



SEYCHELLES

Sendai Framework for Disaster Risk Reduction Mid Term Review Report



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Abbreviations	
BCP	Business Continuity Plan
COMESA	Common Market for Eastern and Southern Africa
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
DRMD	Disaster Risk Management Division
EU	European Union
FAO	Food and Agriculture Organisation
HFA	Hyogo Framework of Action
IAEA	International Atomic Energy Agency
IECMS	Integrated Emergency and Coordination Management System
NBS	National Bureau of Statistics
NIEMP	National Integrated Emergency Management Plan
NGO	Non- Governmental Organisations
SFDRR	Sendai Framework for Disaster Risk Reduction
SNDS	Seychelles National Development Strategy
SIDS	Small Island Developing States
SOP	Standard Operating Procedures
UN	United Nations
UNDRR	United Nations for Disaster Risk Reduction

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Introduction

A successor instrument to the Hyogo Framework of Action (HFA) 2005-2015, the Sendai Framework for Disaster Risk Reduction (SFDRR) is a fifteen-year (2015 – 2030) voluntary, nonbinding agreement that aims to reduce loss attributed to disasters in all its forms.

Recognising the dynamic interaction between development and disaster risk, the Sendai Framework for Disaster Risk Reduction can be considered as the blue print for Disaster Risk Reduction (DRR). With four main priority areas and seven global targets the SFDRR aims to achieve substantial reduction in losses attributed to lives, health and livelihoods in communities and countries.

Recognising that 2023 marks the midpoint of the Sendai Framework implementation, the United Nations (UN) General Assembly has initiated a mid-term review of the Sendai Framework (MTR SF). The overall objective of the mid-term review is to take stock of the overall implementation of the framework on a country basis, that is assess the progress, challenges experienced as well as identify changes and emerging issues in order to formulate country specific recommendations that needs to be prioritised.

Such review shall inform specific policy adjustments and present new modalities for governments to adopt and implement in the next upcoming years.

The report unfolds by introducing the key concepts, frameworks and literature that guides Disaster Risk Management (DRM) on both an international and national basis it then presents the methodology that the Seychelles have adopted to conduct the review. It then goes to provide an overview of the findings, the progress, gaps and constraints that the different MDAs has face in the implementation of the framework.

The report concludes by providing country specific recommendations from the findings in order to guide and improve on the next phase of implementation of the Sendai Framework for Disaster Risk Reduction.



Literature Review

Overview

Characterised by a group of both mountainous and coralline islands, the Seychelles archipelago lies four degrees south of the equator, considered as a tropical paradise, the country faces a fast-growing population of approximately 99, 728 people (National Bureau of Statistics, 2021) thus it is no surprise that there is an enormous pressure for continuous development in order to meet the public's needs.

With the aim of increasing economic revenue and facilitating livelihoods most development occurs along the coastlines. Similar to most Small Island Developing State (SIDS) the tourism sector is the main driver of the economy generating most of the revenue. Combined with the interdependence on importation, influenced by external factors such as economic shocks, limited economic diversity the Seychelles Islands is very vulnerable to external risks and pressures.

Even though a paradise the Seychelles has not been spared from the effects of climate change whereby natural hazards accounts for most of the disaster losses. The change in frequency and intensity of extreme weather has led to the country experiencing a series of landfill fire incidents including disaster events such as the Tsunami (2004) and the Fantala Cyclone (2016).

Minimising the impact of both day-to-day emergencies and unforeseen major disasters requires a coordinated response from every Ministry, Department and Agency (MDA). It also requires those MDAs to become more resilient so that they can continue to deliver their services during disruptive events (As cited in Disaster Risk Management Division, 2022).

Seychelles and Disaster Risk Reduction

With the vision of being the centre of excellence amongst Small Island Developing States (SIDS), the Disaster Risk Management Division (DRMD) acts as the focal point and primary body for both Disaster Risk Reduction (DRR) and Emergency Response in the Seychelles Islands (Disaster Risk Management Division, 2022).

The Disaster Risk Management Act (2014) lies with the Disaster Risk Management Division (DRMD) and its sets out the statutory responsibilities of the DRMD.

Such responsibilities include;

1. Set out specific requirements and uniform procedures on matters which can be standardized nationally, including the declaration of a state of emergency, allocation of functions and responsibilities between the agencies;
2. Command and control of operations and inter-agency coordination arrangements and make the best use of available resources for response at local, regional, national and international levels;
3. Responsibility for ensuring that interagency co-ordination arrangements are developed at all levels to ensure effective coordination of individual response efforts during emergencies;
4. Provide common terminology to facilitate coordinated and safe working;
5. Identify and prioritize risks to ensure that existing services are prepared and equipped to deal with realistic potential emergencies;
6. Ensure preparedness by the principal response agencies to ensure prompt and effective coordinated response;

7. Activate response mechanisms for effective, timely search and rescue operations to save lives and minimize damage to property in times of crisis and ensuring the protection and care of the public at times of vulnerability;
8. Ensure that measures are in place to restore livelihoods and other life support;
9. Coordinate response in the event of a threat of a disaster;
10. Organize and execute various drills, functional and full-scale exercises annually; and
11. Advise, assist and coordinate the activities of government institutions, non-governmental organizations, private sector entities and communities.

(As cited in Disaster Risk Management Division, 2022)

The DRM Act (2014) makes provision for the establishment of two main bodies the National Disaster Risk Management Committee and the Vulnerability Assessment Committee along with the establishment of a platform the National Platform for Disaster Risk Reduction. The committees and platform shall be gazetted and consists of members across relevant Ministries, Departments and Agencies (MDAs).

Bringing into light how Disaster Risk Reduction/Management (DRR/M) is a discipline that cannot be tackled in silo but rather a shared responsibility amongst Ministries, Department and Agencies (MDAs) along with Private Partners.

Despite significant achievement in several arenas the Seychelles faces numerous threats. The Seychelles National Development Strategy (2019 – 2023) identifies the following as the main risks that the Seychelles faces corruption, complacency, technological capability, piracy and health pandemics (Ministry of Finance, Trade, Investment and Economic Planning, 2019).

The now “High income country” status presents a challenge for the country as the Seychelles no longer fits for development aids. Thus, it is important negotiations/agreements need to be established during normal peace time and the country needs to make tactful investments into national priorities that will generate revenue.

[The Seychelles National Integrated Emergency Management Plan \(NIEMP\)](#)

Setting out the baseline structures for emergency preparedness and response, the Seychelles National Integrated Emergency Management Plan (NIEMP 2019 – 2024) presents the various elements, guiding principles, roles and responsibilities that should be taken by various MDAs to ensure that effective emergency preparedness and response (Disaster Risk Management Division, 2022).

The NIEMP presents the framework and scope for more detailed sector specific plans and Standard Operating Procedures (SOPs), it provides the basis for an effective and structured response in any emergency response.

The NIEMP establishes the level of coordination that is required to solve any emergency. It adopts a response structure based on functional command and control concept; the concept establishes four functional level of decision making.

Whilst Disaster Risk Management Division (DRMD) has the overall responsibility for coordination in DRM in Seychelles, the division classifies the MDAs in two main categories. Category 1, being the organisations at the core of most emergency responses and category 2 being the cooperating supporting bodies that assist where deemed necessary. Both categories have their respective internal planning and preparation that needs to be done during normal time.

The Sendai Framework for Disaster Risk Reduction (SFDRR)

The Sendai Framework for Disaster Risk Reduction (SFDRR) is a guide to multi-hazard management of disaster risk within and across all sectors. Its expected outcome is to substantially reduce in disaster risk & losses in lives, livelihoods, health and assets with the of Goal to preventing new and risk and strengthening resilience.

The framework stipulates that there is a need to understand the dynamic nature of systemic risks. The Sendai framework echoes the idea that there needs to be a general understanding on the way to prevent, identify and manage risk.

On a local context the primary responsibility for Sendai Framework implementation lies with the Disaster Risk Management Division (DRMD). It is the Division's responsibility to implement, monitor and report on the national implementation of the framework.

The establishment of focal persons to amass data and report on incident/event along with the development of the National Disaster Risk Reduction Strategic Plan (2021 – 2030) against the framework has all been efforts to adhere and implement the framework.

Nevertheless, the lack of emergency/disaster related incidents has made that past years the Sendai Framework Monitoring platform for the Seychelles has been relatively void. This has not meant that the incidents have not occurred but rather have shown a limitation of the platform to capture the data of small/low scale incidents.

The onus to invest in Disaster Risk Management lies with the states, the responsibility to prevent and reduce the risk remains one that is shared amongst MDAs. Thus, using the SFDRR as benchmark the Division has devised the National Disaster Risk Reduction Strategy (2019 -2022) as a ten-year roadmap to guide stakeholders towards a collective mission and vision for DRR in Seychelles.

To date, it is expected Emergency Preparedness and Response (EPR) is guided by the NIEMP and the National Disaster Risk Reduction Strategic Plan so that DRMD places attention in the mainstreaming of DRR across all sectors.



Methodology

The review adopts an interpretivist approach, the method used was focus group discussion guided by a semi structured questionnaire. A semi structured interview is a verbal interchange/conversation that allows the interviewer to guide the conversation in a standardised manner whilst collecting useful information/responses. Such method was coupled with focus group discussion that included a group of participants and a moderator guiding the semi structured interview with the aim of generating and obtaining key facts and opinions.

The method led to valuable, useful and informed insights whilst engaging the stakeholders in a given topic. With the use of a questionnaire (Annex 3) a series of interviews were conducted to various stakeholders the responses then analysed and classified into thematic themes.

As sampling technique, the review preferred purposive/subjective and snowballing sampling as this allowed the Division to select the right participants to participate in the focus group discussions.

The review also included the use of desktop research on necessary topics, documents and journal these documents facilitated the understanding of the framework and thus guided the formulation of the respective methodology.

Guided by the Mid Term Review Concept Note by the United Nations for Disaster Risk Reduction (UNDRR) the questionnaire was structured around thematic themes and considered the themes in both a retrospective and a prospective manner.

The focus groups were formulated based on the existing Sendai Framework targets and a total of ten focus group discussions were conducted (Annex 1), this included;

- Focus group 1: Academia/Education Sector
- Focus group 2: Economic Sector
- Focus group 3: Health and Social well-being
- Focus group 4: Disaster Management and Early Warning System
- Focus group 5: Telecommunications and Media (A & B)
- Focus group 6: Governance and International Cooperation (A & B)

The Division also conducted a “catch up session” for organisation that missed their respective scheduled meetings (Annex 2).



Results & Discussion

Overview

The main purpose of the review was to assess the progress, challenges and gaps in the implementation of the Sendai Framework for Disaster Risk Reduction (SFDRR) on a national basis and from the prospective review formulate country specific recommendations to attend to the challenges and bridge the identified gaps.

From a general overview, key findings have indicated a sense of ambiguity amongst stakeholders about the way that SFDRR has been implemented in the last few years. It is apparent that the rectification/adoption of the framework has led to some degree of influence amongst many Ministries, Departments and Agencies (MDAs) and the general public.

To date, the tourism and the education sector are the sectors which are much more familiarised with the Sendai Framework. Despite not following the framework to the letter the responses have shown that the sectors have done considerable changes within their respective organisation to meet some conditions of the framework.

Moreover, in some sectors such as the environmental sector risk reduction interventions and strategies have been put in place for instance in the aspects of coastal management. Nevertheless, arguments have suggested that this has not been put in place as a consequence of the Sendai Framework but rather as the necessity to protect valuable assets.

Thus far efforts have been seen amongst many institutions who have now integrated some aspects of DRR into their daily tasks. Respective emergency response and evacuation plans are now being developed and routine drills and trainings conducted.

Nonetheless, critics have pointed out that such is not a standard nor an obligation for institutions to have such documents or to run such exercise, highlighting a gap in quality assurance and enforcement aspects of DRR/M in the Seychelles.



Moreover, despite responses have suggested that there is now an improvement in the response time of many responding entities such as the Public Utilities Corporation (PUC) and the Seychelles Land Transport Agency (SLTA). Arguments has suggested that it is impossible to analyse the response time without necessary data on past emergency/disaster related responses indicating a major issue in the systematic record keeping of data and information for emergency/disaster related incidents.

Discussions have shown that data/information does exist amongst respective entities, but emphasis has been placed on the need for an entity to compile and correlate the data and have a centralise database that would form an information system it is only then that conclusions be deduced from baseline data on the progress and gaps when it comes to emergency/disaster related responses.

Further arguments have indicated that that there remains the issue of lack of coordination amongst MDAs and an overstepping and/or duplication in role when it comes to emergency/disaster related response highlighting the need for intense training during normal time

Similar to the Seychelles National Development Strategy (SNDS), complacency amongst the population has remains one of the main risks identified. The lack of occurrence in disaster related incident in the Seychelles has led to a lenient and laissez faire nature amongst the population a mindset that “we are always safe” when it comes to emergency/disaster related preparedness and response.

Despite the economic shock, the outbreak of the SARS- Cov-2 virus namely the “COVID 19” has brought about positive changes amongst institutions. The pandemic outbreak shed light on the need for a Business Continuity Plan (BCP), the importance of health and safety officers along with the need for an integrated surveillance system.

The COVID 19 pandemic have shed light on the need to review the society’s current norms especially that of the Seychelles which is mostly characterised by the conventional eight to four work routine.

Despite such progress, critics have strongly pointed that the political direction places a vital role on how the country priorities the Disaster Risk Reduction/Management portfolio, strongly pushing the idea that the people can only see the value of emergency/disaster preparedness and response only if it is prioritised nationally.

It has also been pointed out that technological advancement has also led to new type of risks for the country especially for the economic/financial sector. Results have shown that the country’s reputation is at stake and there is a need to stay abreast with new development and abide to international norms, regulations and policies.

The overall picture portrayed is that when it comes to the implementation of the framework the Seychelles has achieve a minor part and there remains areas for improvement.



Retrospective Review (2015 – 2022)

Theme: Risk assessment, Information and understanding

As previously mentioned, efforts to understand and assess respective risks associated with respective sectors and organisations have been seen. Some sectors such as the telecommunications, financial and the education sector have attempted to understand their respective risks by devising and maintaining risks registers.

They have also venture into having Business Continuity Plans (BCP), floor marshals and safety trainings. In seeking achievements, efforts have also been seen by telecommunication service providers having internal back up data systems including back up satellites systems prioritising certain essential services during emergency related incidents.

Some sectors such the agricultural sector despite not having respective plans evidence have shown that they have considered some aspects risks within their organisation. The introduction of risks allowances as an incentive, routine medical tests and drills are all indication that the notion of risks awareness does exists within the sector.

Major efforts have been seen in the education sector to integrate aspects of Disaster Risk Reduction (DRR) into the primary state school curriculum in addition DRR has now been integrated as part of the teacher's curriculum at Seychelles Institute for Teachers Education (SITE). Nevertheless, critics have shown that there lacks a repository of local information and local knowledge that can be used as case studies in the students' education.

Despite such progress, gaps have been seen in the understanding of risks some sectors for example; the technological world. With a worldwide increase in technological advancement many players have become intelligent in cyber-attacks. In the past decade the Seychelles has been a victim of several cyber-attacks and this includes Automatic Teller Machine (ATM) frauds and card copying machines, pyramid schemes and even ransomware.

Nevertheless, despite such events there has been an apparent slack in the education and awareness on such subject which leads to another important sector in Disaster Risk Management the "media" sector.

The sector is considered important as it is an educational and disseminating tool that can be used for various purposes such as dissemination of early warning. Nonetheless, responses have indicated that to date the local media have certain defiance in the aspects of risk reduction as it is not equipped to prepare, response (media coverage) and recover from any emergency/disaster related incident.

The lack of training, personal protective equipment (PPEs) and risk assessments have indicated that the media sector lags far behind in understanding their respective risks. In addition, it has been seen that the Seychelles, has laws only for broadcast and publication houses but lack rigid laws for the unlawful use of social media which makes that there remain the risks of vital information being leak without prosecution.

When it comes to understanding risks, emphasis has been placed on the lack of a structured Information Management System (IMS). Emergency/Disaster related data, records, documents, audits and assessments are scattered amongst MDAs and the Seychelles are failing to capture such data as there lacks a common platform amongst stakeholders.

Furthermore, responses have shown that there is a gap in the way risks is perceived or understood. As a result, there is a need for a standardised way of understand risks. For instance, there seems to be limitations in the understanding of risks in fragile and complex context such as family vulnerability. When understanding risks, the current mechanism that exists in Seychelles is centered only around the financial aspects of the household. This portrays a significant gap in the understanding of their risks and thus vulnerability as a whole.

The vague and random use of DRR/M terminologies has also been highlighted as one of the main issues in the understanding of such discipline. Such use can be seen amongst MDAs but most importantly amongst the mass, broadcasted and social media and such tool may possibly contribute towards the population's confusion on the latter.

The Sendai Framework places emphasis on the use of indigenous/traditional/local knowledge to guide decision making in the disaster management. The review has brought to light that to date indigenous local knowledge responses have indicated that in Disaster Risk Reduction/Management it is only considered to some extent. In the education sector especially the private schools' responses have indicated that the use of local knowledge is almost non-existent as they need to adhere to British curriculum and their respective case studies.

In addition, arguments have shown that indigenous/local knowledge has not been documented as there is no sufficient supportive data online. Despite many recognising its necessity in decision making to date local knowledge in the Seychelles is not being valued or significant enough to stir changes.

Theme: Risk Governance and Management

When it comes to risk governance and management in the Seychelles, arguments have shown that there has been an apparent failure to adjust existing governmental policies with the SFDRR. Governance plays a vital role in the way Disaster Risk Reduction/Management as it guides the direction and thus influence the way it is perceived and prioritised in a country.

Arguments has pointed out that, it is quite challenging to report on the implementation of the Sendai framework as it has not been localised, adopted, shared nor simplify for Small Island Developing States (SIDS).

Moreover, respondents have strongly pointed out that most of the time they are in the receiving end (implementation) of what has already been chosen and endorsed by the cabinet rendering them less empowered.

To date, the Disaster Risk Management Division (DRMD) has limited human resource capacity in terms of qualified personnel in the discipline of risk and disaster management highlighting a major gap in expertise. However, efforts have been seen on behalf of the Division to partner with tertiary education institutions and invest in its human resource development.

Moreover, the Disaster Risk Management Division (DRMD) has taken the initiative to initiate the mainstreaming DRR into various governmental sectors. The SFDRR places emphasis on the notion of 'shared responsibility' however arguments have suggested that it might be quite impossible for it to be such due to jurisdiction and mandate issues. Critics have argued that in order for DRR/M to become a shared responsibility amongst stakeholders the Disaster Risk Management Act (2014) needs to be implemented as well as the National Disaster Risk Reduction Strategic plan (2021-2030). Bringing to light the pertaining issue of the lack of implementation of the DRM Act 2014 since its accession.

Some aspects of DRR governance have been seen in other sectors such as the tourism and the education sector. Nonetheless, areas for opportunities exist for example in the international cooperation aspects of DRR. Responses have indicated their lacks a formal reporting mechanism for early warning of international events and incidents.

Similar to the SNDS, the responses have indicated that lack of continuity along with complacency amongst the stakeholders and that of the general public poses a risk for the Seychelles. Such has been seen in the health sector whereby the COVID 19 pandemic took precedence and the Integrated Disease Surveillance and Response (IDSR) committee ceased to exists and perform its normal function.

Theme: Investment in Risk Reduction and Resilience

Strong criticism has pointed out that investment for emergency/disaster related purposes depends on the political agenda or how invested the head of the respective organisations are, indicating that investment has a strong correlation with governance.

Unfortunately, in the Seychelles there exist a high dependence on donations, sponsorships and grants in order to invest in DRR/M. Critics have pointed out that small yet critical projects are not considered in annual governmental budgets and that projects only gain importance after an event has struck.

Most responses have indicated that governmental budget is for day-to-day operations rather than for operationalisation of projects and programmes. However, some investments have been seen in fragile sectors such as the financial sector thus, it is no surprise that emphasis has been placed for such sector to have safety nets such as insurance policies.

Established international cooperation have also invested in risk reduction through funding and donations for particular events such as the COVID 19 vaccination. Similar cooperation can be seen in the agricultural sector whereby they attempt to strengthen resilience through projects, technical and capacity building support funded by international entities such as the International Atomic Energy Agency (IAEA), European Union (EU), United Nations Development Programme (UNDP), Food and Agriculture Organisation (FAO) and Common Market for Eastern and Southern Africa (COMESA).

Nonetheless, responses have highlighted those donations and sponsorship maybe a danger for fragile sectors such as the financial sector, given that such donations or sponsorships may have adverse effects on the country's diplomatic status.



Theme: Disaster Preparedness, Response and Build Back Better

As a Small Island Developing State the Seychelles is not spared from external shocks as a result it has been argued that there is a need to stay abreast with international events and incidents. One way of staying alerted with national and international incidents is through an Early Warning System (EWS).

Responses have indicated that the Seychelles lacks a nationally recognised multi hazard Early Warning System (EWS) and this presents itself as a setback as it is significant for respective internal

preparation and response. However, there are ongoing projects that would address EWS but they are still in their early phases of implementation.

Many arguments have suggested that on a local basis the adoption of SFDRR has failed as preparedness and response seen across the country has not been as a consequence of the adoption but rather simply a reactive approach to the incident/event.

Moreover, the overstepping and duplication of work during and after an incident portrays that there is room for improvement and that the Disaster Risk Management Division (DRMD) should place emphasis on an Integrated Emergency Management System (IEMS).

Theme: Collaboration, Partnership and Cooperation

Critics has pointed out that focus has been mainly placed on national collaborations and that the implementation of the framework has failed to consider the links between other international agendas such as the Paris agreement and the Sustainable Development Goals (SDGs).

A milestone yet a setback the Seychelles faces the threat of strictly stratified international cooperation and aid due to the 'High Income Country' status recently obtained. To date, the country still depends on international bodies for projects and consultancies

Despite ample invitations for technical support and capacity building in the emergency/disaster related field, critics have indicated that due to such status there is a need to review and assess the country's priorities and areas for cooperation and make necessary amendments and negotiations during normal time.

There exists an apparent reliance on international bodies for consultancies and projects thus there is a need to prioritise technical support and capacity as most of the time Small Island Developing States (SIDS) are only the recipients of international projects.

Theme: Context Shifts and Emerging Issues

Nevertheless, due to lack of data an apparent failure has been seen to understand the influence of emerging issues on the implementation of SFDRR locally. However, emerging issues such as COVID 19 has led to a slight change in the mind set and in the conventional ways of doing things. Whilst stricter measures have been applied in certain aspects such as travelling changes have been seen in other arenas. The increase in virtual platform, development of Business Continuity Plans and flexible working hours has all been parts of adapting to the changes that COVID 19.



Conclusion and Recommendations

The intent of the review was to assess the progress, constraints and gaps that the Seychelles has faced when implementing the Sendai Framework for Disaster Risk Reduction and from the Prospective review formulate country specific recommendations for future implementation.

The Overall, the results have shown that efforts have been made to implement certain aspects of the framework such as its mainstreaming into the state's school education system and the Disaster Risk Management's Division initiative to advocate for emergency response focal points in all government sector.

Nonetheless, the process has shed light on various limitations and areas for improvement when it comes to the implementation of the framework. Despite various efforts findings have indicated that there are minimal organisations and sectors that are aware of the existence of such framework.

The findings emerge from the review has firstly indicated that the stakeholders have a fairly good knowledge about disaster risk reduction/management but a slack in its implementation. The discussion has brought to light a series of recommendations that can be actioned upon to ensure the successful implementation of the framework.

1. Risk Assessment, information and understanding

1.1. Structured Information Management System (IMS)

For better informed decision, it has been suggested that there needs to be a national investment into an Information Management System (IMS) database specifically for emergency/disaster related incidents/events data. Having the mandate for national risk reduction/management and emergency response the DRMD shall host the physical infrastructure and administrative level credentials.

The project should be on a national basis and all MDAs and general public should be informed of its existence. The role of the database and database managers shall be to manage, analyse and collate all information pertaining an incident/event this should include maps, statistics, reports, post mortem debrief, journal articles, photographs and other documents.

In order to minimise the scattering of information and timely update the database could be fed by the existing information officers or the focal points within the MDAs. The system should be able to correlate and show interrelation of incidents between MDAs and its impact.

The most important aspect of such system shall be to guide decision making, responses have suggested that the same IMS should include traditional/indigenous knowledge that can easily be accessed by stakeholders.

1.2. Standardised methodology

Arguments have shown that there is a need to understand the dynamic interaction of systems to understand risk, thus suggestion have indicated the need for a comprehensive multi-disciplinary approach to risk assessments. In order to improve the country's understanding of risk, a standardised method for risk assessments should be developed and shared for all national projects. This should also include the integration of Environmental Impact Assessments (EIA) and Social Impact Assessments (SIA) processes.

In addition, as part of the methodology, a post event evaluation should be conducted amongst all respective MDAs.

1.3. Education and Awareness

Emphasis has been entirely placed on the need for a strong education and awareness campaign. It has been suggested that all programmes need to have a strong intent and an intended target audience. The Division of Risk and Disaster Management should engage/initiate such programme and where necessary should be conducted in conjunction with other organisations. Programmes should ensure that all members of the community are engaged targeting change in behavior, skill sets and attitude.

Education and awareness programmes should also include DRR/M knowledge and terminologies, along with programmes targeting specific sectoral topics /emerging issues such as child abuse, substance abuse, cybersecurity amongst others.

2. Risk Governance and Management

2.1. Top- Down Approach to Disaster Risk Management

The Disaster Risk Reduction/Management portfolio to date, lies with the Minister responsible for Internal Affairs. Arguments have strongly pointed out that there needs to be a top-down approach to DRM. Suggestions have included that DRM needs to firstly integrated/mainstreamed into respective policies and organisations as part of their daily tasks.

However, counter arguments highlight the importance of disaster risk reduction and needs to be seen from top organisational management and only then can it be integrated into respective organisational budget and workplans. In addition, it has been suggested that the members of parliament may use their influence/power to stir necessary changes.

It has also been recommended that the Disaster Risk Management Division should initiate the localisation of the Sendai Framework and it empower its implementation by sharing its responsibility amongst the MDAs.

2.2. Implementation of DRM Act (2014)

Implementation of particular DRR/M related laws and regulations has been seen as one of the major defiance in the system. The lack of rigid laws, standards, licensing certification and evacuation plans portrays that there has been a slack from respective authorities to exert the implementation of their respective laws.

A strong recommendation made, was that risk reduction aspects should be included in the life cycle of all projects implemented in the country, as per DRM Act 2014 making provision for the mainstreaming of the DRR processes and standards.

2.3. Stakeholder engagement for improved coordination

Responses have pointed out that coordination amongst stakeholders still lack consensus, it has been suggested that for improved coordination there needs to be commitment and routine stakeholder engagement meetings and trainings. The Disaster Risk Management Division should intensify the efforts to get the stakeholders acquainted to the National Integrated Emergency Management Plan (NIEMP) as it depicts a favourable framework for command, control and coordination in any emergency response.

In addition, the Division should use available instruments such as the Disaster Risk Management Committee to support the National Disaster Risk Reduction Strategic Plan across MDAs. Being an accountable mechanism, the national committee can bridge the gap between the DRR stakeholders in the mainstreaming of DRR and coordination efforts on all level.

3. Investment in Risk Reduction and Resilience

3.1. Diversification of Seychelles Economy

Arguments have suggested that the country needs to be more self-reliant and find alternative ways to sustain itself through the diversification of the economy and thus increase resilience.

3.2. Investment in Disaster Risk Management Division (DRMD)

A major gap has been seen in the existing capabilities and competencies of the DRMD staff, thus it has been suggested that there needs to be a robust coherent plan to invest in the education and capacity building of existing staff, whilst creating new opportunities for the new staff through a strategic human resource management system.

4. Collaboration

4.1. Prioritisation of projects

The cautious prioritisation of projects (funded by international donors) rather than being a just recipient has also been one of the key recommendations made. It has been suggested that the Disaster Risk Management Division should venture into developing a work system/framework with the Citizen Engagement Platform (CEPS) that allows Non-Governmental Organisations (NGOs) to bridge the gap and equally participate in the DRR/M of the country.

References

Disaster Risk Management Division, 2021. National Disaster Risk Reduction Strategic Plan (2021-2030).

Disaster Risk Management Division, 2022. Disaster Risk Management Handbook for Ministers, Departments and Agencies.

National Bureau of Statistics (2021). National Bureau of Statistics Statistical Bulletin.

Ministry of Finance, Trade, Investment and Economic Planning, 2019. Seychelles National Development Strategy (2019-2023).



Annexes

Annex 1. Seychelles Timeline for Sendai Framework Mid-Term Review (2022)

Objective:

The main objective of the Mid Term Review is to take stock and assess the progress and challenges in the implementation of the Sendai Framework from 2015 to date. The exercise aims to provide critical analysis so as to assist countries and stakeholders formulate and prioritise actions for the period of 2023 to 2030.

Outcome(s):

1. Specific country report and analysis on progress made in the implementation of the Sendai Framework.
2. An MTR synthesis report to facilitate member states deliberations in concluding the MTR SF in 2023, New York.

Table1. Proposed timeframe for the stakeholder consultation and reporting.

Activities	Time Frame (January – August 2022)
1. Confirmation of Seychelles' participation in the Mid Term Review for Sendai Framework (MTR SF)	17 th January 2022
2. Review and draft of relevant documents needed to conduct the consultations and reporting.	Kick Start January 2022
3. Establishment of working group (inhouse staff)	4 th February 2022
4. Email sent to SFM focal persons	1 st February 2022
5. SFM presentation to inhouse staff	18 th February 2022
6. Focus group discussions	May – August 2022
7. Review of First draft by inhouse staff	September 2022
8. Review of first draft by Stakeholders	September 2022
9. Validation of MTR Report	September 2022 (First week)
10. Submission of Report	September 2022

Annex 2. List of Stakeholder Consulted

Table 2. List of Stakeholder Consulted

Organisation	Name	Email addresses
1. International School Seychelles (ISS)	Ms. Fatma Edmond Ms. Sarah Hardy Ms. Daniella Bibi	Fatma.edmond@iss.sc Sarah.hardy@iss.sc Daniella.lenclume@iss.sc
2. Ministry of Education	Ms. Regina Prosper	rprosper@eduhq.edu.sc
3. University of Seychelles (UNISEY)	Dr. Daniel Etongo	Daniel.Etongo@unisey.sc.sc
4. Seychelles Agricultural Agency (SAA)	Mr. Nelson Charles Ms. Valerie Henrie	ncharles@gov.sc vhenri@gov.sc
5. Financial Services Authority	Mr. Christopher Confait	christopher@fsaseychelles.sc
6. Ministry of Tourism	Ms. Philomena Hollanda	philomena.hollanda@seychelles.com
7. Family Affairs	Mr. Ziggy Adam	ziggy.adam@statehouse.gov.sc
8. Citizen Engagement Platform Seychelles (CEPS)	Ms. Chantal Ellen	projects@ceps.sc
9. Seychelles Fire and Rescue Services Agency (SFRSA)	Ms. Tally Domingue	cfo@seychelles.net
10. Disaster Risk Management Division (DRMD)	Mr. Daniel Cetoupe Ms. Veronique Philoe Ms. Ethel Magnan Ms. Maria Sirame Ms. Vanessa Zialor Mr. Henry Moustache Ms. Cheryl Bristol	daniel.cetoupe@drmd.gov.sc veronique.philoe@drmd.gov.sc ethel.magnan@drmd.gov.sc maria.sirame@drmd.gov.sc vanessa.zialor@drmd.gov.sc Henry.moustache@drmd.gov.s Cheryl.bristol@drmd.gov.sc
11. Ministry of Environment	Mr. Jean Claude Labrosse	j.labrosse@env.gov.sc
12. Public Health Authority	Ms. Naomi Laurence	naomi.laurence@health.sc
13. Seychelles Meteorological Authority (SMA)	Mr. Egbert Quatre	e.quatre@meteo.gov.sc
14. . Public Utilities Cooperation (PUC)	Mr. Darel Benoit	dbenoit@pus.sc
15. Intelvision Seychelles	Mr. Fanette Albert	fanette@intelvision.sc
16. . Cable and Wireless Seychelles Limited (CWS)	Ms. Sheryn Raoul	sheryn.raoul@cwseychelles.com
17. Ministry of local government and community Affairs	Mr. Ramano Songor	ramanosongor@gov.sc

18. Seychelles Land Transport Authority	Ms. Stephanny Rosette	srosette@slta.sc
19. Seychelles Media Commission	Ms. Tessa Henderson	mediasec@seychellesmediacom.sc
20. Today Seychelles	Ms. Alvina Uranie	Alvina.Uranie@today.sc
21. Leader of the Opposition	Honorable. Sebastien Pillay	clerk@nationalassembly.sc
22. Members of the National Assembly	Honorable. Waven William Honorable. Wavel Woodcock Honorable. Philip Arissol Honorable. Philip Monthy	wwilliam@nationalassembly.sc wwoodcock@nationalassembly.sc parissol@nationalassembly.sc pmonthy@nationalassembly.sc
23. Ministry of Foreign Affairs	Ms. Nisha Serret Ms. Rennie Mondon	nserret@mfa.gov.sc rmondon@mfa.gov.sc

Table 3. Timeline for stakeholder consultations

Focus Groups	Date
1. Academia/Education Sector	5 th May 2022
2. Economic Sector	17 th May 2022
3. Health & Social Wellbeing	11 th May 2022
4. Disaster Management and Early Warning System	12 th May 2022
5. Telecommunications and Media (Group A)	26 th May 2022
6. Telecommunications and Media (Group B)	26 th May 2022
7. Governance and International Cooperation (Group A)	21 st July 2022
8. Governance and International Cooperation (Group B)	1 st July 2022
9. Governance and international cooperation	10 th August 2022
10. Last Catch-up Meeting	2 nd June 2022

Annex 3. Sendai Mid-Term Review (Seychelles)

Semi structured Interview: Questionnaire

Section 1: Sendai Framework Retrospective Review (2015 – 2022)

1. Has there been a reduction of disaster risk and the impacts of natural- and man-made hazards on persons, businesses, communities, and ecosystems, as a result of actions taken and approaches adopted in your country in implementing the Sendai Framework since 2015?

Probing Question: a. Identify at least one way in which actions and approaches adopted in implementing the Sendai Framework have resulted in a reduction in disaster risk.

2. What does your government and national stakeholders consider to have been the major achievements, challenges and barriers to the implementation of the Sendai Framework since 2015?

Probing Questions: In respect of: a. preventing the creation of new risk b. reducing the existing stock of risk c. strengthening resilience

Theme: Risk Assessment, Information and understanding

3. What progress has been made in approaches to better understand/assess disaster risk in all its dimensions of vulnerability, exposure (persons and assets), hazard characteristics, capacity, and their inter-relationships? (Within your sector/organisation)

Probing Question: Is the systemic nature of risk addressed within your organisation administrative levels and disciplines?

4. How are traditional, indigenous and local knowledge and communities, in addition to scientific and technological insights, participating and guiding risk assessment and risk-informed decision making and investment?

Theme: Risk Governance and Management

5. How has national and local public policy, legislation, planning and organisation changed to align with the Sendai Framework?

Probing Question: What changes have been observed in diversity in DRR leadership since 2015, particularly in terms of decision-making.

6. How has the Guiding Principle of shared responsibility between the Governments and local authorities, sectors and stakeholders been applied? Describe good practices

Probing Questions: What measures has your country taken to enable integrated management of disaster risk across your institutions and/or relevant sectors?

Theme: Investment in Risk Reduction and Resilience

7. To what extent have your organisation invest in resilience (through structural and non-structural measures) increased since 2015?

Probing Question: a. To what purposes have such investments been directed?

8. To what extent are investments by the public (including national and local governments) and private sectors increasingly risk-informed? Describe these measures, tools and mechanisms

Probing Questions: a. What developments have been installed in fiscal instruments to integrate disaster risk reduction considerations and measures? b. What developments have been installed in financial regulatory mechanisms to integrate disaster risk reduction considerations and measures?

9. Have financial resources provided to your country for disaster risk reduction through international cooperation increased since 2015?

Probing Question: a. How has technical cooperation, technology transfer and resources for capacity building increased?

Theme: Disaster Preparedness, Response and Build Back Better

10. How has preparedness for response, as well as for recovery, rehabilitation and reconstruction, changed since the adoption of the Sendai Framework? Cite good practices

Theme: Collaboration, Partnership and Cooperation

11. What partnerships and initiatives have been most successful in reducing disaster risk? Consider relevant partnerships that may be; local, sub-national, national, sub-regional, regional, transboundary and/or multi stakeholder, civil society and public-private.

12. Probing Questions:

- a. How have genuine and durable partnerships been established?
- b. How were they established and developed?
- c. How are such partnerships governed?
- d. How are they funded or resourced?
- e. What are the leadership roles and partnership evaluation methods?

13. How has cooperation and collaboration in risk reduction across national mechanisms and institutions in the implementation of relevant international agendas, frameworks and conventions evolved since the adoption of the Sendai Framework?

Theme: Context Shifts and Emerging Issues

14. What have been the major changes to the contexts within which your organisation has been implementing the Framework since 2015? Including emerging issues and topics of concern.

Probing Questions: a. How have existing risk governance and risk management mechanisms and approaches fared in the COVID-19 pandemic?

Section 2: Prospective Review (2023 – 2030)

15. On a national basis what deliverables, innovations, processes, or transformations, etc. would bring the greatest reduction in disaster risk and the greatest increase in the resilience of people, assets and ecosystems in the remaining period of the Sendai Framework and beyond 2030?

Probing Questions: a. What are the key measures that must be taken to build the resilience of critical infrastructure and basic services? i. health systems ii. food systems iii. water and sanitation systems iv. energy systems v. financial systems

Theme: Risk Assessment, Information and Understanding

16. How can risk knowledge and insight be improved? – including in improving understanding of the systemic and interconnected nature of risk

Probing Question: a. What measures can be taken to ensure that this is systematically integrated in all decision-making?

Theme: Risk Governance and Management

17. Given the systemic nature of risk, and experiences of the ongoing COVID-19 pandemic (including cascading, indirect impacts), what adjustments are required in policy, regulatory and legislative frameworks, organisation, investment and strategy, to be able to capitalise on opportunities, or to mitigate new / emerging threats to the achievement of the expected outcome and goal of the Sendai Framework?

Probing Questions: a. at the national level? b. at the local level? c. at the regional level? d. at the international level

18. The Sendai Framework states that responsibilities for disaster risk reduction are shared by central Governments and relevant national authorities, sectors and stakeholders. What must be prioritised to ensure that responsibilities are shared in risk identification and reduction?

Probing Questions: a. What is required to promote women's empowerment and leadership in disaster risk reduction? b. What measures can be taken to ensure that 'no one is left behind'? c. What measures can be taken to ensure that 'no ecosystem is left behind'?

19. What priority actions can be taken to empower local authorities and local partnerships to strengthen risk reducing action at the subnational and local levels?

20. What are the adjustments or key measures that must be taken to ensure that disaster risk management is no longer treated as a 'sector' in itself, but is a practice systematically applied across all sectors and within your organisation?

Theme: Investment in Risk reduction and Resilience

21. What measures can public institutions take at national and international levels to ensure risk is priced more accurately within all financial transactions, and not treated as an externality and discounted in public and private investment
22. What further actions are required through to 2030 to strengthen the resilience of business and industry sectors to disaster risk?

Theme: Collaboration

23. In accelerating and amplifying action pursuing the outcome and goal of the Sendai Framework:
- a. What new or emerging initiatives and partnerships will need to be developed to support governments in the period to 2030?
- b. In which priority areas are more partnerships required for risk-informed sustainable development to be possible?
- c. How can development partners and the international community provide better support?



