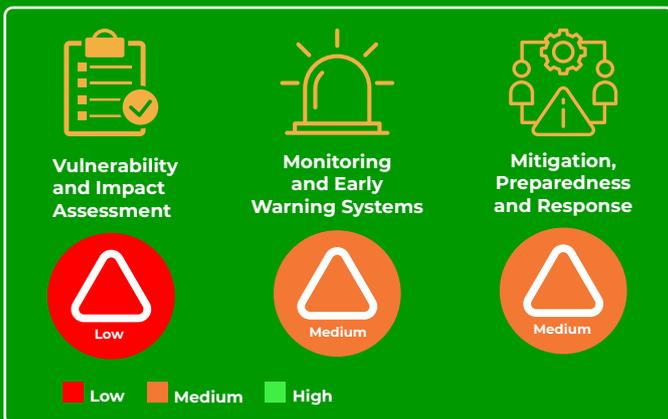


## COUNTRY OVERVIEW

Drought is not as much of a threat for the 115 islands of Seychelles as compared to other natural and man-made disasters such as tsunamis; storms (cyclones, storm surge); heavy rainfall and flooding; coastal erosion; ground movements and landslides; forest fires and land degradation. However, due to climate change and population growth, the country is expected to experience increasingly severe water shortages on the islands of Mahé, Praslin and La Digue. These islands have been faced with an increase in annual water demand of around 7-8%. This also comes as a result of reduced rainfall, decreased ground water recharge and reduced stream flow during dry periods. By 2030, the water demand on the main island of Mahé is expected to grow by 130%. Currently, Seychelles can only meet 60% of its residents' water requirements. As with all other Small Islands Developing States (SIDS), the Seychelles is particularly vulnerable to climate change, particularly rising temperatures, sea level rise (SLR) and changes in rainfall. For agriculture, temperature rise will increase the risk invasive species pose to Seychelles' food systems and only highly resilient crops, resistant to high temperatures and rainfall and longer drought periods will be able to survive. Coastal erosion and massive flooding events from SLR will damage critical coastal infrastructure such as airports, ports, desalination and main roads, utility lines (for both electricity and water), houses, hotels and other buildings. For water security, SLR can cause salt water intrusion in the underground water storage systems affecting water quality and availability (The Seychelles National Climate Change Strategy, 2009). The increased dry spells in Seychelles could also result in an increase of forest fires, particularly in Praslin.



The Integrated Drought Risk Management Framework highlights a three-pillar approach centered around interconnected, multi-disciplinary, multi-institutional activities. These are 1) Vulnerability and impact assessment; 2) Monitoring and early warning systems; and 3) Mitigation, preparedness and response. This country Drought Resilience Profile contains drought information based on these three pillars.

This profile provides a background of the Seychelles' drought resilience capacity in the three pillars. It is important to note, however, that as drought is not a major threat in the Seychelles, and therefore does not receive explicit focus in policy or institutional objectives, its disaster management frameworks have been analyzed to the degree to which they encapsulate multi-hazard approaches.

Its vulnerability and impact assessment capacity is categorized as low. While progress has been made in case-specific pre-disaster risk assessments, there is not yet in place a comprehensive system of undertaking multi-hazard risk assessments.

In terms of monitoring and early warning capacity, the Seychelles has an operational disaster early warning system (EWS). However, its long-term EWS is limited due to the lack of data available for forecasting and proper indicators used for drought. There is also a wide stakeholder collaboration which is strengthened through Standard Operating Procedures (SOP) that binds the role of stakeholders with regards to early detection of hazards, issuance of alerts and warning. Capacity in this regard is categorized as medium.

Finally, Seychelles has a relatively robust disaster response framework, however there is a need for structured and periodic capacity building in disaster preparedness in order to build a larger critical mass of stakeholders that can be engaged in preparedness planning and response. Capacity in this pillar is therefore also categorized as medium.



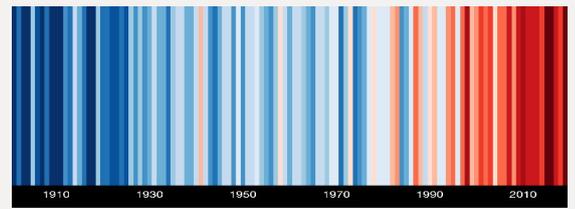
This document provides a brief overview of drought risk issues. The key resources at the end of the document provide more in-depth country and sectoral analyses. The contents of this report do not necessarily reflect the views of the World Bank, CIWA, NDMC or IWMI.



## Historical climate

- As illustrated in the #ShowYourStripes 'warming stripe' graphic in Fig 1, the stripes for Seychelles turn from mainly blue to mainly red in more recent years, illustrating the rise in average temperature since 1901.
- Mean annual temperature is 27.05°C (1901-2016).
- The warming in the Seychelles region, over the period 1972-1997, is estimated to be 0.25 °C.
- The number of very warm days and nights is increasing dramatically, while the number of very cool days and nights is decreasing.
- Maximum and minimum temperatures show a positive warming between +0.33 to +0.82°C respectively.
- Mean annual precipitation is 1647.70mm (1901-2016) (World Bank, 2021).

Fig 1. Temperature change in Seychelles, 1901-2019



Source: Berkley Earth/#ShowYourStripes

## Future climate

- Mean annual temperature is expected to increase by 1.4°C in 2040-2059 (RCP 8.5, Ensemble).
- The relative warming will occur mainly during the cooler southeast monsoon.
- The warming ranges are from +0.4-0.7°C, 0.9-1.4°C and 1.8-2.9°C respectively for the years 2025, 2050 and 2100.
- It is expected that annual precipitation will rise by 29mm in 2040-2059 (World Bank, 2021).

### Major droughts in Seychelles:

According to the EM-DAT (2020), there are no recorded droughts historically listed in the Seychelles for the time period 1980-2021.

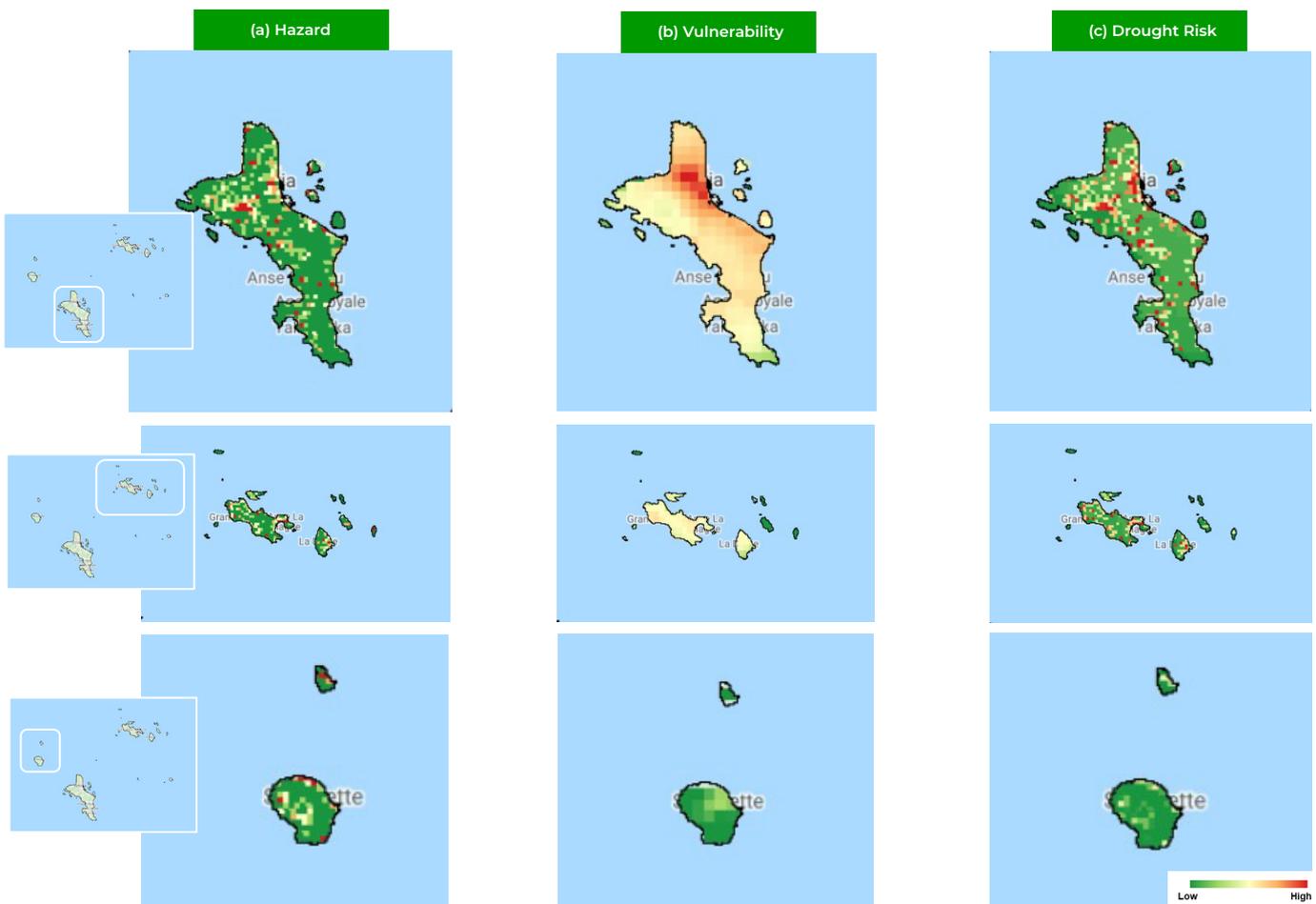
### Inter-annual climate variations in Seychelles explained:

According to an ocean circulation modeling study conducted by Tozuka et al, 2010, inter-annual variations of the Seychelles Dome (SD) are locked seasonally to boreal winter. In addition, these variations are more closely linked with the Indian Ocean Dipole than the El Niño–Southern Oscillation in the Pacific.

# Vulnerability and Impact Assessment



Fig 2a-c. Drought hazard, vulnerability and risk maps for Seychelles



# Vulnerability and Impact Assessment



The above maps (Fig 2a-c) depict drought hazard areas (a), areas of vulnerability (b) and drought risk (c). Drought risk is defined by characterizing hazard and exposure to vulnerability and the lack of adaptive capacity, using multisource information from satellite-derived drought indices and socio-economic conditions. In terms of components, hazard is defined through meteorological and agricultural drought i.e. Integrated Drought Severity Index (IDSI); and exposure and vulnerability expressed through population density, human modification index, water risk and irrigated systems.

Agricultural production (agricultural practices i.e. irrigated area, food production as provided on HarvestChoice) was used to define levels of vulnerability which were finally combined with all three components to define levels of drought risk at the country level, referred to as the National Drought Risk Index (NDRI). The drought risk profile is therefore based on the probabilistic estimation of hazard and vulnerability to assess the drought risk in the exposed areas.

The NDRI above shows that among the drought-prone areas in Seychelles only a few regions in the northern parts of the country seem to be affected by dry spells including Mahe, Praslin and La Digue (maps generated by IWMI). As for the hazard, the colour is more greener showing that drought hazards are not that much pronounced. However, the vulnerability is much more towards the northern part of the country as shown by the red colour.

## Water shortages and their impact on the economy

Seychelles has abundant water resources, however, the main water resources used (primarily from streams and rivers, the rest being supplied by groundwater and desalination) are not evenly distributed in space and time: south Mahé, Praslin and La Digue are less endowed, and there is a well-demarcated dry season from June to September. Piped water supply is increasingly irregular during the dry period and close to maximum capacity in peak demand periods (ECODYS, 2007). The main islands periodically face water rationing during the dry season. It was estimated that the water deficit in 1996 was 5,650Kl/d; in 2000 was 13,850Kl/d, in 2005 was 13,890Kl/d and in 2010 was 13,950Kl/d (Government of Seychelles, undated).

These dry season shortages could increase both in duration and acuteness with the effects of climate change, leading to more disruption of economic activity and public health problems during the 4 to 5 months of dry season (ECODYS, 2007). Desalination plants have brought relief in Praslin and La Digue where total demands are low, but on Mahé, they have only provided partial relief, and in addition have experienced operational problems.

The islands of Mahé, Praslin and La Digue have seen an increase in annual water demand of around 7-8%. And by 2030, Mahé's water demand is expected to grow by 130%. An aggregate annual increase of 5% in water demand in the coming years is forecast for all key sectors, and demand is expected to be particularly high in the tourism industry which is expected to maintain a projected growth of slightly above 10% (Seychelles Ministry of Finance, Trade, Investment & Economic Planning, 2020).

Robust, effective and integrated water resource management is therefore needed using water storage systems and irrigation systems, improving the monitoring and forecasting systems for droughts and floods, and conducting further research to determine adequate adaptation to climate change on key sectors such as fisheries (Government of Seychelles, 2020). This shows the increasing need to continuously identify and prioritize actions that increase supply, as well as measures that reduce demand not only from the country's ever-growing population but also from the increasing number of tourists visiting the country (Seychelles Ministry of Finance, Trade, Investment & Economic Planning, 2020). According to the Seychelles Ministry of Finance, Trade, Investment & Economic Planning (2020), as of 2020, the supply of water is below the demand for water in the country. As shown in the figure below, during 2018, a total of 13,245,074 m<sup>3</sup> of water was produced for all the three islands.

Finally, with traditional water resources development options (i.e. storage reservoirs) being increasingly limited, the focus is shifting to the development of alternative sources of water, and water demand management. Also, management measures need to be implemented that improve knowledge, management, and control of the resources.

Table 1. Water supply by island (Source: Seychelles Ministry of Finance, Trade, Investment & Economic Planning, 2020)

Reservoir	Total Production m <sup>3</sup>	Desalination Volume m <sup>3</sup>	Potable Water Volume m <sup>3</sup>
Mahe	10,985,378	1,790,245	9,195,133
Praslin	1,678,521	121,792	1,556,729
La Digue	581,175	195,785	385,390
<b>Total</b>	<b>13,245,074</b>	<b>2,107,822</b>	<b>11,137,252</b>

## Vulnerability and impact assessment capacity

In terms of overall vulnerability and impact assessment coordination, Seychelles established a Vulnerability Assessment Committee integrating key stakeholders from the ministries and relevant governmental and non-governmental organizations with the responsibility to conduct vulnerability assessments to identify vulnerable groups, the prevalence and degree of any given risk, and their causes using agreed indicators and assessment tools. The Seychelles Assessment Committee also forms an institutionalized information system to collect vital information and conduct multidisciplinary analysis required to tackle vulnerability reduction and food security issues (SADC, 2018).



# Vulnerability and Impact Assessment



According to a Disaster Risk Reduction (DRR) peer-review conducted of Seychelles, facilitated by the SADC DRR Unit, the country advanced meaningfully in undertaking a comprehensive pre-disaster risk assessment in 2016. At this time, Seychelles managed to undertake mapping and profiling of risks induced by hazards such as earthquakes, floods and tropical cyclones, as well as estimate actual losses that were incurred in the economy following certain episodes of rapid onset disasters (SADC, 2018).

Despite this progress, the review noted that the Government of the Seychelles (GoS) does not yet have in place a comprehensive system of undertaking a risk assessment, one that reflects all hazard dimensions including drought and/or dry spells. Capacitating the Seychelles Vulnerability Assessment Committee would be beneficial in strengthening the country's capacity to coordinate regular vulnerability and impact assessments.

In terms of Disaster Loss Accounting, Seychelles has integrated systems for quantifying direct and indirect disaster damages and losses and such milestones are archived through the Damages and Loss Accounting System (DALA) that has been used since the 2004 Tsunami disaster. Regular Post Disaster Needs Assessments (PDNA) are regularly undertaken in accordance with national protocols to enhance understanding of disaster induced damages and losses. This enables the government to better mitigate disaster impacts as well as develop recovery programs and projects. The 2018 DRR peer-review confirmed that the DALA system is robust since disasters directly impact on the mainstays of Seychelles economy being tourism and fisheries (ibid.).

In terms of vulnerability analyses, Seychelles undertakes periodic Household Income and Budget Surveys (HIBS), however, the report does not provide linkages between the poverty situation and disaster vulnerability. These are purely survey reports oriented towards advising government on development policy decisions but lacking explicit synergies with DRR and drought.

Given that disaster risk management (DRM) is a development concern, DRR and DRM need to be explicitly stated in national development planning, in order to inform relevant policy and planning processes. In this regard, the GoS is advised to undertake comprehensive studies and analyses on disaster exposure and vulnerability of people, infrastructure, basic services as well as social and economic systems with the coverage of all inhabited islands (SADC, 2018). To this end, the Seychelles Vulnerability Assessment Committee could play a critical role in leading the integrated analysis for national vulnerability mapping.

In terms of climate change impact studies, Seychelles performs well having facilitated numerous studies on hazards and risk factors induced by climate change. The most recent study was facilitated by the Ministry of Environment, Energy and Climate Change in the year 2016. This study focused on the impact of climate change on coastal erosion and surge storms, while others that were undertaken in preceding years focused on flood risk, tropical cyclones and earthquakes. A comprehensive body of knowledge was documented through these studies prompting monitoring, detection, forecasting and hazard warning services (ibid). However, the SADC peer review mission observed the need for such studies to be carried out in a systematic manner in order to ensure a coherent and comprehensive outlook on how climate change affects development and induces natural hazards and how these impact on the economy and social systems (ibid).

Seychelles has also made progressive steps in integrating DRR with its national intelligence gathering processes. The Division of Risk and Disaster Management (DRDM) in collaboration with category one (I) responders positioned an Intelligence Gathering system within the DRDM that is linked to the national intelligence system. This initiative aims to generate intelligence on impending social threats as well as the strategic mitigation measures which have to be commissioned in sufficient lead time to allow authorities to evade its impact. While the intelligence gathering system is in place, it could be improved by enhancing the access to, use and viability of intelligence information for disaster preparedness and response.

Finally, DRM in the Seychelles enjoys a fair amount of political support, particularly during periods where state of emergencies are declared. During emergencies the National Emergency Committee (NEC) is activated. The NEC operates at a high level within the GoS, being chaired by the President and constituted mainly of cabinet ministers. The Disaster Management Act, 2014 provisions provide for an inclusive and highly participatory disaster risk management system. In that regard the DRDM has established statutory disaster risk management committees at strategic and technical levels, which brings together key stakeholders involved in disaster risk management that constitute key government ministries, NGO and the private sector (ibid).

Sector-specific plans also help to articulate and strengthen DRR in the country. The Coastal Management Plan, 2019-2024, for example, consolidates risk information and provides a framework for its use for coastal management, adaptation and risk management. It aims to help maintain and protect the coastal zone to reduce coastal risk, support healthy ecosystems and enable sustainable coastal economic development (Government of Seychelles, 2019). A notable good practice in Seychelles is the bottom-up DRM mainstreaming practice that was demonstrated by the Ministry of Foreign Affairs and Tourism (MoFAT), when it established a department that focuses on risk management. The ministry has undertaken comprehensive risk assessments to understand issues of exposure and vulnerability for the tourism sector and sub-sectors that include the accommodation, maritime leisure and catering sectors.

## Monitoring and Early Warning Systems



### Monitoring and early warning systems capacity

Table 2 represents a summarized traffic light checklist to illustrate the state of monitoring and early warning system capacity in Seychelles. It summarizes key aspects needed for a strong monitoring and early warning systems (EWS) framework, most notably, whether there is an official definition of drought used in country; whether drought indicators are used, and if so, which ones; whether there is a drought early warning system (DEWS) in place; and if so how functional it is; and whether the country makes use of seasonal forecasting.

Seychelles has an operational EWS to initiate inter-disciplinary response operations and actions, but DRDM is not actively involved in the dissemination of early warnings. Long-term early warning mechanisms are not strong enough due to the lack of data available for forecasting and proper indicators used for drought. There are also coherent systems for disseminating risk information among all DRR stakeholders or of users of early warning information. The DRDM is responsible for hydrological, meteorological, geological and aviation safety monitoring systems.



Table 2. Summarized checklist of monitoring and EWS capacity

Official definition of drought	●
Drought indicators used	●
Existence of a DEWS	●
Capacity to tailor EWS messages to end-user needs	●
Effective communication of early warnings with built-in feedback mechanisms	●
Use of most salient communication channels to reach women/youth/disenfranchised communities	●
Use of community relays, extensions services, local media to communicate EWS and reach at risk communities promptly	●
Seasonal forecasting	●

● Yes     ● No     ● Limited

In addition, there is wide stakeholder collaboration which is strengthened through Standard Operating Procedures (SOPs) that bind the role of stakeholders with regards to early detection of hazards, issuance of alerts and warning. The SOPs enforce the wide stakeholder realization and commitment that disaster risk management, particularly response interventions, are critical, hence the need to improve turnaround time for detection of hazards, dissemination of hazard information to stakeholders and communication of warning messages and alerts to people exposed to particular risks.

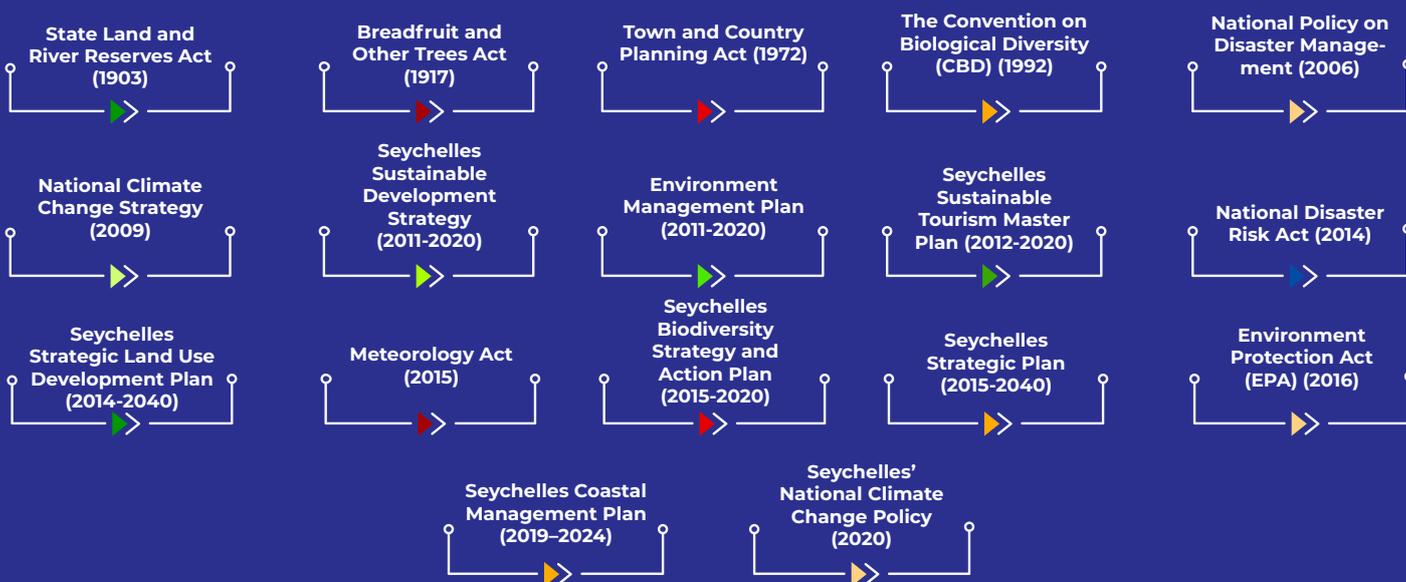
The Department of Meteorology convenes dissemination meetings through a dissemination platform that was established by the department in collaboration with the Division of Risk and Disaster Management (DRDM) that resembles the National Climate Outlook Forum (NACOF). It is important however to note that the NACOF processes in Seychelles have not yet been formalized and a recommendation is registered for the government to consider establishing formalizing the NACOF of the Seychelles. In this non-legislative forum the meteorological services downscale climate outlooks and weather forecasts. The protocol is structured in that after dissemination there is delegation of early warning interpretation to stakeholders, especially category one (1) responders, while the responsibility for communication early warning messages is undertaken jointly by the DRDM and the Department of Meteorology.

## Mitigation, Preparedness and Response



### Drought policy framework

The GoS has made considerable effort in addressing natural hazards by taking necessary measures through policy initiatives. Key natural disaster policies include:



Since drought is not a high priority for Seychelles, there are no policies or strategies dedicated specifically to drought management, however, several newer pieces of legislation, such as the National Climate Change Policy (2020), make reference to the growing likelihood of droughts and dry spells in the future due to climate change.

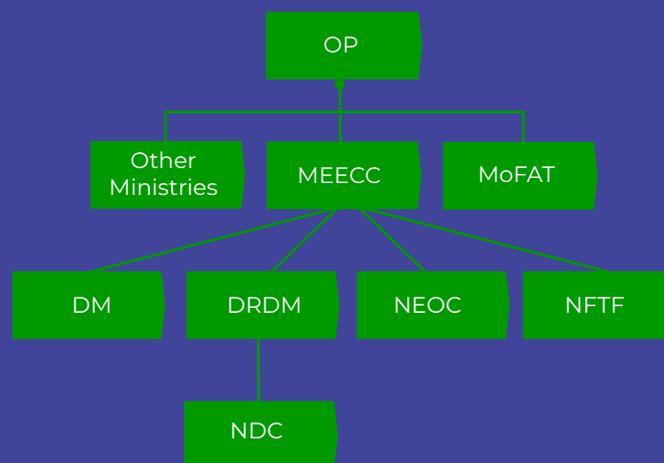
Moreover, the country's vulnerability to water shortages means that drought and water scarcity, as an additional yet increasingly prominent hazard, in an already stressed hazard risk management agenda, needs to be adequately addressed and prioritized.



Fig 3. Seychelles drought institutional framework

## Legend

OP- Office of the President  
 MEECC- Ministry of Environment, Energy and Climate Change  
 DM- Department of Meteorology  
 DRDM- Division of Risk and Disaster Management  
 MoFAT- Ministry of Foreign Affairs and Tourism  
 NDC- National Disaster Committee  
 NEOC- National Emergency Operations Centre  
 NFTF- National Flood Task Force



Seychelles has adopted a bottom-up DRR planning process which starts at the local level where contingency plans and other multi-sectoral policies, strategies and long-term initiatives are drafted. Key DRR guiding legal arrangements (National Development Strategy 2012-2020, District Contingency Plans, Hazmat Plan, Master Plan, among others), were drafted and are being used in Seychelles. Some of these documents are currently under revision to accommodate the new emerging challenges.

## Institutions and coordination

Seychelles has institutions and institutional arrangements essential for DRR, however drought is not explicitly prioritized.

In 1997, the GoS established the National Disaster Committee (NDC) after realizing the increasing threat of natural disasters. The NDC is a multi-sectoral body that works as the national platform for coordination and policy guidance on disaster risk reduction.

The NDC secretariat was upgraded in 2006 and it was established as the DRDM, which was initially under the Office of the President and later was sub-delegated to the Office of the Vice-President.

It forms the operational body of the NDC and it oversees day-to-day operations and ensures proper implementation of the disaster management program.

Since 2010, the DRDM falls under the Ministry of Environment, Energy and Climate Change (MEECC). MEECC is responsible to ensure clean, healthy and ecologically sustainable and balanced environment to ensure reliable water supply, energy and build resilience.

In terms of functioning, the DRDM is responsible for coordinating the disaster risk reduction effort in Seychelles and also the emergency response in the event of a natural catastrophe or manmade emergency.

The DRDM also executes the actions, regulations and directives towards the reduction of disaster impacts on human lives, goods and society in the country.

It is responsible for actions such as planning, supervision, assessment, scientific research (risk mapping), information dissemination, education, public policy implementation and coordination of disaster risk management initiatives with all national and international organizations. In terms of the preparedness and awareness to reduce vulnerability to disasters, a new National Emergency Operations Centre (NEOC) has been created and the government is currently developing a Master Plan for Disaster Risk Management.

This plan builds on a multi-hazard risk assessment and contingency plans and strategies across sectors and various levels from the national to community level.

The DRDM also works closely with the Meteorological Department and other stakeholders at national and regional level, which monitor and provide data to the DRDM.

This collaboration reflects the integration of the different stakeholders in the DRR system, which is essential for effective DRR coordination and management.

The United Nations agencies and other development partners also play a pivotal role in supporting government efforts to strengthen capacities for disaster risk management and to supplement efforts in mobilizing resources for disaster risk management in Seychelles.

The Red Cross Society Seychelles (RCSS) which serves as an auxiliary to government and operates through the Seychelles Red Cross Act is a critical partner in disaster risk management.

The RCSS is thus instrumental in the provision of humanitarian assistance to communities affected by disasters and further contributes to disaster risk reduction and building community resilience to disasters.

In terms of disaster response, there is relatively strong multi-stakeholder collaboration that is to a large extent led and coordinated by the police who are described as category 1 responders.

However, there is room to broaden institutional engagement for national preparedness and response coordination mechanisms to bring in more non-state actors i.e. civil society organizations and private sector players.



## Mitigation, preparedness and response capacity

In terms of DRR, the GoS has relatively strong response capacity. The country developed and strengthened its policy and institutional framework to address the challenges of natural disasters, including the development of a Disaster Risk Financing Strategy to respond appropriately to an adverse natural event, evaluate the impact of a disaster, and protect fiscal stability through risk-financing tools such as risk sharing, risk pooling, contingent financing and catastrophe-related bonds and insurance. Additionally, Seychelles is a member of the Southwest Indian Ocean Risk Assessment and Financing Initiative (SWIO RAFI). SWIO RAFI seeks to provide a solid basis for the future implementation of disaster risk financing through the improved understanding of disaster risk to participating island nations.

In terms of responding to agriculture disaster challenges, the country developed an Investment Plan (SNAIP, 2015-2020) which provides a development strategy and investment plan for agriculture and fisheries. The SNAIP helps to ensure that the sector is resilient to climate change and other natural hazards and ensures adaptation measures through climate-smart agriculture. The related budget amounted to USD 128 million over a six-year period of which USD 86 million was covered by the government and the rest was covered by external partners in 2015-2020. The 50 percent of the investment plan (USD 64 million) was for the adaptation of the sector to climate change.

In terms of food security and agriculture, the Agriculture Disaster Committee was established and is made up of representatives from Agricultural Extension Services, Agricultural Lands Management, Statistics, Agricultural Research and Development, Livestock Development, Veterinary Services and the Department of Environment (Drainage Section).

The role of the committee is to record and verify the extent of damage to farms and other agricultural premises and infrastructure. Effort was also made to capture the number of people who were affected by the disaster and suffered losses.

The majority of farmers who lost crops together with equipment such as irrigation equipment were documented for compensation.

After the disaster of 2013, the government conducted an initial assessment of damages costing approximately USD 9.3 million.

This early needs assessment was meant to determine cost of the rehabilitation of infrastructure, houses, schools and other public buildings, as well as for support in the water and sanitation sector and food security.

The government also requested support from the World Bank in the Damage and Loss Assessment and to support reconstruction efforts in the country as part of relief in January 2013.

In response to the government's request, the World Bank assembled a team of experts to assist with the formulation of a PDNA through training and utilization of the Damage and Loss Assessment (DALA) methodology in order to estimate the damages and losses, as well as the social, economic, and environmental impacts of the disaster.

The country also established two reserve/savings funds for more frequent disasters: the National Disaster Relief Fund (NDRF) and a Budget Contingency Fund. The NDRF was set up to assist with relief and recovery operations after the Felleng disaster, and over USD 3.1 million was raised.

Funds from the NDRF come mainly from the private sector and individual and international donors.

The National Flood Task Force (NFTF) is the approving and management body for this relief fund. The SFRSA supported the operation of pumping and rescue during the floods in close coordination with the DRDM.

In terms of water and sanitation, the government formed the Water and Sewerage Division within the PUC which is The National Flood Task Force (NFTF) is the approving and management body for this relief fund. The SFRSA supported the operation of pumping and rescue during the floods in close coordination with the DRDM.

In terms of water and sanitation, the government formed the Water and Sewerage Division within the PUC which is also active during disasters, for the production and distribution of treated water on the islands of Mahé, Praslin, La Digue, as well as the inner islands. The assistance with sanitation services is also provided for Mahé Island in the form of four isolated sewage treatment plant systems, namely Victoria, Beau Vallon, Pointe Larue, and Anse Aux Pins (Chetty Flats) sewerage systems.

The country also has a land use planning strategy outlined in many projects listed in the NDC and is seen as an important tool for adaptation to climate change. For instance, the current moratorium on building big new hotels is intended to protect sustainability in the face of coastal erosion and pressure on energy, food and water. Seychelles has a well-established legal framework for land use, in the form of the Town and Country Planning Act. Land use is guided by the 2015 Seychelles Strategic Land Use Plan which is intended to guide land use planning until 2040. However, the Plan does not adequately address sea-level rise and storm surges, the two main climate change impacts on infrastructure.

In conclusion, it is clear that droughts are not a major threat to the Seychelles when compared to other natural disasters, and this is reflected across all three drought management pillars. That said, water scarcity during the dry season due to growing demand is indeed a national concern. There is a need to articulate water security challenges more explicitly in existing policy and institutional mandates. In addition, there is a need for structured and periodic capacity building in disaster preparedness in order to build a larger critical mass of stakeholders that can be engaged in preparedness planning and response to ensure continuity within institutions and a wider scope of capabilities of those responsible for implementation. A coordinated and functional partnership is encouraged between DRDM and the Seychelles Broadcasting Corporation and other private radio stations to ensure public awareness on DRR including preparedness and response mechanisms are well covered.

The media plays a significant role in disseminating information on DRR and is encouraged to be utilized not only in the dissemination of alerts but also to be involved in preparedness messages to increase community resilience to all hazards that are likely to affect them. The Seychelles could invest in enhancing its remote sensing technology system to develop appropriate early warning, disaster preparedness planning, response and recovery mechanisms.

## Recent drought resilience efforts by the international community

Table 3 Selected projects focused on drought, or some aspect of it, in Seychelles.

### Japan/World Bank

Strengthening Coastal Resilience in Seychelles  
Budget (USD): 0.5M  
Time Period: 2019-2021

### EU/ACP

Seychelles: Strengthening Emergency Response Management and Resilience  
Budget (USD): 0.2M  
Time Period: 2019-2020

### World Bank

Disaster Risk Management Development Policy Loan with a Catastrophe Deferred Drawdown Option  
Budget (USD): 7M  
Time Period: 2014-2023

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### Data Sources:

Climate Data: CHIRPS  
Drought Risk : International Water Management Institute (IWMI)  
CDI: National Drought Mitigation Center at the University of Nebraska-Lincoln  
Population Data: WorldPop  
Livestock, GDP: FAO, World Bank

## About the Southern Africa Drought Resilience Initiative (SADRI)

SADRI is a World Bank initiative supported by the Cooperation in International Waters in Africa Program (CIWA) that integrates across the energy-water-food-environment nexus to help lay the foundations for making southern African countries more resilient to the multi-sectoral impacts of drought. Its main objectives are to generate tools and dialogue for enhancing partnerships and capacity across Member States and to inform future national and regional investments in drought-related activities.