the plastic cycle producers and the States where they are based for the global adverse impacts of plastic on human health and environment. This is particularly important for vulnerable island States that lack the capacity for the sound management of plastic wastes. Accountability means that the public should have access to information on chemicals of concern in plastic products and on the volumes of plastics produced. This information is critical for adequate monitoring and enforcement, including in respect of the reductions of plastic production that need to be established. Accountability also means that plastic producers should make contributions to a global fund to support implementation of waste management measures in developing countries. Moreover, product design must enable both import restrictions of non-essential plastic products, as well as chemically-safe recycling, especially in developing States like the small islands of the Pacific, where the lack of economies of scale and the high cost of freight poses serious and at times unsurmountable obstacles to recycling and adequate disposal. To achieve all this, explicit references to human rights in the plastic pollution treaty, including the right to information, the right to a clean, healthy and sustainable environment, and the right to development are key to properly frame effective and legitimate solutions.

## Cars and tires

The number of cars is steadily increasing in Samoa. This is another source of pollution that Samoa cannot safely process. I have seen many abandoned cars and other vehicles that just lie in various sites of the country, with their chemicals slowly contaminating the soil. Tires contain many toxic elements. I have also been told about the import of used tires. While certainly cheaper, these short-lived products will soon be discarded and add to the volumes of wastes that Samoa cannot and does not handle in an environmentally sound manner.

In addition, new electric cars are being brought to the country. While these cars will reduce the emission of toxic gases, it is unclear how the lithium batteries of these cars will be handled. It is worth recalling that these batteries are highly toxic and also present risks of explosion if mishandled. While I have been told of future plans to take care of this issue and ship them out of Samoa, it seems that at this stage there is no clear plan except than a fortified container for interim storage.

I have also been told of creating waste-to-energy plants based on the burning of different material, including tires. I have serious doubts on the soundness of this approach. Burning tires releases toxic chemicals to the air, even when filters are used.

## Asbestos

In 2017, together with other Pacific islands, Samoa endorsed an initiative to ban or restrict the importation, re-use and re-sale of products and wastes containing asbestos. Nevertheless, the legacy of asbestos is still present in Samoa, and there is little capacity to deal with it. This is particularly problematic, given the increase in incidence and severity of cyclones due to climate change, which have the effect of disturbing existing housing and construction, and thus of exposing the population to the risks of inhalation of deadly asbestos fibers.

## Waste management

As an island State, many types of wastes need to be shipped out. Yet shipping costs are very high and this represents a financial challenge for the Government and the economy at large. Therefore, a number of initiatives are needed at the national level to deal with the waste problem.

According to a 2021 World Bank document, in Samoa:<sup>5</sup>

- Separating recyclables at source generally does not occur;
- Up to 50 percent of waste generated is not deposited at landfill;
- Only 50 percent of households use the free collection services provided by the Government;
- Current market conditions have forced the closure of two recyclers in Samoa; and
- Data is not being captured for all incoming waste at Tafaigata Landfill.

As noted by State authorities, more work needs to be done on the segregation of wastes, including at household/community level and at the site of recycling and disposal. Oily waste is another issue that needs to be dealt with promptly. Again, this needs cooperation between the State, the private sector, CSOs, communities and individuals. Nevertheless, the State has the primary responsibility. Having multiple stakeholders should not result in unclarity or dilution of

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<sup>5</sup> <https://www.greenpolicyplatform.org/sites/default/files/downloads/best-practices/Samoa-Waste-Audit-Report-2021.pdf>

responsibilities. Obligations of each stakeholder and accountability mechanisms need to be clearly defined, and effective implementation of laws and policies should be put in place.

The Tafaigata landfill in Upolu is reaching its limits. It was a model for the region when completed and handed to the Samoan Government in December 2005, including with the use of the Fukuoka method. The Fukuoka method introduces air into the landfill through pipes to create an aerobic environment that promotes the degradation of waste, stabilizes the landfill, and reduces the amount of methane gas emitted. Nevertheless, it seems that due to poor maintenance the landfill is not operating properly.

At community level, despite a ban, many continue to systematically burn things which in some cases can be dangerous for them and for their neighbours.

The increase of electronic waste is also of concern. I was told that a feasibility study is being undertaken to make Samoa an electronic-waste hub for recycling in the region. While regional initiatives to deal with economies of scale are very much needed in many domains, in the case of electronic waste, much caution is needed, given the serious risks involved, including to avoid exposure of workers to the hazardous material in the discarded electronics. Electronic waste from the region should not end up piling in the existing electronic waste deposits that I saw in the country.

I have noted that large inventories of chemicals, including obsolete items, are stored at certain sites, including in laboratories, and that there are no capabilities for collecting this dangerous material and avoiding risks of explosion, fires, or leakage due to natural disasters.

Moreover, there seems to be a serious problem of used pesticide containers. Without a lack of program of collection and storing, many of these hazardous containers end up in the landfills.

## **Methods for waste management and recycling**

My understanding is that progress has been made in terms of recycling in Samoa. I commend the work of some associations that I met with in this difficult area of work. Yet, more needs to be done. It seems that segregation of material at household level can be improved, in particular in relation to paper and cardboards. Of course, segregation also needs to take place in the disposal and recycling centers in an environmentally sound manner.

Batteries contains toxic material including heavy metals. I suggested to one community that they could set up a simple box to collect batteries. It is a simple step that can have a very positive impact for the environment and people's safety.

Compost and the use of permaculture principles could be envisaged as well. Composting is a natural process for waste management that breaks down organic materials into a nutrient-rich fertilizer for soil. Permaculture is based on principles of sustainability, resilience, and natural productivity.

I would also encourage looking into possibilities of fixing items and giving a "second life" to old product, especially electronic equipment instead of throwing them away.

## **Education and awareness raising**

Throughout my visit, I was pointed to the importance of behavioural changes of the population in relation to waste. In this context, the Government, civil society and development partners should

do more to inform people of the dangers of hazardous products, including pesticides, plastics, and the impact of waste on the environment and the long-term effects on this beautiful country.

Awareness raising needs among communities, including with the village chiefs, is key. Given the system of governance in Samoa, communities play a crucial role in the protection of the environment and health of their people. The Government should provide them with the necessary information on toxic products and waste management as well as the tools to putting this knowledge in action.

The change of behavior is key. I was told about a promising initiative called Samoa CARES (Climate Adaptation, Resilience and Enhancement of Samoa) that intends to educate people about better environmental practices, including through volunteer teachers to incorporate environment education into local schools. While this is a good step forward, there is a need to fully integrate environmental education in the school curriculum.

I note that events such as CHOGM or the Pacific Games have clearly showed that everyone in the country can come together in cleaning up the island.

I was also told about how youth's opinion is frequently dismissed and not taken into account by adults. Yet the children and youth of Samoa are the future of the country and will be the ones dealing with the legacy of pollution and wastes. Including them in decision-making processes and hearing their voices is crucial.

Spaces for youth to intervene in international and national debates need to be opened and widely disseminated through Public Service Official Circular and social network. U-Report, supported by UNICEF, (<https://ureport.in/>) is also an interesting digital platform that allows young people to share their opinions on issues that affect them.

## **Sea pollution**

I understand that there are plans to increase the number of cruise ships coming to Samoa. In this perspective, adequate port reception facilities for the sound management of waste from these ships is key to process garbage, oily wastes, sewage, cargo residues and other wastes.

A few days prior to my arrival in Samoa, we learned that the navy vessel HMNZS Manawanui sank near the coast of Samoa. It was reported that this was a research vessel. It is well known that research laboratories employ hazardous substances and generate hazardous wastes.

There should be a full and transparent disclosure of inventory of the hazardous substances in the vessel, type and volume of fuel and other crucial information, so that inter alia the correct prevention and mitigation measures can be taken. Also, communities and fisherfolks should have access to effective remedies, including adequate compensation, and the environment should be fully rehabilitated, as appropriate. While the naval ship may benefit from certain immunities of jurisdiction, this does not mean there should not be accountability and adequate reparations.

## **Preliminary recommendations**

In addition to some of the preliminary recommendations made above, I would like to add the following ones:

- Ban the most dangerous pesticides like paraquat and glyphosate and replace them with alternatives that are not harmful. In regards to the unfortunate use of paraquat by some

for suicide, this will also allow progress on the Sustainable Development Goal 3.4 (by 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being)

- Adequate legislation needs to be developed in light of the “polluter-pays” principle which holds polluters responsible for the costs of pollution and the damage it causes to the environment and human health and in line with the Rio Declaration on Environment and Development. Without it, the health of Samoan people and their environment will suffer while producers, including foreign companies, reap profits. In this context I note that Palau has set a positive example as one of the first Pacific Islands to legislate a Container Deposit Levy system which allows recovery and diversion of beverage containers away from State landfills.
- It would be advisable that the various legislations be easily accessible to all. For instance, we could not find the Waste (Plastic Bag) Management Regulations text online.
- Yet developing legislation alone is insufficient and implementation of these legislations is needed. In this context, it seems there is a general misunderstanding of the roles and responsibilities of the different government agencies. Working on clarifying this may be helpful for the protection of the environment against waste and various forms of pollution.
- Importer take-back schemes should be developed, starting with certain streams, such as cars, electronic products and radiological equipment. Without such schemes, imports will continue to flood the island with wastes. In this context, taking back material should be factored in all projects, even in the context of aid.
- Pollution information portal can increase transparency and implement the right to environmental information. This portal could contain information on the results of the various types of testing (water, soil, etc.) that the authorities are conducting, and also information on the private sectors and others relating to pollution and products that are being used and sold. I have presented to United Nations Human Rights Council a report on this topic this year ([A/HRC/57/52](#)).
- The labelling of non-labelled hazardous products and the use and updating of product codes in Samoa, in line with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), may be the opportunity for better tracking products, especially those containing toxic and harmful material, in their life circle.
- The international community and the development partners of Samoa need to rethink some of their strategies. In my conversations, an important complaint was that pilot projects were being initiated but not sustained over the long- term.
- Particular attention should be given to people working with wastes, including through education and the provision of protective gears, as well as fighting the stigma that could be attached to such activities.
- Promptly ratify the International Covenant on Economic, Social and Cultural Rights, its optional protocol and the International Convention on the Elimination of All Forms of Racial Discrimination.
- The lack of data is a problem throughout many fields. Development partners could provide support for the development of reliable data, including on microparticles pollutants and water, air emissions, use and exposure to pesticides, among others.

## Conclusion

Regional and international collaboration is critical for a small island like Samoa that lacks the capacity and resources to confront the surging plastic tide.



Samoa has championed environment and human rights in international fora. Samoa thus has an important opportunity to integrate this right in its constitution and laws and, in the meantime, already use it explicitly in the development of its policies and programmes.

Thank you very much.