

PEOPLE WORKING FOR THE PLANET

Gender, Disability and Social Inclusion Dynamics in Samoa's Waste Management Sector



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People working for the planet

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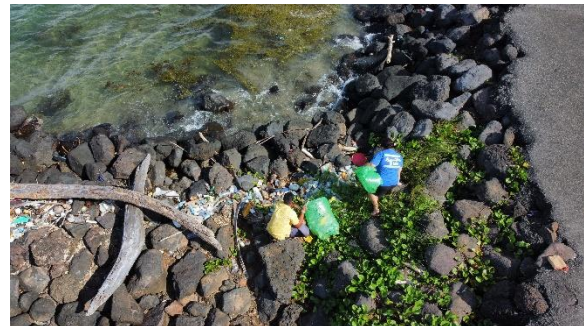
Waste mismanagement, a risk to the health of Samoa

Samoa, a small island developing state in the South Pacific, is battling against the growing problem of waste generation and leakage into its environment. Long-distance shipping, low exportable value and volumes of waste make landfilling the most economically feasible disposal mechanism in Samoa. However, according to Samoa's latest quantification and sectorial material flow analysisⁱ, the Tafaigata landfill serving the Upolu Island is reaching full capacity. As a result, waste entering the landfill is currently being disposed outside the lined cells, causing leachate intrusion into groundwater.

Land-based pollution is of critical concern to the country's natural resource base, particularly as 97% of Samoan households engage in some level of agricultural activity for subsistence and consumptionⁱⁱ. Compounded by Samoa's insular context and its geographical location within accumulation zones, waste and pollution threaten the integrity of socio-economic and cultural relations with, and dependence on, oceans. The Government of Samoa has recognized the urgent need to close the loop by embracing an inclusive circular economy to safeguard Samoa's natural resources for enhanced food, livelihood, water security and climate change resilienceⁱⁱⁱ. Transitioning to a circular economy is a necessity to move from the linear "take-make-waste" approach to a regenerative system where materials are never wasted but continuously kept in circulation through processes such as maintenance, repair, reuse, remanufacture and recycling.

Samoans have been practicing "circular economy" habits and initiatives long before the term was coined. Scarcity of resources, means of production and economies of scale, combined with the remoteness of the islands, have

accentuated the need to increase the economic value of resources by extending the lifespan of materials and maximizing efficient resource use. Many examples, from refillable water systems and bottle deposit schemes to second-hand cars and clothing markets, planters made from waste tires beautifying village gardens, to name a few, illustrate the several lives of items in Samoa. Nonetheless, with increasing import dependence and few recycling options in-country, Samoa faces challenges in realizing the full potential of a circular economy.



Volunteer clean-up day in Apia, Samoa

No circular economy without its workforce

As the country aims to minimize landfilling and upscale its circular economy, the professionalization of the waste management sector raises the question of its workforce, with potential to expand formal employment opportunities. Following the principle of "leaving no one behind", it is key to enhance safe, inclusive, and diverse circular economy workplaces in Samoa. While a circular economy encompasses a broad range of formal and informal roles, from repairers to creative upcyclers, this brief focuses on the waste management component. Unlocking the potential

of waste workers and volunteers as agents of change requires creating decent and attractive green jobs that can work for everyone.



Samoa experiment associate working on fish leather recycling (UNDP 100% Fish Use project)^{iv}

Unlike countries where informal waste workers are a common phenomenon, Samoa has developed a small yet formalized workforce in waste collection, treatment and recycling. The Ministry of Natural Resources and Environment of Samoa contracts a private company to handle waste collection. For the recycling, two civil society organisations (CSOs) lead the way: the Samoa Recycling and Waste Management Association (SRWMA) and the Samoa and Tokelau Association of Recyclers (S.T.A.R.).

National data shows that the waste management workforce remains predominantly male-dominated. According to the 2022 Samoa Labour Force and Child Labour Survey^v, only 25.4% of the “water supply, sewerage and waste management sector” workers were women, and only 6.2% were youth^{vi}. While women tend to be slightly underrepresented in managerial roles in Samoa^{vii}, they occupy key positions in the two recycling organisations, SRWMA and S.T.A.R., respectively as founder and president. The launch of the Women of Waste (WoW) taskforce in 2024 marked a groundbreaking effort to amplify women’s voices in this traditionally undervalued sector^{viii}.

WOW Women Of Waste SAMOA

Piloted by SRWMA, the Women of Waste taskforce aims to encourage women’s leadership in the Samoan circular economy - a unique initiative in the Pacific Islands.

Kickstarted during International Women’s Day 2024, the launch event hosted all-women panel discussions featuring female recyclers, upcycling entrepreneurs, businesswomen, policymakers, and development practitioners.

Discussions explored gender barriers to employment and entrepreneurship, emphasizing the need for support in village-level waste management initiatives. They also celebrated women-led innovation and careers across sectors contributing to circularity: from upcycling fish skin as leather for crafts and second-hand fabrics for clothes and bags, transforming glass waste into road cement, designing reusable feminine hygiene products, to putting up a deposit system for beer bottles.



Scan the QR code to watch the Women of Waste launch video

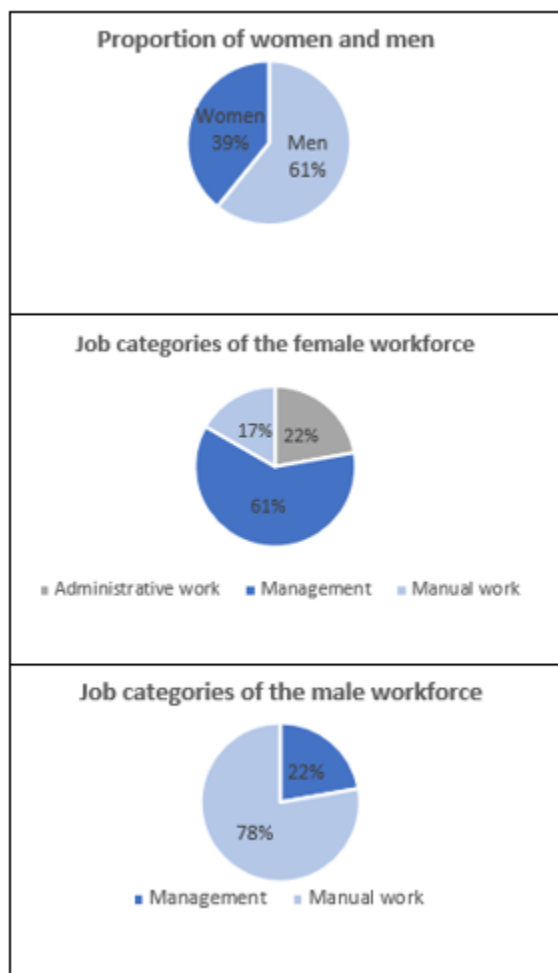


SRWMA recyclers promoting the Women of Waste taskforce in front of their workplace, the Tafaigata landfill

A UNDP-led survey^{ix} helped complement the national data by focusing on these three major actors in the waste management sector in Samoa – the waste collection private company and the two CSOs. Reflecting the national statistics, men were significantly more numerous than women (representing 61% of the overall workforce), with a particularly stark representation in waste collection. Women were less involved in manual labour but better represented in management and administrative roles, though the differences in management were minimal, amounting to only three positions.



S.T.A.R. raising awareness among Samoan schoolchildren about waste recycling (The Bag That Builds programme)^x



Gender, disability and social inclusion dynamics at play

Gender, disability and social inclusion dynamics in waste management cannot be understood in isolation from Samoa's local context and specificities, norms and policies. Through the data collected from key stakeholders in the sector, managers, employees and volunteers were asked about their perceptions of barriers to safety, inclusion, and diversity in the workforce. Some key themes surfaced.

Employment rights and benefits

Low wages for labour-intensive jobs and exposure to hazardous waste were identified as key barriers to attracting and retaining employees in this field. While high-value waste such as metal can be sold for recycling, low-value waste like plastic is not as profitable to date, hence the bulk of low-value waste recycling in Samoa being undertaken by CSOs. *"Because we handle waste, we are often considered at the low-end of the economy. We struggle to find funding channels that allow us to pay our employees more than the minimum wage. It's not because we handle rubbish that we deserve less"* explained an employer.

The minimum wage in Samoa was recently raised to WST\$ 4.00 per hour for workers both in the private and public sectors^{xi}. For reference, the minimum wage in New Zealand is NZD\$ 23.15 per hour^{xii}, over 9 times higher. For the CSOs, the

project-tied nature of their funding strongly hampers the sustainability of their budgets, and in turn long-term investments such as wage raises. Unlike other countries, no hardship allowance is planned for waste management workers despite their exposure to repetitive tasks and handling of hazardous waste.

“Because we handle waste, we are often considered at the low-end of the economy. We struggle to find funding channels that allow us to pay our employees more than the minimum wage. It’s not because we handle rubbish that we deserve less.”

Female waste employer in Samoa

The main **supportive benefits** provided by all three organisations to their respective workforce included social protection measures, namely the accident compensation scheme (ACC), the savings scheme from the Samoa National Provident Fund (SNPF), and annual, sick and compassionate leave entitlements. Some organisations included other economic benefits in the work package, varying across partially subsidised transport for the work commute, paid overtime, salary increments and bonuses. Transport pick up was highlighted by a respondent organisation as a good practice to help mitigate the cost of transport for employees living in rural areas with no access to a personal car. Only one organisation reported flexible work arrangements to accommodate for parental leave to deal with a family situation such as taking care of a baby or an ill child.

Capacity-building was identified as a stark need to train managers, employees and volunteers to allow career growth within the waste management space. While mentorship and in-house upskilling are common practices across the sector, some organisations pointed out a lack of capacity to equip themselves with more consistent training material. The CSOs leveraged training opportunities from development partners and other providers to benefit from knowledge-sharing and enhance skills including public speaking, proposal writing, and monitoring and evaluation.



S.T.A.R. recyclers collecting plastic waste at a local school (The Bag That Builds programme)

Formal policies on **safeguarding measures**, such as prevention of sexual exploitation, abuse, and harassment, were not the norm - but the organisations conveyed their interest in developing a referral mechanism in their workplace to deal with such cases.

Health and safety

Occupational health and safety (OHS) in the waste management sector is crucial particularly for roles involving heavy lifting, use of machinery and exposure to sharp and hazardous waste. National minimum labour standards for employers in Samoa^{xiii} include systematically identifying existing, potential and new hazards to employees, provide, maintain and make accessible to employees the protective clothing and equipment, while ensuring their use, cleaning, maintenance, and secure storage. Every consulted organisation reported the provision of on-the-job training and safety gear (e.g. gloves, boots, visibility vests and protective glasses when handling machinery), even though staff turn-over with no systematic return of the gear could occasionally challenge the provision of full equipment per employee.

There is a lack of data on the **current impacts of hazardous waste and malpractices on health** in Samoa. Among them, e-waste is known to be a threat both to the environment and to human health if not treated, disposed of, and recycled appropriately: it can release as many as 1000 different chemical substances into the

environment, including harmful neurotoxics such as lead. Several unsound practices may release e-waste toxicants, such as scavenging, dumping in water bodies, shredding plastic coatings or acid leaching. Burning e-waste is considered one of the most hazardous activities due to the toxic fumes created^{xiv}. In Samoa, recycling organisations provide pick-up tours around the island for voluminous waste, including e-waste. But burning waste remains an extremely common practice in the country, while the exposure of households to burnt e-waste and other toxic chemicals is unknown. The Ministry of Natural Resources and Environment in Samoa has set up a complaint mechanism to report burnings, but the lack of enforcement capacity hampers their efforts.

The **health impacts due to hazardous waste exposure** differ depending on multiple factors including sex and age. Children and pregnant and lactating women (due to the transmission through the placenta and breastmilk) are at a higher risk to contaminants released by hazardous waste^{xv}. In addition, scientific publications have provided data^{xvi} that women exposed to toxic chemicals contained in e-waste may suffer from anemia, fetal toxicity, hormonal effects, menstrual cycle irregularities, endometriosis, autoimmune disorders, and cancers of the reproductive system. In Samoa, the incinerator burning medical waste is located next to the landfill where recyclers work. Exposure to its fumes was reported as a long-lasting health concern by both employees and managers. The long-term impacts of poor air quality, hazardous waste handling, and physically intensive tasks on workers' health need to be further documented in Samoa.

Exposure routes to hazardous waste can also be gender differentiated, as women and men often have distinct experiences and roles in handling exposure sources in workplace and private environments. Empirical evidence from Indonesia and Nigeria^{xvii} showed women more often than men disposed of household waste by burning it in open fires in homes and yards, thus releasing and being exposed to unintentional Persistent Organic Pollutants (POP) such as furans and dioxins. Women and children were more exposed as they tend to remain close to their homes and thus can be exposed to the smoke of burning waste throughout the day. Women were also affected by secondary

exposure when washing clothes containing toxic chemicals. In Samoa, exposure disparities in both workplace and private settings remain undocumented, missing out on more targeted prevention and response strategies for waste management malpractices.



Samoa member of the Komiti o Tina (Women's Committee) active in her village's waste management efforts

Accessibility

The lack of **accessible and disability-friendly infrastructures, equipment and policies** were reported to hinder the safe recruitment of persons with disabilities in the survey. At the time of the consultations, no person with a disability was employed by any of the waste management organisations. The only national data on the matter goes back to the 2017 Labour Survey^{xviii}, in which persons with disabilities represented 4.2% of the water supply, sewerage and waste management workforce.

In a recent pilot initiative hiring employees with disabilities in waste management, these new workers ended up shortly resigning: their reasons referred to the lack of safe and convenient public transport options to go to the workplace, and the prevalence of social and gender norms among their families. On overall workplace accessibility, only one organisation reported being equipped with disability-friendly infrastructure.

Stigma and social norms

In many societies, **women traditionally manage household waste** as part of their daily chores, increasing exposure to health risks from burning fumes and handling chemicals^{xix}. But they tend to be underrepresented once the jobs are formalized, missing out on wages and social benefits.

In the professional sector, **gender dynamics in the division of labour** also play a strong role. Global trends show how women are represented in greatest numbers at the base of the recycling value chain, primarily as sorters of recyclables and waste pickers, and typically earning less than their male counterparts^{xx}. Men are associated with heavy lifting activities (collecting, loading and hauling), while women are associated with tasks that require greater attention to detail, such as the time-intensive work of sorting and separating waste, or administrative roles^{xxi}.

In Samoa, truck drivers tend to be men, associated with higher income as a more specialized job. An employer observed: *"Operations of the machinery for recycling might not be seen as a woman's job -being mindful this is unconfirmed and an assumption-, generally men are in the operating seats of machines and are driving waste trucks compared to women. But we are working towards inclusiveness including women to also take part in the training on the machines, collection, and picking".* A female waste worker added: *"I don't know how to drive a waste truck yet, but I want to learn".*



Samoa waste workers

On the other hand, Samoan women are well represented in leadership positions in the waste management space, and overrepresented among the active volunteers, on which some of the organisations' capacity and operations mostly rely on.

Stigma around waste work is a specificity of the industry, with respondents reporting feeling misunderstood and their jobs demeaned. One female worker explained: *"Many people say, 'You're cleaning rubbish, why are you doing this job? This kind of job is not good for you.' But I enjoy this job, and I tell them how littering destroys our rivers".* This stigma is compounded for women, as working at the landfill tends to be perceived as "not a woman's job". An employer stated: *"As this space is usually seen as an informal industry, the value of respect from others (mostly external) can be a downturn for inclusiveness. Not many people value the work that is done, and therefore always shun the idea of a working mother standing with a bag to collect plastics."*

"Many people say, 'You're cleaning rubbish, why are you doing this job? This kind of job is not good for you.' But I enjoy this job, and I tell them how littering destroys our rivers."

Female waste worker in Samoa

Ways forward

Gender equality, disability and social inclusion measures are key to fully harness the opportunities of a circular economy, to avoid reinforcing exclusion dynamics and to actively promote the recruitment, promotion and retention of a diverse workforce.

As the brief provides some background on these dynamics through the case study of Samoa, these recommendations aim to offer some leads to work towards a just transition to a circular economy.

Employment rights and benefits

- ✓ **Addressing knowledge gaps** to better inform policy and project design. More granularity is needed in national statistics on the waste workforce with data disaggregated by sector (rather than the joined water supply, sewerage and waste management sectors), by subsector (collection, treatment, recycling), and systematically disaggregated by sex, age and disability.
- ✓ **Giving voice to the waste workers** when designing projects, national policies, regulatory frameworks and other instruments to make sure their experience and needs are heard and considered in policy design, implementation, and monitoring and evaluation. Organisational and national policies should not be gender-blind but incorporate gender-responsive and socially inclusive analysis and corrective actions where relevant.
- ✓ **Raising awareness on the duty of care and responsibility over labour rights and benefits** among Government, donors, CSOs, and private companies through the Samoa Chamber of Commerce, as well as the interconnected dynamics of gender equality, disability and social inclusion to enable decent and attractive workplaces. Samoa has ratified International Labour Organization conventions such as the Promotional Framework for Occupational Safety and Health Convention 2006 (No.187), and the Violence and Harassment Convention 2019 (No.190):

full awareness around duties and responsibilities is needed to make sure the country effectively domesticates these undertakings.

- ✓ **Integrating a hardship allowance** to the waste workers' wages could be explored by legislators to allow them fairer remuneration, and ultimately greater recognition and improved livelihoods.
- ✓ **Ensuring the full coverage of workers by social protection schemes** should be embedded in the work package, including maternal, paternal and family leave.
- ✓ **Supporting workers organising themselves** to allow their engagement and advocacy to bring about fair remuneration, working conditions and consideration of health impacts. Women-led initiatives such as the national Women of Waste taskforce can be relevant channels of advocacy for workers' rights.
- ✓ **Mainstreaming trainings on prevention of sexual exploitation, abuse and harassment (PSEAH)**, funding trainings of trainers to empower staff and volunteers to raise awareness on these risks, and making sure all workplaces have an internal referral mechanism in place for survivors and bystanders. Waste workers should be informed about their right to protection.

Health, safety and accessibility

- ✓ **Harmonizing the effective implementation of OHS standards** by providing and maintaining quality safety equipment, and by ensuring workers' awareness of OHS risks and measures through various communication channels and regular training.
- ✓ **Designing a health insurance policy** tailored for the specific risk exposure of workers in the waste sector, including a preventive service offer, as an integral part of the

employment package. Regular on-the-job medical visits should be considered to track the health of waste workers.

- ✓ **Conducting a national mapping of exposure routes to hazardous wastes** disaggregated by sex, age and disability, both in work and private settings, to better understand the gaps and disparities in exposure trends. Disaggregated data on **waste management malpractices** such as open burning would help document exposure disparities and inform targeted health measures. Ensuring respondent anonymity will be crucial for encouraging honest feedback given the risk of fines.
- ✓ **Strengthening the law enforcement capacities** of the Ministry of Environment and Natural Resources and the Samoa Fire and Emergency Services Authority in prevention and response to open burnings.
- ✓ **Developing public awareness campaigns on the risks of and alternatives to waste management malpractices**, with targeted communication on the specific health risks posed to children, pregnant and lactating women, using a range of communication channels in both English and Samoan.
- ✓ **Conducting disability audits** in circular economy workplaces to identify accessibility gaps and adapt infrastructure, equipment, and transport options accordingly. CSOs will need financial support to undertake these audits and make the necessary infrastructure adjustments if they are deemed unfit, as their budget resources were reported to be too strained to cater for these needs.

Stigma and social norms

- ✓ **Implementing gender-sensitive communication campaigns** to promote green jobs and the value of waste work, with the aim to destigmatize the profession and challenge gender stereotypes in both occupational and domestic waste management roles.
- ✓ **Supporting a comprehensive capacity-building programme** to strengthen the workers' knowledge and skills as environmental frontliners, including by planning more core funding to waste organisations. Building capacities on governance, protection and technical issues is also key to provide equal opportunities of professional mobility to all workers, for example by offering trainings to female workers to drive and operate the waste vehicles and machinery.

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