





Case study

Supported by the GEF ISLANDS Indian Ocean Project

Beating Plastic Pollution: Key Insights and Lessons from Seychelles' Deposit-Refund Scheme

UNITED NATIONS DEVELOPMENT PROGRAMME

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The <u>United Nations Development Programme (UNDP)</u> partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain growth that improves quality of life for all. On the ground in 170 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.

About the GEF ISLANDS Programme

The GEF-supported <u>Implementing Sustainable Low and Non-Chemical</u> <u>Development in Small Island Developing States (ISLANDS) Programme</u> is supporting 33 island nations in the Atlantic, Caribbean, Indian and Pacific regions to improve hazardous chemicals and waste management.

Table of Contents

SHUBLNOO

01.
Introduction04
02.
Executive summary05
03.
Background07
04.
Designing a deposit-refund scheme09
05.
Impact and insights16
06.
Looking ahead19

A MESSAGE FROM UNDP

Plastics are among the most urgent environmental challenges of our time. For Small Island Developing States (SIDS), the stakes are existential – threatening ecosystems, economies, and ways of life. With fragile environments, limited land, and a deep reliance on healthy oceans, SIDS must embrace circular economy solutions that curb plastic pollution while advancing sustainable development.

Seychelles' PET bottle deposit scheme is a powerful example. Since its launch in 2007, it has diverted an estimated 400 million bottles from landfills, collecting 70–80 tons of plastic each month and dramatically reducing pollution. With a 90 percent collection rate, it demonstrates not only the operational strength of the Deposit Refund Scheme (DRS) model, but also the commitment of citizens and institutions to shared environmental stewardship. Equally important, the scheme is financially self-sustaining: generating around USD 3.6 million annually to secure long-term funding for waste management operations.

This case study, prepared by UNDP with the Government of Seychelles and the GEF-supported ISLANDS Indian Ocean project, shows how innovation, good governance, and community engagement can transform waste management. It offers lessons for SIDS and African countries aiming to scale up circular economy solutions, reduce marine and terrestrial plastic pollution, and integrate Extended Producer Responsibility (EPR) into national frameworks.

UNDP congratulates the Government and people of Seychelles for their leadership and vision. We are proud to highlight this achievement and remain committed to supporting other nations in adopting similar approaches – protecting ecosystems, advancing sustainable development, and building resilient waste systems for the future.





Seychelles' example shows that a well-designed recycling system with shared responsibilities in the value chain can deliver both environmental benefits and financial sustainability, making it a compelling model for others to learn from.

Xiaofang Zhou, Director Chemicals and Waste Hub, UN Development Programme

A MESSAGE FROM THE SEYCHELLES

11

In Seychelles, we do not produce plastic; we import it. This makes us particularly vulnerable to plastic pollution and reinforces the need to protect our marine ecosystems that underpin fisheries, tourism, and the well-being of our people.

Flavien Joubert, Minister of Agriculture, Climate Change and Environment, Government of Seychelles



Protecting our environment has always been at the heart of Seychelles' development vision. As a Small Island Developing State, we understand that the health of our ecosystems, communities, and economy are deeply interconnected. Plastics, if unmanaged, pose an existential threat to this delicate balance by warming the climate, damaging human health, and destroying ecosystems.

This is why we have taken bold action over the years. More than 20 years ago, we pioneered the PET bottle deposit-return scheme. By facilitating PET collection, treatment, and export, this initiative has proven to be a powerful tool for preventing plastic pollution, reducing landfill waste, and safeguarding our marine and coastal environment. With a collection rate of nearly 90 percent, it has diverted hundreds of millions of bottles from landfills, created livelihoods, and generated stable funding for waste management operations.

Building on this experience, in 2017, Seychelles introduced a ban on the importation and sale of plastic bags and utensils, including cups, forks, styrofoam takeaway boxes, and plates. This was followed by a ban on single-use plastic straws in 2019 and on balloons in 2021. The success of our national plastic action reflects the power of innovation, good governance, and community participation. It demonstrates what is possible when government, the private sector, and civil society work together towards a shared vision of sustainability.

Through this case study, we are proud to share with the global community Seychelles' step-by-step journey with the PET bottle deposit scheme, highlighting the challenges we faced as well as the key success factors. We hope our experience can inspire and guide other SIDS and African countries as they advance circular economy solutions, implement Extended Producer Responsibility systems, and join us in reducing marine and terrestrial plastic pollution.

Seychelles remains strongly committed to protect our environment, sustain our economy, and contribute actively to global action on plastic pollution - for the health of our people, our ecosystems, and our shared future.

Extended Producer Responsibility (EPR) has become central to global debates on plastic pollution. By holding manufacturers, importers, and brand owners accountable for the collection, recycling, and safe disposal of the products they place on the market, EPR reduces the burden on taxpayers and local governments while promoting reuse, recycling, and more sustainable product design.

Deposit-refund schemes (DRS) are among the most effective EPR instruments for beverage packaging. By adding a small deposit at purchase and refunding it when containers are returned, DRS create strong incentives for high collection rates, ensure a clean supply of recyclable materials, and generate a reliable funding stream for waste management.

Polyethylene terephthalate (PET) bottles – lightweight plastic bottles widely used for water, soft drinks, and other beverages – are often the entry point for such systems due to their visibility in litter streams, recyclability, and economic value. Well-designed deposit-refund systems can achieve collection rates exceeding 90 percent – a stark contrast to the low recovery rates in countries without them.

For Small Island Developing States (SIDS), where plastic leakage has outsized environmental, economic, and social impacts, deposit-refund schemes offer a practical solution: they reduce leakage, recover valuable resources, and secure long-term financing for waste management.

Seychelles is considered one of the pioneers in this field in the African region. The country's early adoption of a national PET bottle DRS demonstrates how such systems can be designed and managed in an island context.

Based on government reports and interviews with experts and officials, this case study traces Seychelles' experience – the process behind the system's development, the challenges encountered, and the lessons it offers for other island nations and beyond.

02. EXECUTIVE SUMMARY

In 2007, facing growing concern over plastic bottles overwhelming landfills, polluting coasts, and threatening the country's tourism- and fisheries-based economy, Seychelles launched a national deposit-refund scheme (DRS). The system has since expanded from PET bottles to aluminium cans and glass bottles and consistently achieves collection rates above 90 percent.

To date, it has diverted more than 400 million PET bottles from the environment, delivering clear environmental gains, stable financing, and valuable lessons for other SIDS and African nations.

At a glance: Seychelles' Deposit-Refund Scheme

Launch:	 2007 in Mahé, Praslin, and La Digue (home to 99 percent of the population).
Materials covered:	PET bottles (2007);aluminium cans (2009);alcoholic glass bottles (2018).
Return rate:	about 90 percent return rate.
Volumes recovered:	1,000 tons of PET bottles annually;1,000 tons of aluminium cans annually;300 tons of glass bottles annually.
Financing:	 Seed funding: USD 280,520 (PET producers and government); Levy: 1 SCR per bottle (≈ 0.07 USD); Refund: SCR 0.50 per bottle (≈ 0.035 USD); Redemption centre operational fee: SCR 0.10 per bottle (≈ 0.007 USD); Waste management fund: SCR 0.10 (≈ 0.007 USD) per bottle; Government covers transport costs for PET waste collected on Praslin and La Digue to Mahé for shredding; Disposer receives no direct payment but generates income from selling PET flakes.
Jobs created:	• 100+ across redemption centres, transport, and processing.

CASE STUDY: SEYCHELLES' DEPOSIT-REFUND SCHEME

Key lessons learned



Anchor in political commitment

Strong legal frameworks and continuous government support and recognition are essential for system stability and long-term success.



Secure seed capital

Upfront funding helps ensure a smooth launch and early operational stability.



Ensure careful financial and technical design and planning

Levies must be socially acceptable, redemption centres strategically located; and private sector involved to ensure ownership and viability.



Keep it simple

Straightforward levy-and-refund structures encourage public acceptance and high return rates. Simple, low-cost technologies can be practical and effective.



Establish robust oversight mechanisms

Put in place reliable accounting and monitoring systems, assign full-time staff to manage and supervise redemption centres, track imports through well-maintained customs database of eligible materials.



Plan for markets

Success depends on access to reliable export or regional markets for recyclables.



Set up strong procurement systems

Transparent and competitive tendering processes ensured efficiency in procuring goods and services and attracted capable private companies based on their expertise and geographic suitability.



Expand gradually

Start with a core material that has a higher value (e.g. PET, aluminium), then add others as acceptance, systems and capacity grow.

03. BACKGROUND

Country context

Seychelles is an island nation in the western Indian Ocean, made up of 115 islands and home to <u>about 120,000 people</u>. Classified as a Small Island Developing State (SIDS) and an upper-middle-income economy, it has the highest income per person in Africa, estimated at <u>USD 17,800 in 2024</u>, with tourism and fisheries forming the backbone of its economy.

Tourism is the largest economic sector, contributing <u>26 percent of gross domestic product</u> (GDP) and employing <u>over a third</u> of the workforce. Fisheries also play a critical role – supporting food security and providing <u>about 12 percent</u> of formal employment.

Renowned for its biodiversity, Seychelles is home to many species found nowhere else in the world – <u>around 45 percent</u> of its plants and <u>up to 85 percent</u> of some animal groups are unique to the islands. <u>Over 70 percent</u> of the land is forested, and extensive protected areas safeguard key ecosystems including coral reefs, mangroves, and biodiversity hotspots. However, these ecosystems are highly vulnerable to pollution, soil erosion, marine litter, and the impacts of climate change – making sustainable environmental management a national priority.



Tourism accounts for about 26 percent of Seychelles' national income and employs over a third of the workforce.

Waste management in Seychelles

Solid waste management in Seychelles is a complex and growing challenge. Despite the country's limited land area, landfilling remains the dominant method of waste disposal. Municipal waste is collected unsorted from bins, compacted in specialised trucks, and transferred to landfills on various islands. While some private initiatives encourage waste separation, segregation is usually lost during collection. Only a few waste streams – PET bottles, alcoholic glass bottles, aluminium cans, and large scrap metal – are collected separately.

On Mahé, the largest and most populated island, annual deposits at the main Providence landfill increased from 40,000 tonnes in 2001 to 80 000 tonnes in 2022, a trend accelerated by the surge in imported goods after trade liberalization in 2008. The landfills on Mahé and the small but heavily visited tourist island of La Digue have already reached capacity, posing environmental risks such as methane emissions, leaching of pollutants, and long-term financial burdens on the government.

Seychelles currently operates three sanitary landfills and two traditional landfills. Landfills on Mahé (pictured) and La Digue have already reached capacity.



The rise of PET bottles

In the early 2000s, plastic pollution in Seychelles sharply increased, particularly from PET bottles, polystyrene lunch boxes, and plastic bags. With no significant local production, the country imported most PET beverage bottles and preforms, which bottling companies blow-moulded into bottles and filled with their products.

In 2007, the country's leading beverage producer shifted its entire soft drink line from refillable glass bottles – previously sold under a refundable deposit system – to single-use PET bottles. At the same time, several companies began setting up water bottling plants and plastic bottle production facilities.

This transition sharply increased PET consumption, and soon the islands faced a surge in plastic litter, with discarded bottles becoming a widespread environmental problem. The situation drew strong public criticism from residents, tourists, and environmental groups, putting mounting pressure on the Ministry of Environment to act.

11

A local brewery launched sodas in PET bottles without a refundable deposit. This, together with an increase in water bottle manufacturers, substantially increased PET plastic production and pollution in Seychelles.

Cliff Gonzalves, Senior Chemicals and Waste Consultant, who supported the development of the DRS scheme in 2007.



04. DESIGNING A DEPOSIT-REFUND SCHEME

Laying the groundwork

Responding to the growing public pressure in 2007, the Department of Environment launched an awareness raising campaign to promote better waste management practices. The "Waste-Free Seychelles" campaign featured school quizzes, television spots, radio programmes, posters, billboards, and community activities. However, while it helped increase awareness around the country, the campaign did not significantly reduce plastic pollution and littering.

As a result, the government began drafting a policy that introduced a refundable deposit scheme. The first proposal included the establishment of 25 redemption centres, one in each district. District administrations, however, did not support the plan, likely due to limited interest or technical capacity. Soon after, a new technical committee of officials and experts was established to explore long-term solutions.

The new group engaged key representatives from the Ministry of Agriculture, Climate Change and Environment's (MACCE) Environment Department and Waste Management Department, the Ministry of Finance, the Attorney General's Office and also consulted the private sector.

The government and PET-producing companies jointly contributed about USD 280,500 in seed funding to launch the scheme.



A financial feasibility analysis was conducted to assess the long-term sustainability of the scheme, determine suitable levy and fee structures and develop a detailed business plan to guide operations and funding. The analysis showed that only five redemption centres would be economically viable, prompting major revisions to the original plan.

Another challenge was the large volume of PET bottles already in circulation – and not subject to the levy – that were likely to be returned for refunds, requiring an initial seed fund. Following negotiations, the government and PET-producing companies agreed to jointly contribute about USD 280,500. The two main manufacturers agreed to buy back existing bottles for treatment and re-export. This arrangement, formalized through a Memorandum of Understanding (MoU), secured the necessary public–private contributions and provided the seed capital to launch the scheme.

CASE STUDY: SEYCHELLES' DEPOSIT-REFUND SCHEME

Deposit-refund models vary by governance, operation, and scope:

- Producer Responsibility Model: managed by a non-profit organization formed by beverage producers. Common in Europe, efficient but requires strong regulation.
- Government-Run Model: operated by a public authority or government agency. Provides high oversight but may be less flexible or innovative.
- Retailer-Led Model: retailers are responsible for collecting returned bottles, often through reverse vending machines. Convenient for consumers but requires retailer participation and monitoring.
- Hybrid/Public—Private Model: combines public oversight (e.g. legislation) with private sector management (e.g. a producer-led operator). Balances accountability with operational efficiency.
- Voluntary or Informal Model: not legally mandated; relies on voluntary participation from industry. Often limited in scale and effectiveness.

Designing the legislation

Introducing the new levy and establishing a trust fund to manage revenues required the government to develop and adopt new legal instruments. These were framed around five key principles:



Keep it simple: ensure the system is simple to understand and implement, while still allowing flexibility (e.g. include more types of plastics in the future).



Implement in phases: roll out the scheme gradually using a piecemeal approach, rather than launching all components at once.



Identify and minimize risks early: proactively assess potential risks and address challenges before they escalate.



Avoid burdening the government: design the scheme to be financially sustainable, minimizing administrative and financial pressure on public institutions.



Time public communication for when fully ready: hold off on public announcements until all operational and logistical elements are firmly in place.

Key components of the legislative framework:

National law

Environmental Protection Act (EPA), 2016: Section 13
 provides the Ministry of Environment with legal authority to
 introduce a fee for importers/manufacturers of materials
 (including packaging) to cover disposal costs.

Levy and deposit system

- Trade Tax Act: Approved in 2007, imposes a 1 SCR levy on PET bottles (categorized as a tax, not a fee under the EPA).
- Statutory Instrument (SI) 81 of 2020: legally formalized all deposit levy mechanisms on beverage containers.
- Environmental Regulations (2018–2021): Expanded the levy scheme to include glass bottles and aluminium cans, under the Ministry of Environment.

Waste Management Trust Fund (WMTF)

- Established: 2007 under the Waste Management Trust Fund Notice.
- Origin: 2007 Memorandum of Understanding between the government and beverage producers (SMB and SBL).
- Purpose:
 - Receive and manage levies on relevant products under the amended Trade Tax Act.
 - Finance the PET and aluminium can deposit-levy system.
 - Support public education on waste management.
 - Cover additional costs for collecting and processing plastic waste from other sources (e.g. cruise ships).
- Governance: Managed by a Board of Trustees with public and private sector representation.



A bill on deposit-based waste management was drafted, submitted, and approved by the Cabinet. It was essential to demonstrate that an EPR system was the most effective, sustainable mechanism to finance national waste management efforts - because you cannot go on loans.

Dean Gobin, Senior Coordinator - Trust Funds within the Seychelles Department of Environment

Operationalizing the scheme

Once the legislative framework was in place, the government took a series of key steps to operationalize the deposit-refund scheme, achieving full functionality within two months:

Issue tenders:

The government published tenders to invite operators to bid for running parts of the deposit-refund system (e.g. establishing and managing redemption centres and disposal). The tenders included incentives for disposers, with the private sector agreeing to support waste management companies by providing equipment and machinery (e.g. PET shredder) to help launch their operations and reduce the initial investment burden.

Determine locations for redeem centres and PET processing facilities:

Six redemption centres were established across the three most populated islands – four on Mahé, one on Praslin, and one on La Digue. Locations were chosen for accessibility, ensuring centres were convenient for the public (for example, one was placed near the main supermarket on Mahé).

Mahé was selected as the site for the central PET processing facility as it is the country's most populous island and the economic and political centre, hosting the main commercial port that facilitates exports. In addition, private waste management companies were already operating there. The government assumed responsibility for transporting collected materials from Praslin and La Digue to Mahé for processing.

The outer islands were excluded from the scheme due to their low population density and distance; plastic waste generated there is either managed independently by resorts, some of which operate their own recycling systems, or sent to landfill.

Hire the management team:

The Ministry of Environment hired a dedicated team to run the scheme and enforce the new policy. The team established monitoring and supervision mechanisms to track operations, including the use of slings and receipt books, as well as regular inspections to ensure compliance and proper functioning across all participating entities.

Receive seed funding:

The government and private sector contributed the seed funding to kickstart operations.

Launch public awareness campaign:

To ensure residents' understanding and engagement in the scheme, the government rolled out a public communication campaign featuring television programmes and media coverage to explain the scheme to citizens.

The PET bottle scheme in action

Step 1: Import and levy collection



- Customs imposes a fixed levy on all plastic bottles and preforms imported into Seychelles using the Harmonized System code for "PET plastic" (HS code 3923).
- The levy was initially SCR 0.70 (\approx 0.05 USD) per PET bottle and later increased to SCR 1.00 (\approx 0.07 USD) to account for inflation.
- The levy is collected under the Trade Tax Act and transferred to the Waste Management Trust Fund to finance refunds and operations.

Step 2: Product sale

- The cost of the levy is incorporated into the final retail price.
- Consumers pay the deposit when purchasing beverages in PET bottles.



Step 3: Return and refund



- Citizens, middlemen waste collectors or government collectors return clean and empty PET bottles to designated redemption centres.
- Bottles are counted using plastic cement slings to ensure accuracy.
- Customers receive a refund of SCR 0.50 (≈ USD 0.04) per bottle.
- The redemption centres receive an operational fee of SCR 0.10 (

 USD 0.007) per bottle and the Waste Management Fund receives the remaining SCR 0.10 per bottle.

Step 4: Transport, processing and export

- Redemption centres crush and bale collected PET bottles for transport.
- PET bottles are transported to the processing facility on Mahé at the government's expense.
- PET bottles are shredded and bagged for export.
- The recycling company sells the PET flakes on international markets, particularly in Asia, where they serve as feedstock for producing recycled plastic pellets and products.



Expanding to other waste streams

Aluminium cans:

Following the introduction of a levy on plastic bottles, beverage producers in Seychelles began shifting towards alternative packaging materials such as aluminium cans and Tetra Pak. To promote recycling, prevent market distortion, and ensure a level playing field, a levy on aluminium cans was introduced in 2010.

The levy structure mirrors that of the PET scheme. A SCR 1.00 (\approx USD 0.07) levy is applied per can and paid by importers at customs, with the cost ultimately passed on to consumers. When consumers return aluminium cans to designated redemption centres, they receive a SCR 0.50 (\approx USD 0.035) refund. In addition, SCR 0.10 per can (\approx USD 0.007) is allocated to redemption centres as an operational fee, and another SCR 0.10 is directed to the Waste Management Fund to support broader environmental initiatives.

The existing network of redemption centres established for PET bottles was expanded to also handle aluminium cans. A new private sector recycling company was contracted to handle the aluminium waste. The company provided its own equipment and was tasked with collecting cans free of charge from redemption centres, crushing and compacting them at its facility.

To date, it has exported an estimated six to seven containers of processed aluminium cans, each weighing between 21 and 24 tonnes. In addition to aluminium, the company also recycles and exports scrap metal, batteries, and copper, contributing to the country's broader recycling efforts.

To date, about six to seven containers of processed aluminium cans have been exported for recycling.



Glass bottles:

The deposit scheme for glass bottles was launched in 2018, initially only targeting alcoholic beverage containers. The scheme aimed to address two key issues: reducing the volume of glass waste, particularly on beaches and in public spaces, and correcting distortions in the packaging market that had emerged as other materials (like PET and aluminium) were regulated.

Under the scheme, a SCR 2.00 levy (\approx USD 0.14) is applied per glass bottle, paid by importers at the time of customs clearance. This cost is passed on to consumers. When bottles are returned to redemption centres, consumers receive a SCR 1.00 (\approx USD 0.07) refund.

Of the remaining amount, SCR 1.40 is retained by the redeem system and distributed as follows:

- SCR 0.15 covers the operational costs of the redemption centre;
- SCR 0.60 is allocated to the recycling company this is different from the PET and cans system, where recyclers do not receive any funding from the levy;
- SCR 0.25 is transferred to the Waste Management Fund.

The collection and processing of glass waste are managed by the contracted recycling company. However, the company has so far been unable to export crushed glass due to market constraints. While a portion of the material is sold locally – for example, for use in construction applications – a significant share still ends up in landfill.

Operations face multiple challenges, including frequent equipment breakdowns, pollution concerns, low-quality output, and severe human resource limitations. At present, the government's strategy for advancing glass recycling remains uncertain.

To date, the company handling glass waste has been unable to export crushed glass due to market constraints, resulting in a significant share still ending up in landfill.



05. IMPACTS AND INSIGHTS





You would not see Seychelles green without the scheme.

Dean Gobin, Senior Coordinator - Trust Funds within the Seychelles Department of Environment

The introduction of the deposit-levy system in Seychelles has delivered significant financial and environmental benefits. Each year, the scheme generates an estimated SCR 50 million (\approx USD 3.6 million) through levies on plastic, aluminium, and glass containers. Even during years of lower activity, it secures at least SCR 25 million (\approx USD 1.8 million), providing a reliable funding source for national waste management operations.

Since its launch, the system has diverted an estimated 400 million PET bottles from landfills, greatly reducing plastic pollution and associated environmental impacts. With a consistent collection rate of around 90 percent, the scheme demonstrates both strong public participation and operational efficiency.

Job opportunities

Beyond its environmental benefits, the scheme has created over 100 jobs across redemption centres, transport, and processing facilities, while improving incomes for waste pickers, intermediaries, and recyclers. Both PET and aluminium recyclers note that the levy system has been instrumental in making their operations more economically viable and sustainable.



Business was slow in the early years – we were collecting only around 50,000 bottles a month. Today, we collect about 3 million PET bottles every month, which amounts to 40 to 50 tonnes. We earn approximately \$300 per tonne.

Harini Enterprises, the private operator of the redemption centres and PET processing facilities.

Impact on tourism

The deposit-refund scheme has also had a positive impact on tourism by helping preserve the natural landscapes that Seychelles' tourism industry relies on. While comprehensive national data is not yet available, evidence from cleanup campaigns indicates a clear decline in plastic bottle litter. Today, plastic bottles are rarely seen on beaches or in forested areas, reflecting both improved public behaviour and the effectiveness of the scheme.



People who come to Seychelles care a lot about the environment. Giving visitors a green and healthy environment is priceless. For me as a citizen, I get to enjoy this clean and magnificent environment every day, and it is very fulfilling.

Dean Gobin, Senior Coordinator - Trust Funds within the Seychelles Department of Environment



Key trends and challenges

Financial and market pressures

High operational costs and relatively low levy values continue to limit profitability across the recycling chain. Private operators of redemption centres and processing facilities report that their share of the levy is insufficient to sustain operations, making long-term financial viability challenging.

These pressures are compounded by market volatility. During the COVID-19 pandemic, recyclers were forced to export PET flakes free of charge, absorbing both transport and processing costs. Dependence on a single exporter for PET logistics adds further risk, while export opportunities have narrowed as traditional markets – including India, Sri Lanka, China, and Vietnam – have imposed restrictions or bans on imported recyclables.

At the same time, growing consumer awareness of plastic pollution has led several beverage producers to shift from plastic to glass, reducing the overall volume of PET available for recycling and lowering system revenues.

As a result, the scheme remains economically viable only for high-value materials such as PET and aluminium, while low-value or multilayer plastics continue to be landfilled. The financial and operational burden still falls largely on the government and consumers, rather than on producers and importers, limiting accountability and reducing incentives for innovation in packaging design and materials.

Infrastructure and institutional limitations

PET processing infrastructure remains limited, with only two PET shredding machines, both over 15 years old and operated by a single company. Aging equipment, coupled with constrained land availability, hampers expansion and modernization efforts. Some recycling operations continue informally, underscoring the need to formalize all actors and strengthen compliance, safety, and monitoring mechanisms.

Enforcement gaps

Policy and customs enforcement gaps also weaken the system. Outdated Harmonized System (HS) codes enable misclassification of plastic imports, leading to under-declaration and loss of levy revenues. The open import system makes it difficult to track the quantity and type of packaging entering the country, while reports of deliberate mislabelling highlight the need for stricter oversight and up-to-date import controls.

Social and behavioural impacts

Although the scheme is widely recognized, levels of public awareness and participation vary across communities. Some communities still lack adequate information or convenient access to redemption centres, particularly in remote areas. The levy also slightly increases consumer prices, which can disproportionately affect low-income households.

To improve accessibility, some redemption centres have introduced door-to-door collection services, offering a lower refund rate (e.g., SCR 0.30 instead of the standard rate) to encourage bulk returns. This practice has led to the emergence of temporary storage sites across the islands, where bottles are aggregated before redemption.

Despite the existence of a formal collection and redemption network, informal waste pickers remain active at landfill sites, collecting bottles to exchange for cash. Many come from vulnerable groups and work under unsafe and unhygienic conditions. While the scheme offers a modest source of livelihood, it may also inadvertently reinforce social and health risks among these individuals.

It is estimated that around 60 percent of bottles are collected by informal pickers or middlemen operating outside formal oversight. Many collectors sell bottles to intermediaries at reduced prices for immediate income. These intermediaries then redeem the bottles at official centres for the full refund, creating unfair competition for redemption centres and allowing some actors to bypass taxes and reporting requirements. This practice undermines revenue collection, distorts data accuracy, and weakens accountability across the recycling chain.

Increased litter of bottle caps and labels

Since the deposit-refund scheme does not cover bottle caps and labels, it has inadvertently contributed to increased littering of these items.

06. LOOKING AHEAD

The Seychelles deposit scheme has been successfully supporting plastic management for almost 20 years. It is built on strong regulatory support, consumer incentives, and effective public-private partnerships.

However, it faces key challenges, including low public awareness, lack of coverage for non-PET plastics, aging infrastructure, reliance on volatile export markets, and outdated policies, particularly around customs codes and enforcement.

Future strategies to revise and strengthen the deposit scheme:

- Updating HS code tracking systems to improve accuracy and close existing loopholes that allow misclassification of imports.
- Extending the scheme to cover additional plastic types, particularly non-PET rigid plastics.
- Enhancing data systems and implementing online import tracking to increase transparency and efficiency.
- Engaging the private sector more systematically in policy reviews, while reconsidering the government's role in scheme management.
- Introducing redemption points in schools and community centres to improve accessibility and encourage grassroots participation.
- Strengthening sorting infrastructure, which is currently concentrated primarily in Providence, to increase processing capacity and quality.
- Assess the continued relevance and efficiency of the redemption centres, considering the current practices, as well as the broader social implications of the current scheme.
- Revise the National Waste Policy in 2025 and incorporate lessons learned from the scheme to enhance its effectiveness.
- Complementing these efforts, the GEF-supported and UNDP-implemented <u>ISLANDS</u> <u>project</u> is developing schemes for hazardous waste recycling, including end-of-life vehicles (ELVs), electronic waste, and used oil. This work encompasses new legislation, financing mechanisms, and private sector licensing to broaden the country's waste management framework.
- The GEF-supported <u>iCOAST</u> (Integrated Collaborative Approaches to Sustainable Tourism) program led by UNDP in partnership with multiple agencies will reinforce Seychelles' efforts by promoting circular supply chains, strengthening policies and regulations, expanding access to sustainable finance, and empowering tourists to make more sustainable choices.

Recommendations to further strengthen the scheme:

- Consider shifting management away from direct government control to a more autonomous or public-private entity, to improve efficiency and responsiveness.
- Diversify redeem locations, including the potential use of reverse vending machines in high-traffic areas to make bottle returns more convenient.
- Introduce dedicated "PET only" bins for individuals not actively participating in the deposit scheme though a similar initiative was previously tested and did not succeed, its design could be revisited and improved.
- Implement a collection scheme for HDPE bottle caps, which are currently excluded from the programme but have recycling potential.
- Explore the feasibility of in-country recycling of PET flakes, which could reduce reliance on export markets and generate added value locally.
- Explore the environmental and social cost-benefit of increasing the levy.