



## INFORMATION BRIEF

December 2025

# Small Island Developing States

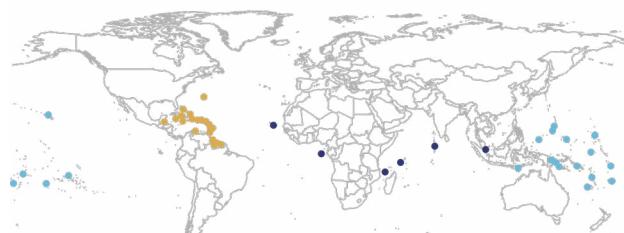
## Multi-Dimensional Challenges Require Integrated Approaches to Build Resilience

Small Island Developing States (SIDS) were first recognised at the 1992 UN Conference on Environment and Development as a distinct grouping of island nations that share high vulnerability to extreme weather events, climate change, and global economic shocks.

The **39 states and 18 territories** that make up SIDS face many similar social, economic and environmental challenges to sustainable development.<sup>1</sup> These include their small and remote landmasses, exposure to climate change and natural disasters, high levels of food imports and external debt, and limited financial, technical, and human capacities. SIDS **economies are primarily based on tourism, fisheries, and natural resources**, and sustained by global trade, remittances, and overseas development assistance (ODA).

Spread across over a thousand islands, SIDS are home to approximately **74 million people**, just under 1% of the global population,<sup>2</sup> often clustered into three sub-regions: the Caribbean, the Pacific, and the AIS (Atlantic, Indian Ocean, and South China Sea). Whereas pre-colonial settlements were often located inland, most SIDS populations and critical infrastructure (e.g., airports, roads, urban areas, tourism, water/waste management) are now **concentrated in the low-lying coastal areas**.<sup>3</sup> Approximately 1.1 million people, or 2% of the SIDS population, currently reside on land with an elevation of less than 1 metre above sea level.<sup>4</sup>

Figure 1: UN Population Estimates for 2023<sup>5</sup>



SIDS IN THE CARIBBEAN	29	46.5 MILLION
SIDS IN AIS	8	15.2 MILLION
SIDS IN THE PACIFIC	20	11.8 MILLION
ALL SIDS	57	73.5 MILLION

SIDS rely on **regional inter-governmental organisations** as key partners in their efforts to overcome limited capacities and implement both national and multi-country policies and programmes to address climate change, land degradation, and drought. These include the Pacific Community (SPC), Secretariat of the Pacific Regional Environment Programme (SPREP), Pacific Islands Forum Secretariat (PIFS), the Partnership Initiative on Sustainable Land Management (PISLM), and the Caribbean Community (CARICOM), which hosts the Caribbean Disaster Emergency Management Agency (CDEMA) and Caribbean Institute for Meteorology and Hydrology (CIMH).

SIDS have a **strong, unified voice in multilateral dialogues** (e.g., Pacific Small Island Developing States, Alliance of Small Island States, SIDS Coalition for Nature), playing an important role in **climate change negotiations** and advocating for urgent global action, including stronger commitments to the 1.5°C target, the creation of the loss and damage fund, and increased finance for adaptation and disaster risk reduction.

**Land degradation and drought** are now being prioritised on the SIDS development agenda, underlining the need for strategic investments in land restoration, water/waste management, and integrated spatial planning approaches that build resilience and help communities adapt to future existential challenges.

The **UNCCD SIDS Forum** held their inaugural convening at UNCCD COP16 with the aim to establish a dedicated space to discuss and coordinate efforts to combat desertification, land degradation, and drought.<sup>6</sup> This information brief provides a broad outline of the unique challenges and opportunities for SIDS in the context of the UNCCD, to be followed by a more in-depth examination in the forthcoming **Global Land Outlook Small Island Developing States Thematic Report**.

# Multi-Dimensional Challenges

SIDS face a distinctive set of interconnected environmental and socio-economic challenges that stem from their geographic, ecological, and economic characteristics.

Their small and remote land masses, inherent water scarcity,<sup>7</sup> exposure to climate change and natural disasters,<sup>8</sup> and fragile economies make it difficult to balance human development and environmental protection.<sup>9</sup> These challenges are closely linked to and influenced by socio-economic factors which shape the growth trajectories of most SIDS, including rapid demographic changes and a growing reliance on food imports, external finance, and technical assistance.<sup>10</sup>

## Small, Remote Landmasses

SIDS are characterised by abundant biodiversity and highly connected terrestrial, aquatic, and marine ecosystems. When healthy and productive, these ecosystems provide a myriad of goods and services that are the foundation of island livelihoods and culture.<sup>11</sup>

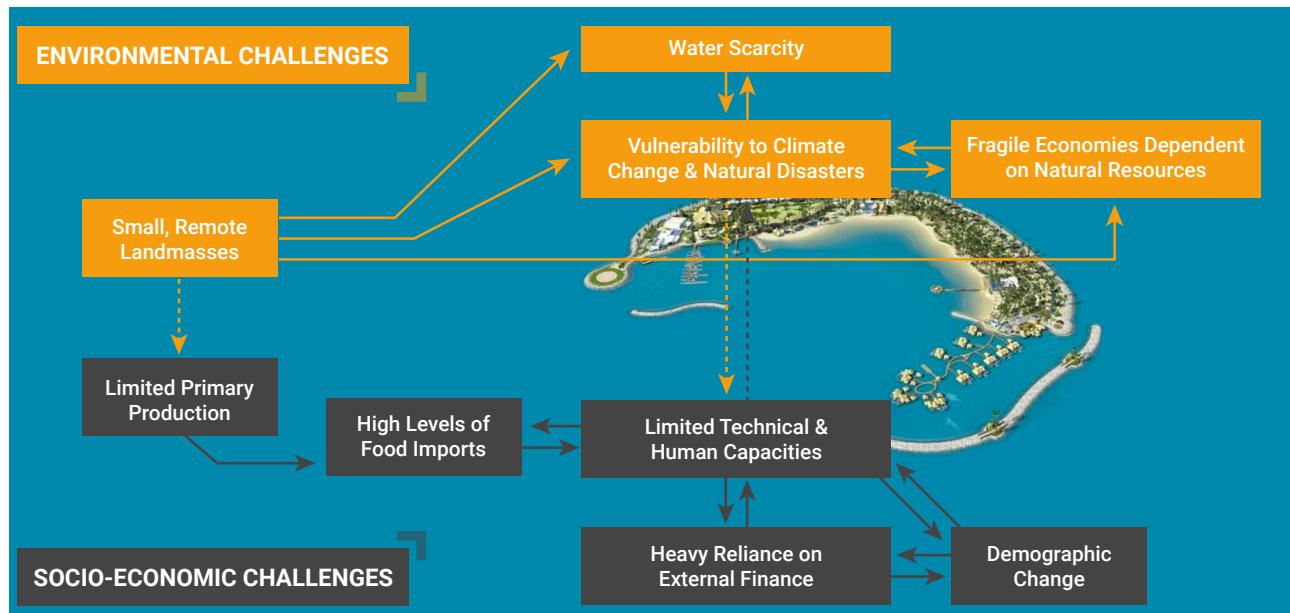
SIDS differ in their ecological and hydrological characteristics depending on their lithological origin (volcanic, limestone, reef, or composite), as well as their size and elevation. The Pacific contains a mix of volcanic (39%), reef (34%), limestone (20%) and composite (7%) islands, with the larger volcanic and composite islands located on the edge of the Pacific tectonic plate.<sup>12</sup> In the Caribbean, the Lesser Antilles are predominantly volcanic, whereas the Greater Antilles originated from older continental rocks that accreted onto the Caribbean Plate to form larger composite islands. In the AIS region, the islands of Comoros, Mauritius, Réunion,

Cabo Verde, and São Tomé and Príncipe all have volcanic origins, while Singapore and the Seychelles are made up of continental fragments and the Maldives are comprised of low-lying limestone atolls.

**Land resources – soil, water, and biodiversity – in SIDS are largely influenced by the origin, size, and location of each island.** Volcanic islands generally have fertile soils, with good water-holding capacity. However, their steep slopes limit the areas suitable for farming and are subject to severe erosion when vegetation is cleared. In contrast, coral and limestone islands have sandy, nutrient-poor soils and small aquifers that are susceptible to saltwater intrusion. Notable for their large river systems and deltas that create fertile soils for agricultural production, Papua New Guinea, Suriname, Guyana, and Guinea-Bissau are also prone to salinisation, flooding, and erosion.

**Despite covering less than 0.5% of the world's total surface area, SIDS are home to over 20% of global biodiversity.**<sup>13</sup> As many SIDS are remote and geographically isolated, they tend to have high levels of endemism, meaning that if species are lost, they could face global extinction.<sup>14</sup> Biodiversity loss degrades the provision of critical ecosystem services across terrestrial, freshwater, and marine environments, such as soil fertility, pollination, water cycling, and coastal protection. This, in turn, reduces ecosystem productivity and resilience while undermining the food security and livelihoods of island populations.<sup>15</sup>

Figure 2: Multi-dimensional challenges influencing land management in SIDS



## Land Degradation and Drought

Land use change and unsustainable land and water management practices are driving land and environmental degradation, and increasing drought vulnerability in many SIDS.

**Many land degradation processes in SIDS have their roots in the social, economic, and institutional legacies of colonialism, particularly cash crop plantations and forest industries.** These systems of natural resource extraction displaced indigenous peoples and their traditional land use practices, and, in some cases, formerly enslaved populations were left landless following emancipation.<sup>16 17</sup> The effects of deforestation and land degradation in SIDS include soil erosion, fertility loss, biodiversity decline, water scarcity and pollution – all of which compromise food and water security while perpetuating poverty, economic inequalities, and weak governance.<sup>18</sup>

- The previously uninhabited islands of São Tomé and Príncipe, Cabo Verde, Mauritius, and the Seychelles experienced rapid biodiversity loss and widespread clearing of primary forests during the early stages of colonisation beginning in the 1600s.
- In Haiti and Comoros, structural poverty and instability, agricultural expansion, reliance on charcoal, and limited governing capacities have led to relatively high levels of deforestation over the past decades.
- Similarly, Papua New Guinea and the Solomon Islands have lost significant forest cover in recent decades due to weakly regulated commercial logging.

**Drought is also a growing concern in many SIDS.** The proportion of land area that was affected by at least six months of extreme drought per year increased from 2% (1961–1970) to 17% (2014–2023).<sup>19</sup> More severe and

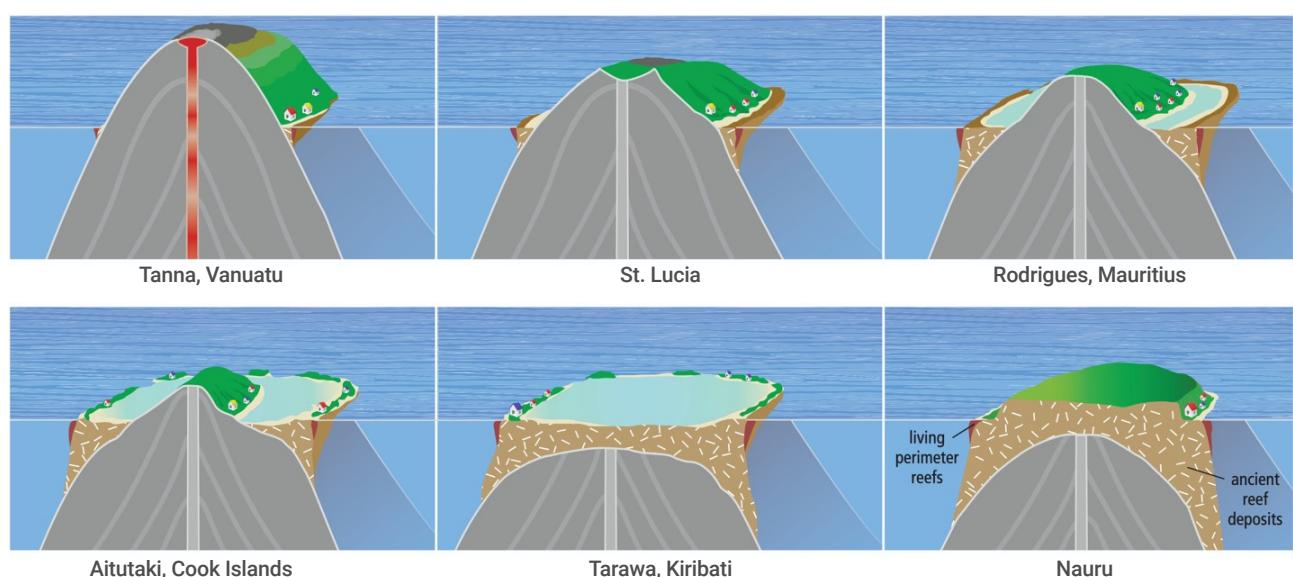
frequent droughts can lead to food and water insecurity, economic losses, and the increased transmission of infectious diseases. The most vulnerable SIDS are generally the smaller, more isolated and poorer ones, especially the Marshall Islands, Guam, Haiti, Comoros, and Martinique.<sup>20</sup>

**Today, the growing demand for food, water, and energy is putting enormous pressure on the functioning of island terrestrial ecosystems and limited land resources, especially freshwater and fertile soil.** The main human drivers of land degradation in SIDS are:

- Urbanisation, including tourism infrastructure, waste management, and informal settlements, resulting in the loss of fertile land and the discharge of untreated wastewater;
- Agricultural practices, such as slash and burn clearing, overgrazing on marginal lands, and intensive agrochemical use; and
- Extractive industries, including commercial forestry and the domestic demand for charcoal, firewood, and timber which lead to deforestation, as well as gravel and sand mining for building construction.<sup>21</sup>

**Given their small size, even relatively minor changes in land use can disrupt key ecological processes, with cascading impacts on nature and people.** Consequently, about 75% of all recorded extinctions have occurred on small islands,<sup>22</sup> with 41% of endemic species in SIDS considered to be at high risk.<sup>23</sup> Furthermore, geographic isolation makes SIDS particularly vulnerable to invasive alien plant and animal species, often cited as the primary cause of extinctions in island ecosystems.<sup>24</sup> Non-native mammals (e.g., rats, wild pigs) are disrupting native habitats and food chains, while exotic plants are displacing native vegetation, contributing to habitat fragmentation, degradation, and loss.<sup>25</sup>

**Figure 3: Lithological Origins of SIDS<sup>26</sup>**



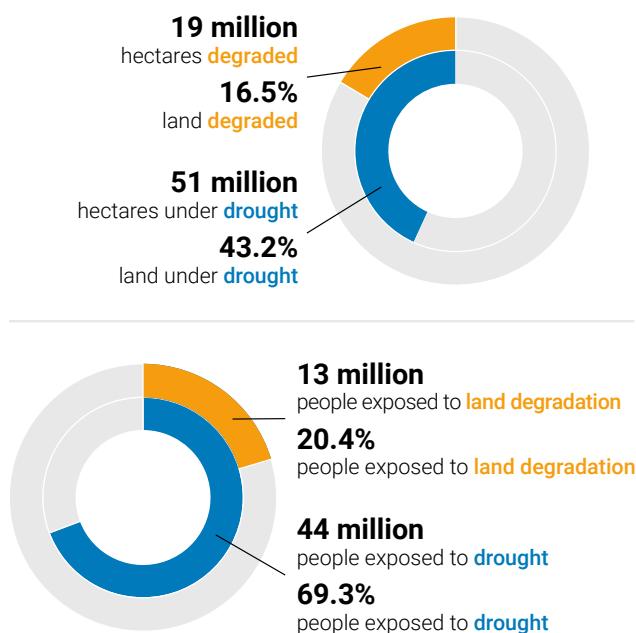
## Climate Change and Water Scarcity

The impacts on human health and the economic losses resulting from climate change and water scarcity often exceed the recovery capacity of SIDS governments and communities, creating a cycle of debt, poverty, and increasing vulnerability.<sup>27</sup>

**Climate change is increasing the frequency and intensity of extreme weather events (e.g., storms, droughts, floods) around the world.**<sup>28</sup> For SIDS, climate change is also exacerbating trends in land degradation and drought by disturbing habitats, triggering severe soil erosion, and damaging natural, agricultural, and urban landscapes.<sup>29</sup> Under a 2°C warming scenario, more intense storms and floods are projected to cause cumulative losses and damages of USD 56 billion by 2050.<sup>30</sup> SIDS face the highest disaster recovery costs and climate-attributable losses of any region globally, relative to the size of their economies. This is especially true in the Caribbean, which accounted for nine of the ten largest single-disaster economic losses (as a share of GDP) from 2000–2019.<sup>31</sup>

**Many SIDS are low-lying islands or atolls with a high concentration of people and infrastructure along the coast, which are subject to tropical cyclones, flooding, and salinisation.**<sup>32</sup> While collectively they account for less than 1% of global CO<sub>2</sub> emissions,<sup>33</sup> and the root causes of climate change are beyond their control, SIDS are forced to prioritise nature-based solutions and land-based adaptation interventions (e.g., mangrove and wetland restoration, reforestation, soil and watershed management) to protect their populations, economies, and ecosystems.<sup>34</sup>

**Figure 4: Area Degraded and under Drought; Population Exposed to Land Degradation and Drought in SIDS<sup>35</sup>**



**In addition to environmental degradation, rising temperatures are directly impacting human health and wellbeing in SIDS.**

Trends indicate that annual exposure to days of extreme heat has almost doubled over the last 20 years. Altered patterns of temperature, rainfall, and humidity have increased the transmission potential of dengue fever by 33%, compared to the 1950s, with more frequent outbreaks recorded since 2019. Climate impacts are also shifting the ranges of suitability for both crops and native vegetation, resulting in a loss of species diversity and non-timber forest products on which many vulnerable communities depend.<sup>36</sup> In 2022, an additional 2.6 million people (4.8% of the total population of the 30 SIDS studied) experienced moderate or severe food insecurity due to heatwaves and droughts, compared to the 1981-2010 average.<sup>37</sup>

**Water resources vary significantly across SIDS depending on their geomorphology and climate.** Several SIDS have high rainfall, large aquifers, and relatively abundant surface water,<sup>38</sup> however many small, low-lying atolls and limestone islands, such as those of Tuvalu, Kiribati, Maldives, and the Marshall Islands, have thin freshwater lenses which are highly vulnerable to overexploitation, salinisation, and contamination.<sup>39</sup> Sea level rise, saltwater intrusion, and more frequent droughts will further strain freshwater availability in SIDS, particularly in low-lying areas. An increase in temperature of 1°C (from 1.7 to 2.7 °C) could lead to a 60% rise in the number of people in SIDS facing severe water stress between 2043 and 2071.<sup>40</sup>

**Five SIDS currently experience water scarcity (less than 1,000 m<sup>3</sup> per person per year), and an additional three face absolute water scarcity (less than 500 m<sup>3</sup> per person per year).**<sup>41</sup> Since 1976, all SIDS (except Singapore) have been affected by climate-induced or climate-exacerbated water crises.<sup>42</sup> Over 70% of SIDS report seasonal rainfall variability, and over 60% report inadequate water supply infrastructure, saltwater intrusion, and water contamination as significant drivers of water scarcity. Human-induced watershed degradation and sea level rise are additional constraints to meeting freshwater demand, according to 19% and 17% of SIDS respectively.<sup>43</sup>

**In their UNCCD national reports, most SIDS indicated that an increasing proportion of their populations had access to safely managed drinking water services from 2000 to 2015.** This is attributed to high rates of urbanisation and improved water management institutions, policies, and infrastructure.<sup>44</sup> However, this trend is being threatened by growing freshwater demand, land use changes that generate more pollution and reduce soil permeability, and climate change which is triggering more intense droughts.<sup>45</sup> The financial burden of meeting freshwater needs in SIDS is likely to rise in coming decades, highlighting the importance of safeguarding the integrity of aquifers and investing in more sustainable management practices, such as wastewater recycling, aquifer recharge, and rainwater harvesting.

## Fragile Economies, Food Security, and Demographic Change

SIDS economies are often highly dependent on natural resources which underpin key sectors, such as fisheries, tourism, and agriculture.

**Narrow resource bases, small domestic markets, and geographic isolation limit economic diversification, making many SIDS heavily dependent on imports of food (and other essentials) and exports of primary commodities (agriculture, marine, and forest products).** As a result, SIDS economies are among the most vulnerable to global price fluctuations and shocks, which are exacerbated by low revenues, high debt burdens, and restricted borrowing opportunities. Limited financial, technical, and human capacities generate additional constraints and often perpetuate structural dependencies on external assistance and concessionary finance. This can lead to a vicious cycle whereby increasing portions of government revenue are being used to repay foreign debt.

**Food security in SIDS is challenged by the amount of arable land, costly food imports, and the triple burden of malnutrition, i.e., undernourishment, micronutrient deficiency, and obesity.**<sup>46</sup> In most SIDS, agricultural production is constrained by limited arable land, high input costs, and exposure to droughts, cyclones, and salinisation that make them unable to meet domestic food demand.<sup>47 48</sup> The dependence on imports exposes them to global market volatility, rising transportation and fuel costs, and supply chain disruptions that strain foreign exchange reserves.<sup>49</sup> The prevalence of imported, processed foods have been linked to rising rates of non-communicable diseases (e.g., obesity, diabetes), highlighting the linkages between food and nutritional security, public health, and economic dependency.<sup>51</sup>

**Emigration in search of better economic opportunities is leading to rapid depopulation, labour shortages, and a brain drain in many SIDS.** For example, Samoa, Jamaica, the Federated States of Micronesia, Haiti, Guyana, Cabo Verde, Grenada, and Fiji are among the 20 countries that score the highest on the Human Flight and Brain Drain (HFBD) Index, which measures the economic impact of lost human capital.<sup>52</sup> High levels of emigration are leaving many SIDS

with weakened labour forces and reduced productivity<sup>53 54</sup> but have resulted in substantial remittance inflows, which now constitute the largest source of external financing in SIDS economies.<sup>55</sup> Rural to urban migration in some SIDS is improving access to services and economic opportunities while driving the growth of informal settlements and the loss of human capital from rural areas and remote islands.

**Although SIDS government officials and natural resource managers recognise the need for resilience building, there is tremendous pressure to prioritise more urgent concerns regarding economic development, social stability, public education, and healthcare.**<sup>56</sup> Local institutions lack the necessary investments in innovation and infrastructure, as well as the incentives to build and retain technical expertise, to effectively integrate nature-based solutions into their land, freshwater, and coastal management policies and programmes. In the transition to more sustainable management practices, preparing and upskilling the current and future labour force should be a priority for building resilience in SIDS.

## Climate and Development Finance

Given their limited economic base, SIDS have been resourceful when it comes to mobilising finance for sustainable development and climate adaptation.

**SIDS have struggled to access climate finance and face an adaptation funding gap of around USD 153 per capita, compared with USD 22-81 per capita for other vulnerable country groups.**<sup>57</sup> Roughly USD 3 billion in climate finance to SIDS has been approved, with over half already distributed.<sup>58</sup> For perspective, between 2023-2035, SIDS will collectively require at least USD 11.7 billion in annual funding for adaptation activities, nearly six times the current financial flows.<sup>59</sup> The majority of climate finance comes from the **Green Climate Fund** (GCF), with SIDS receiving an estimated USD 1.56 billion (including multi-country projects exclusive to SIDS).<sup>60</sup> However, the burdensome accreditation process is challenging for smaller states with limited capacity. Consequently, only seven SIDS (Saint Lucia, Antigua and Barbuda, Belize, Jamaica, Federated States of Micronesia, Cook Islands, and Fiji) currently have an accredited national GCF implementing entity.<sup>61</sup>



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**To date, SIDS have received USD 586 million from the Global Environment Facility (GEF) for climate adaptation and mitigation, biodiversity conservation, and sustainable livelihood projects (excluding multi-country projects).<sup>62</sup>** However, terminal evaluations show that GEF projects in SIDS consistently scored lower in terms of expected outcomes, implementation and execution quality, compared with the overall GEF project portfolio.<sup>63</sup> Between 2007 and 2014, most GEF projects in SIDS were limited to single 4–5-year phases, with many subsequent initiatives launched and implemented without coherent follow-up.<sup>64</sup>

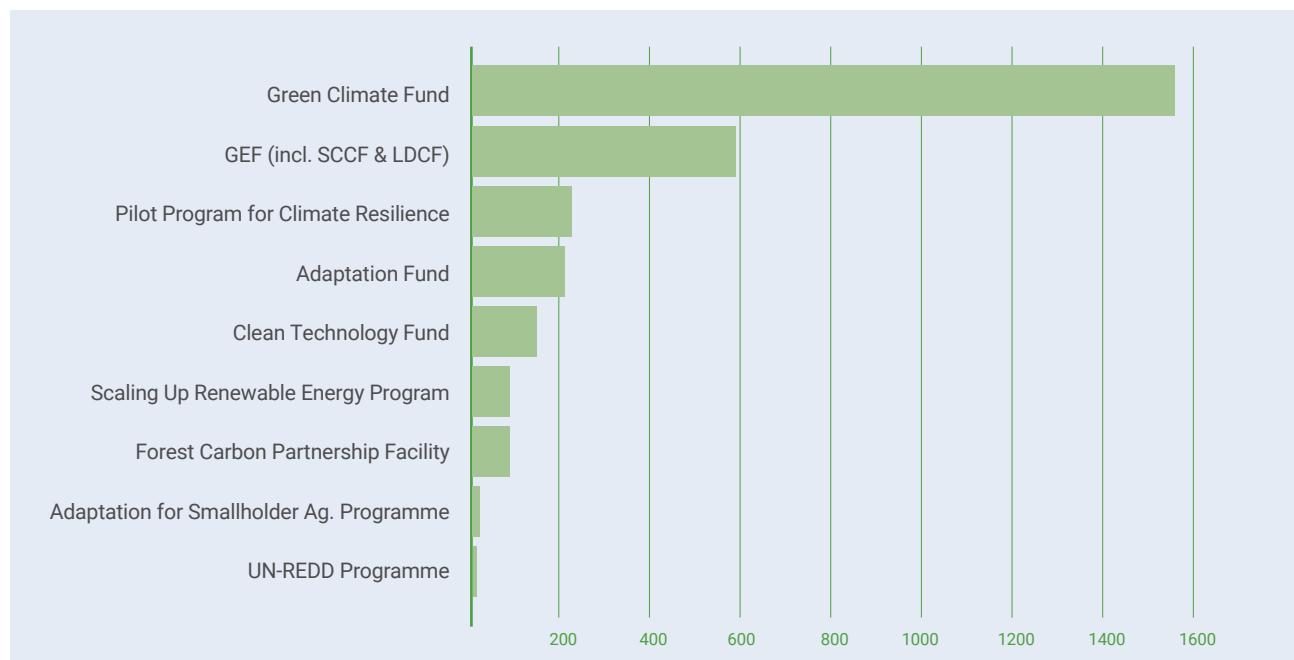
**Only USD 487 million of the total development finance provided to SIDS between 2016 and 2023 was related to desertification, land degradation, and drought.** Even so, this funding was unevenly distributed among SIDS, with five countries (Papua New Guinea, Haiti, Dominican Republic, Solomon Islands, and Fiji) accounting for 65% of the total.<sup>65</sup> Considering their high levels of vulnerability, most SIDS receive relatively little investment to proactively address the growing risks of climate change, land degradation, drought, and biodiversity loss.<sup>66</sup>

**The high-risk profile of many SIDS further limits financial and technical assistance for scaling up sustainable land management and enhancing drought resilience.** At the same time, 7 SIDS have 'graduated' according to OECD standards on long-term gross national income, with another 5-12 expected to do the same by 2030, restricting their access to concessional finance.<sup>67</sup> However, these high-income SIDS also have extremely high costs of living and are not in a position to support themselves without ODA. A multi-dimensional vulnerability index is now being considered to supplement income-based criteria for allocating concessional funds to SIDS and other vulnerable countries that have graduated.<sup>68</sup>

**Funding for SIDS needs to be more direct, predictable, and sustained to ensure the implementation of coherent development strategies and integrated approaches that build resilience.** Currently, only 10% of the finance for climate action and disaster risk reduction in SIDS reaches local actors and institutions.<sup>69</sup> In addition to addressing this bottleneck, there are emerging opportunities for increasing finance for SIDS, including through 'debt for nature' swaps, resilience (green/blue) bonds, and structured remittances programmes. As remittances comprise the largest part of financial inflows for SIDS, strategies and incentives that redirect investments towards sustainable land and water management could create opportunities for innovation and entrepreneurship that maximise long-term benefits for local communities.<sup>70</sup>



**Figure 5: Climate Finance Approved for SIDS from 2003 to 2025 (USD millions)<sup>71</sup>**



## Land Governance and Gender Equality

Rapid urbanisation, out-migration, land conflicts, and the growth of informal settlements present significant challenges to effective land governance and administration in SIDS.

**Many SIDS lack the financial, technical, and administrative capacity to recognise, document, and enforce legitimate land rights.** This reflects broader structural challenges, including fragile economies, dependence on imports, high borrowing and disaster recovery costs, and, in some cases, dispersed populations across multiple islands. The legacy of colonial plantation economies is extreme inequality in land ownership. These systems displaced indigenous governance and left formerly enslaved populations landless following emancipation and independence. This is particularly true in the Caribbean where tenure insecurity tends to incentivise environmentally harmful practices, and discourage investments in sustainable land and water management.<sup>72 73</sup>

**Many Pacific Island communities have retained secure tenure and access to their ancestral lands.** Nevertheless, there are significant pressures on these lands due to the shortage of housing, inadequate waste management, and the expansion of informal settlements, often exacerbated by short-term leasing arrangements that contribute to land degradation. Ensuring sustainable land use requires strong legal safeguards for traditional governance systems and institutions, as well as effective community-based land use planning and enforcement. Governance challenges in SIDS are further compounded by highly dispersed populations which can make effective land administration both difficult and costly to maintain.<sup>74</sup>



**Women in SIDS tend to have less diversified employment opportunities than men, and are overrepresented in the tourism and informal sectors, which are highly vulnerable to natural disasters, economic shocks, and climate change.**

As it is typically men that emigrate, women that remain behind take on greater responsibilities in local economies and low-wage service industries. In the aftermath of crises, women and girls are also at increased risk of gender-based violence and often have to take on the additional burden of unpaid work.<sup>75</sup> In response, many SIDS are pursuing climate adaptation and environmental protection programmes that promote gender equality and empower women and other vulnerable groups.<sup>76</sup> Further encouragement and support for these community-led initiatives, in the form of capacity building activities, is needed to enhance climate resilience and foster sustainable livelihoods.



# Integrated Approaches to Build Resilience

**SIDS depend heavily on healthy and productive land and ecosystems to support livelihoods and key economic sectors, such as agriculture, fisheries, and tourism.<sup>77</sup>** This high reliance on nature means that the loss of biodiversity and ecosystem services in SIDS can have a significant impact on human health and wellbeing.<sup>78</sup> As communities have limited opportunities to diversify into other livelihoods or relocate in response to environmental changes, sustainable land management and ecosystem restoration are vital to ensure survival and resilience.

## Ridge to Reef and Land Degradation Neutrality

Integrated approaches and nature-based solutions are often best suited to the geographic and socio-economic contexts of SIDS, including small, fragmented land areas, extreme climate vulnerabilities, and limited capacities.

**Most SIDS have made pledges to achieve Land Degradation Neutrality (LDN), recognising the important role of land and water management in achieving sustainable development as well as building climate and drought resilience.** Consequently, 26 out of the 39 SIDS that are country Parties to the UNCCD have engaged in the LDN target setting process, with 21 committing to quantified and spatially explicit targets totalling around 7.9 million hectares, just under 7% of the total land area reported by SIDS. For example, by 2030:

- Papua New Guinea has pledged to restore 500,000 hectares of degraded forest and agricultural land.
- The Dominican Republic has committed to reducing the area affected by forest fires by 50% (42,000 hectares), primarily in protected areas.
- Mauritius aims to maintain and expand its forest cover to 52,290 hectares, including by converting 4,500 hectares of private forest into protected areas.
- São Tomé and Príncipe has promised to reduce forest and savanna conversion to less than 5%, reduce illegal logging to 15%, and restore approximately 32,000 hectares of degraded land and forests.

The **LDN response hierarchy**, which aims to avoid, reduce, and reverse land degradation, encompasses traditional nature conservation approaches, while recognising the need for better land resource planning and management to meet the food and water demands of current and future generations.<sup>79</sup> This closely aligns with the holistic **'ridge to reef' approach**, which leverages increased connectivity between terrestrial, coastal, and marine ecosystems to enhance the resilience of island communities and ecosystems.<sup>80</sup> This approach often relies on the deployment of **nature-based solutions** that



enhance conventional resilience infrastructure or contribute to hybrid systems that include grey, green, and blue features.<sup>81</sup>

**Effective and sustainable natural resource management in SIDS requires strong community ownership and traditional leadership.** The ridge to reef approach, for example, advocates for a flexible, adaptive 'community to cabinet' governing philosophy that connects formal state structures with informal, traditional systems, thereby empowering local communities in the planning, implementation, and monitoring of projects and programmes. Integrated land use planning facilitates balanced management of limited land resources, while addressing the competing needs for housing, agriculture, nature conservation, and tourism. Coordinating land, aquifer, and coastal zone management interventions through spatial planning can help reduce land degradation and habitat loss, prevent resource conflicts, and enhance resilience to climate change and drought.

**Diversifying agriculture is a cost-effective way for SIDS to increase the productivity of their current farming systems and boost their resilience to multi-dimensional shocks and stresses.**<sup>82</sup> For example, SIDS in all regions have long histories of indigenous farming and agroforestry practices,<sup>83</sup> which are more resilient to storms, floods, and droughts than industrial monocultures.<sup>84</sup> Dual land use systems, such as agroforestry, agrivoltaics, and urban farming, can enhance ecological connectivity and safeguard ecosystem services while meeting the demand for food. In Pacific SIDS, trees in urban and agricultural landscapes provide essential income and ecosystem functions, including water provision, stable and healthy soil, biodiversity habitat, and protection from storms and floods.<sup>85</sup>

## Data Considerations for Integrated Land Use Planning

Integrated land use planning and landscape management are often limited by the lack of fine-scale and disaggregated data in SIDS, primarily due to limited institutional capacity and digital infrastructure.

**In general, there is a shortage of basic development data in SIDS.** Both national statistical capacity and data availability for SDG indicators are lower in SIDS than in any other region. Sex-disaggregated data on exposure to land degradation and drought, as well as on the gendered division of labour, is generally unavailable. In 2022, only 33% of the gender-stratified SDG indicators were reported by SIDS, compared to 58-68% in other regional groupings.<sup>86</sup> Improving data collection and analysis is critical to design and implement policies and initiatives which effectively protect livelihoods, human health, and local adaptive capacity, while promoting gender equality.

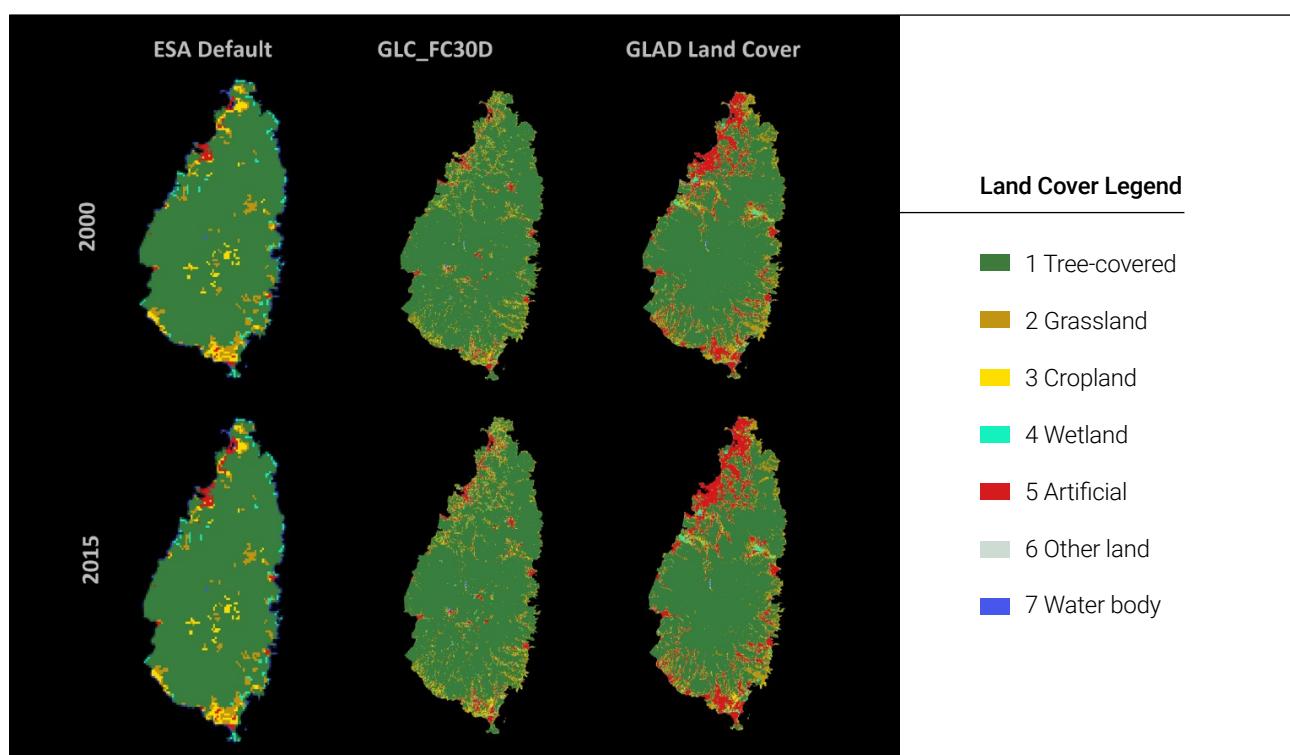
**Without the necessary data or processing techniques for downscaling or disaggregation, the spatiotemporal resolution of global indicators tends to be too coarse for SIDS.** Timely, high-spatial resolution datasets are required to support land degradation assessments, integrated land use planning, and the evaluation of climate impacts on communities and ecosystems. Two new land cover datasets with a resolution of 30 metres are currently being considered for LDN reporting,<sup>87</sup> providing greater spatial detail than the 300-metre global default maps generated by the European Space Agency (ESA).<sup>88</sup> This granular information enables policymakers to implement targeted, localised strategies to improve the efficacy of land

and water management practices, thereby helping to avoid, reduce, and reverse environmental degradation.

**For the time being, SIDS will require bespoke solutions to access high resolution land cover information for national LDN reporting.** As each of the new datasets use different land cover classification methodologies, notable discrepancies arise that require aggregation and cross-mapping in order to adhere to the seven classes used for UNCCD reporting.<sup>90</sup> To ensure reliable land degradation assessments, the accuracy and temporal consistency of the classifications in both datasets should be evaluated.<sup>91</sup> The **Land Cover Comparison Tool for SIDS** can help identify the most suitable dataset for specific national contexts.<sup>92</sup> The example of Saint Lucia below illustrates some of the differences that, in most cases, require on-the-ground validation to resolve.

**Looking to the future, the ESA WorldCover dataset offers land cover data with a resolution of 10 metres for all SIDS** (except Tokelau, Federated States of Micronesia, and some very small atolls).<sup>93</sup> As this product only covers the period 2020-2021, there is a lack of comparable data to establish a 2000-2015 baseline reference for UNCCD reporting. Nevertheless, going forward, this dataset and emerging mapping tools could prove to be a valuable Earth observation resource for planning and implementing land and water management interventions to proactively address the risks of land degradation and drought. Data platforms, hosted by SPREP<sup>94</sup> and PISLM,<sup>95</sup> offer regional environmental data that is tailored to national and local governance needs. These initiatives can be expanded and strengthened to enhance SIDS capacity for evidence-based policies, planning, and programmes.

**Figure 6: Land Cover Maps for Saint Lucia (seven UNCCD classes)<sup>96</sup>**



# Endnotes

- 1 **States:** Antigua and Barbuda, Bahamas, Barbados, Belize, Cabo Verde, Comoros, Cook Islands, Cuba, Dominica, Dominican Republic, Fiji, Grenada, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Mauritius, Nauru, Niue, Palau, Papua New Guinea, Samoa, São Tomé and Príncipe, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Seychelles, Singapore, Solomon Islands, Suriname, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu, and Vanuatu.
- 2 **Associate Members of United Nations Regional Commissions:** American Samoa, Anguilla, Aruba, Bermuda, British Virgin Islands, Cayman Islands, Commonwealth of Northern Marianas, Curacao, French Polynesia, Guadeloupe, Guam, Martinique, Montserrat, New Caledonia, Puerto Rico, Saint Maarten, and the US Virgin Islands.
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Forthcoming in 2026

# Global Land Outlook Small Island Developing States Thematic Report

The United Nations Convention to Combat Desertification (UNCCD) recognises that addressing and reversing land degradation is one of the key sustainable development priorities for many countries, particularly in the developing world. In response, the UNCCD secretariat and its partners created a strategic communications publication and platform, entitled the Global Land Outlook (GLO), to facilitate insights, debate, and discourse on a transformative vision for land management policy, planning, and practice at various scales. The aim of the GLO is to communicate and raise awareness of evidence-based, policy-relevant information on land degradation trends to a variety of stakeholders, including national governments formulating their responses to commitments to better manage and restore land resources, including the SDGs and associated targets, such as Land Degradation Neutrality (LDN). The evidence presented in the GLO reports demonstrates that informed and responsible decision making can, if more widely adopted, help to reverse the current worrying trends in the state of our land resources.

This GLO thematic report will discuss the social, economic, and environmental contexts of Small Island Developing States (SIDS) relevant to land and water management, their challenges in terms of climate change, land degradation, and drought, and emerging opportunities for integrated approaches that enhance community and ecosystem resilience. The report will be illustrated with case studies and examples of good practices that can accelerate progress towards achieving LDN, as well as context-specific finance and governance pathways for adopting and scaling sustainable land and water management practices. It will also explore applications of the 'ridge to reef' and integrated watershed and coastal areas management approaches, highlighting the interconnectivity between terrestrial, coastal, and marine systems, as well as an equivalent 'community to cabinet' approach to governance, highlighting how bottom-up, participatory processes can deliver more efficient and equitable development and environmental outcomes. The objective is to inspire strategic decision-making and the synergistic implementation of proactive measures at local, national, and regional levels.

All GLO reports and working papers, can be found at:  
<https://www.unccd.int/resources/global-land-outlook/overview>



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