SISRI
SMALL ISLAND STATE RESILIENCE INITIATIVE

Small Island States Resilience Initiative (SISRI)

Workshop on Building a Community of Practice for Resilience of Small Island States to Climate and Disaster Risk

Final Workshop Report

Venice, Italy
May 16-17, 2016
Understanding Risk Forum 2016

WORLD BANK GROUP

GFDRR
Global Facility for Disaster Reduction and Recovery

Contents

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Workshop on
Building a Community of Practice for Resilience of Small Island States to Climate and Disaster Risk

Venice, Italy – May 16-17, 2016

1. Introduction

Background

Small island states are among the most exposed and vulnerable countries to the effects of climate change. Given the increasing adverse impacts, they have developed an increasing range of innovate institutional arrangements and operational solutions to make their development resilient. In many cases, the lessons learned can be adapted or replicated in other small island states across the world – resulting in better resilience programs and scaled-up results.

A workshop on Building a Community of Practice for Resilience of Small Island States to Climate and Disaster Risk was organized by the Small Island States Resilience Initiative (SISRI) on May 16-17 in Venice, Italy, to support and accelerate sharing of solutions and challenges. The workshop brought together 50 key decision-makers from 22 small island states across the world (see participants list in Annex 2)

Objectives of the workshop

The objectives were:

- To exchange experiences, insights and best practices developed by small island states;
- To facilitate peer-to-peer learning to support effective design and implementation of climate and disaster resilient development; and
- To start building a community of practice between small island states' practitioners.

Format

The workshop was divided into six sessions, each of which address a key challenge (institutional, operational or technical) faced by small island states, drawing on the SISRI 'Building Blocks Framework' (see Figure 1)

Experts from the small island states, the World Bank and external organizations facilitated the sessions and made technical presentations. During each session, key challenges and solutions were identified through interactive discussion and recorded.

SISRI is a programmatic initiative supported through the World Bank and the Global Facility of Disaster Reduction and Recovery (GFDRR) which aims to assist small island states in reducing their climate and disaster risks. More information can be found at

www.gfdrr.org/small-island-states-resilience-initiative

The SISRI team gratefully acknowledges financial support from the Government of Luxembourg that made this Workshop possible.

2. Participants

Countries represented. In total, 50 representatives from 22 small island states participated at the workshop. The countries represented included:

- African/Indian Ocean: Comoros, Guinea-Bissau, Madagascar, Maldives, Mauritius, São Tomé and Príncipe and Seychelles.
- Caribbean: Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines.
- Pacific: Fiji, Kiribati, Marshall Islands, Samoa, Solomon Islands, Tonga, Vanuatu.

Small States participants represented government officials with policy, finance, technical and operational/implementation responsibilities for climate resilient development in their countries. As such, the participants were from Offices of the President/Vice President, Ministries of Finance, Planning, Environment, and Project Management Units (PMUs) from relevant line Ministries. The majority of participants were at the level of Permanent Secretary, Director, Project Manager or PMU Director.

In addition, the workshop benefited from participation from experts from Deltares, the University of Tokyo and UNESCO-IHE well as from GFDRR and the World Bank.

The detailed list of participant is attached in Annex 2.

3. Summary of sessions

The sessions addressed the key institutional, operational and technical building blocks identified as part of the SISRI 'Building Blocks' Framework. The building blocks are a menu of interventions identified based on 15 years of project experience, and which help small island states to advance systematically towards resilience (for full details, see **SISRI Knowledge Note 1 – accessible here**).

FIGURE 1: SISRI 'BUILDING BLOCKS' FRAMEWORK

The key issues and messages raised during the sessions are summarized below:

Session 1 – Investment Planning and Institutional Coordination

Making development climate resilient requires actions by many line ministries, including water, planning, finance as well as agencies such as meteorology, disaster risk management and local authorities. Participants shared emerging best practices and institutional models to plan investments and ensure the necessary coordination – international and domestic – to drive resilience programs forward.

Samoa described the creation of a Climate Resilience Investment Coordination Unit within the Ministry of Finance. The unit provides coherence across investments, contributing to donor coordination and inclusion of climate resilience as a major pillar for Samoa's development strategy. **Grenada** and **Dominica** described successful project management approaches when 'building back better' after major hurricanes that moved consideration of climate and disaster risks from recovery programs into reconstruction efforts. **Belize** described how critical segments of its road network were assessed as being vulnerable to climate-related risks, and how the subsequent prioritization of investments helped to mobilize donor funds at scale.

Saint Lucia described the model of its Climate Adaptation Financing Facility, which extended its disaster risk reduction approach by offering concessional credit to individual households through a national bank so that they can strengthen their homes or businesses against geological and climate-related hazards. **Solomon Islands** shared successful approaches to coordinating stakeholders at different levels of society – including village leaders and churches – to implement climate resilient development activities.

C**hallenges** related to investment planning and institutional coordination included:

- Donor fragmentation, which places a heavy burden on government departments, causing a high workload for project management and diminished efficiency through delays and additional paperwork.
- Limited available financial and human resources.
- Lengthy timelines for review/approvals and limited technical capacity in developing scope requirements and Terms of Reference (TORs).
- Lack of compliance with building codes and difficulty enforcing them.

Proposed **solutions** included:

- Creation of a Climate Resilience Steering Committee to strengthen country ownership and sustainability, increase absorption capacity, strengthen partnerships, and promote efficient allocation, management and accounting for the available resources.
- Alignment of disaster risk reduction, climate change adaptation and meteorology across all cross-sectoral issues under one ministry.
- Use of participatory approaches to systematically prioritize resource use based on identifying criticality of infrastructure and vulnerability to natural disaster risks.
- Engage and coordinate with international financial institutions to leverage additional resources, consolidate financing into larger envelopes, and reduce overheads.
- Make strategic use of external technical experts to outsource activities. Engage youths, women, community leaders and church leaders in coordination efforts.

Session 2 – Addressing Operational Bottlenecks

Effective coordination between national agencies and development partners – together including on procurement and financial management – are key elements for effective resilience programs. However, many countries experience operational bottlenecks that can hamper the effectiveness of their programs and make it harder to achieve results on a large scale. Niels Holm-Nielsen, Global Lead for Disaster Risk Management at the World Bank, moderated a discussion on steps that can overcome such constraints in order to substantially scale up resilience investments.

David I, Senior Financial Management Specialist at the World Bank, presented successful experiences with overcoming financial management challenges in island contexts, including suitable flow-of-funds arrangements; appropriate software and business processes; peer-to-peer learning; and enhancing the role of auditor generals. **Saint Lucia** described lessons from building a high-performing PMU, including developing in-house expertise on safeguards and procurement and dedicating staff to individual projects that is helping with effective implementation.

Key operational **challenges** identified were:

- Fragmentation: many countries have a problem of 'too many projects' as opposed to 'too little capacity.'
- Capacity constraints such as:
  - PMUs responsible for large numbers of projects;
  - No proper segregation of duties; variabilities in staff capabilities; and high staff turnover (moreover when country relies on one or two staff);
  - Lack of specialized procurement and finance management staff.
- Budget, financial, and reporting constraints :
  - Unrealistic budgeting, difficulty with financial reporting;
  - Lengthy and complicated audit process with high costs and poor quality.
- Lack of effective coordination between ministries.

Solutions to operational bottlenecks included**:**

- Harmonization of guidelines and criteria among donors.
- Building up an effective PMU through sustained effort and good management over time, together with support from senior national leadership.
- Training on safeguards, procurement, project management and contract management. Committed staff and longevity of staff.
- Proper planning and uses of resources, good chart of accounts to capture multiple sources and uses of financing.
- Experience in the Caribbean with support to auditor generals, making use of these institutions for enhanced audit capability as an alternative to hiring external audit firms with high costs and limited local knowledge.

Session 3 – Risk-Based Spatial Planning and Resilient Infrastructure

Given the mounting risks from climate change, risk-based spatial planning is crucial in order to minimize the vulnerability of people and assets and steer development into safer locations. Scientific risk information can underpin decision-making at community to national level. However, getting reliable information at the right scale and for the right timeframe can be a challenge. Countries shared examples of how they are increasingly applying risk information in decision-making, sharing risk data across line ministries, and embedding risk sensitivity into national policies.

Madagascar shared lessons from developing resilient building codes and standards that cover buildings, transport, water supply, and irrigation infrastructure, and are being extended to traditional housing as well as to telecommunications and power facilities. **Samoa** showed how it developed Coastal Infrastructure Management Plans – now Community Integrated Management Plans –that allow government and communities to drive participatory investment decisions to reduce risks through a cross-sectoral approach integrating climate change resilience and disaster risk management. **Guyana** shared experience of applying flood risk assessments to drive large-scale investments in reducing vulnerability of the capital region Georgetown.

São Tomé and Príncipe shared lessons from a process of managed population retreat from vulnerable coastal areas (**see also SISRI Knowledge Note 2**) that considers current and future risks. **Saint Lucia** described its National Spatial Data Initiative, which helps to integrate spatial data into decision-making support. **Tonga** described a safer schools program that builds on risk analysis, building codes developed in Australia and New Zealand to withstand wind conditions typical of category 3-5 storms. They have also assessed the effectiveness of these codes to localized tsunami models and plan to extend them to all-

hazard types. And the **Secretariat of the Pacific Community (SPC)** presented its approach to developing 'smart' decision making systems for identified audiences, incorporating scientific modeling approaches.

Some of the common **challenges** on risk-based spatial planning and resilient infrastructure were:

- Reducing the vulnerability that arises from households settling in areas exposed to floods, storm surge, extreme winds, landslide and other hazards.
- Getting buy-in from communities to not live in high-risk areas.
- Moving from just introducing building codes to actually enforcing them.
- Getting line ministries and other stakeholders to share data, coordinate their GIS investments, and apply spatial data systematically in their decisions.
- Reducing the financial and economic losses due to reconstruction after floods and cyclones, especially where poor building standards or lack of risk-informed planning lead to high recurrent costs.
- Reducing the risk of priority structures, including critical facilities such as schools, clinics and main roads.

Examples of **solutions** identified by the participants:

- In Madagascar, national building standards and guidelines were created for multiple sectors, including (i) water infrastructure; (ii) housing; (iii) telecommunication and electricity facilities.
- Guyana prioritized a master plan of hard and soft interventions to safeguard the capital, Georgetown, from severe flood risks.
- In a process of managed population retreat from at-risk areas, communities participated in identifying their risks in São Tomé and Príncipe. In addition, expansion zones' where citizens can safely live were created.
- Saint Lucia developed a National Spatial Data Initiative and established a National GIS Coordinating Committee and National GIS Technical Committee.

Session 4 – Coastal Protection

Coastal areas are where most inhabitants of small island states live, but a mixture of structural options (for example dykes and seawalls), ecosystem-focused approaches (e.g. retaining mangroves, improving health of coral reefs), behavioral and decision-making changes are required to protect them. **Professor Kayanne** (University of Tokyo) proposed a set of ecosystem-focused approaches that can replenish the substrate and reduce overall risks. The approach is based on using shell-building organisms (foraminifera) as a natural process to accelerate sand production in coral atolls. He also highlighted the importance of controlling pollution to ensure the health of coral reefs, and ensuring that artificial structures do not disrupt the equilibrium and create extra pressure, e.g. a road on an atoll can block water flow and cause increased erosion.

St Vincent and the Grenadines described the combination of structural solutions (e.g. boulder rock revetments) and ecosystem-based approaches used to protect priority sites across its critical coastal zone. **Kiribati** highlighted their approach to blending traditional designs with modern engineering structures (including sea walls), and the need to improve early warning systems and harmonize responses with traditional land tenure systems. **Marshall Islands** described how severe threats from coastal erosion, inundation and king tides are identified and prioritized for short- to long-term interventions. They emphasized the need to use GIS and GPS technology in monitoring vulnerability of the major urban centers; the need to address funding constraints to enable hard and soft interventions to go ahead; and the need to raise awareness in schools and communities.

Mauritius described successful experiences in eliminating beach sand mining, which was causing harmful coastal erosion, by engaging construction companies in developing an alternative basalt rock sand industry, providing compensation to those whose livelihoods

were affected, and enforcing a total ban on beach sand mining with no exceptions. **Guinea-Bissau** described successful initiatives to protect coastal ecosystems, as well as the use of innovative, low-cost approaches such as simple kites with built-in cameras to monitor the areas (while also generating photographic data on protected wildlife). **Haiti** described the use of multi-hazard risk models to protect vulnerable coastal communities including planning evacuation routes.

The **challenges** identified by participants include:

- Loss of natural assets (such as coral reefs or mangroves) have increased the threats to the coastline, adding to coastal erosion and inundation challenges (which are especially acute on atolls).
- Widely used 'hard' engineering solutions, especially when implemented poorly, have exacerbated coastal erosion in some areas by disrupting natural processes such as beach natural accretion .
- Several countries face severe challenges around lack of building materials for construction (as well as for coastal protection structures), which necessitates costly imports of large volumes of material.
- Lack of building codes, weak early warning systems, and limited capacity and resources for post-disaster recovery add to coastal protection challenges.
- Large proportions of the population live in coastal areas (eg. 80 percent in Guinea-Bissau). Pressure on coastal resources is rising, driving by factors ranging from beach sand mining to overdevelopment (including through tourism).

Some of the **solutions** presented:

- Implementation of coastal protection in priority sites, mixing hard interventions and ecosystem-based options. Combine traditional responses with modern engineering solutions.
- Raise awareness in schools and communities; strengthen regulatory mechanisms; strengthen coordination among all stakeholders; develop well-defined standard operating procedures.
- Prioritize the regions requiring ecosystem-based adaptation to protect communities and economic activities (including tourism). Set up ecosystem protection zones.
- Make use of innovative and low-cost technology.

Session 5 – Social Protection

Floods, extreme winds, landslides and other hazards can impact individual families and cause harm that spans multiple generations. Social Protection refers to government-run programs such as cash transfers, cash-for-work, unemployment insurance or pensions (see **SISRI Knowledge Note 3,**). Small island states are increasingly harnessing these tools as part of building resilience. This session started with an overview of social protection as applicable to climate and disaster resilience, presented by Asha Williams (Social Protection Specialist, World Bank).

Jamaica described its mainstreaming of resilience and livelihoods practices in infrastructure and social development projects, strengthening assessment capabilities and beneficiary registries to target support to the most vulnerable. After Hurricane Dean in 2007, an additional 90,000 households received payments under the Programme of Advancement Through Health and Education (PATH) scheme, exemplifying how scalable (or 'adaptive') social protection systems can help reach vulnerable households after an adverse event.

Comoros shared lessons on channeling assistance to poor households while building their resilience to climate change, including through cash-for-works. Participants discussed experience with the business processes and data systems that are required for social

protection, including targeting mechanisms to identify the households requiring support and payment systems.

The **challenges** identified included the following:

- When a disaster strikes, households that lack savings or assets may have no other choice than to adopt 'negative coping mechanisms.' These include withdrawing children from school, or selling productive assets such as tools or livestock. They can create a cycle of poverty by reducing the future productivity and income of the households and leaving them vulnerable next time a shock happens.
- Social safety nets can cushion poor households and prevent this negative spiral. However, many countries need to strengthen the tools and procedures that underpin such programs. These include an accurate and up-to-date register of the households needing support; an effective 'targeting instrument' to identify the right households to receive benefits; and payment mechanisms.
- Potential misuse of funds is an important challenge. Fiscal sustainability of social protection schemes requires close attention.
- Lack of skilled human resources and competing claims for assistance need to be addressed.

Some of the **solutions** presented:

- Most small island states have some form of social protection, or social safety net, while these tools are increasingly advanced in a number of countries – allowing support to be scaled up in case of a disaster.
- Social Protection tools should be adapted to the context. They can range from cash-for-work schemes that leave communities with small scale infrastructure (such as improved roads or communal facilities) that increase resilience; to sophisticated Conditional Cash Transfer (CCT) systems.
- Jamaica was identified as a best practice example for scaling up payments after two recent hurricanes through its CCT system. Payments can be scaled up 'vertically' (providing larger payments to existing beneficiaries) and 'horizontally' (reaching an increased number of beneficiaries).
- Multiple payment mechanisms can be developed to provide flexibility of response. Social Protection strategies should be harmonized with national approaches to climate change adaptation and disaster risk management.

Session 6 – Risk Financing

Disasters can impose crippling financial costs on small island states, both at the level of governments, communities and households. Island nations are making increased use of financial solutions that can minimize the economic costs and provide immediate liquidity for recovery efforts. The instruments include regional sovereign insurance risk pooling mechanisms, agricultural and property insurance, contingency funds and review of budget execution mechanisms. Based on understanding the risks, tailored financial protection strategies can increase the ability of governments, households, businesses, agricultural producers and low-income populations to cope with disasters. The session started with an overview presentation by Olivier Mahul and Barry Maher (World Bank).

Seychelles described its newly passed national disaster risk management law as a step towards taking a Catastrophe Deferred Drawdown Option (Cat-DDO) with the World Bank. This instrument will provide US$ 7 million line of credit to Seychelles that can be issued within days after a disaster. **Fiji** described its strategic approach to disaster risk financing and experiences mobilizing domestic and foreign capital following Tropical Cyclone Winston in 2016. **Saint Lucia** explained its multi-layer approach to financial protection against disasters. **Vanuatu** described how it financed recovery after Tropical Cyclone Pam including a risk-pooling payout and overcoming budget execution hurdles.

The **challenges** identified included:

- Exposure to hazards with a high potential of generating damages and losses, but which may not trigger payments under catastrophe insurance schemes.
- Access to finance and insurance on time (liquidity for rapid response).
- Access to finance in the aftermath of disaster is also key for rapid recovery and reconstruction.

- Missing standards in insurance systems (gaps, e.g. months without financial coverage).

Some of the **solutions** presented:

- Risk pooling: Increase the number of participants to decrease the cost of insurance.
- Parametric insurance and strengthening of the legal framework for insurance: good initiatives to support countries reduce financial risks.
- Budgetary reallocations, contingency budgets, and stock of building bridges to use in emergency situations.
- Development of a Disaster Risk Finance strategy e.g. several financial instruments to address the different needs after disasters in function of the capacities of the country to deal with it.

4. Publications and Outreach

The Workshop provided an opportunity to conduct training, make relevant announcements and share materials tailored to the specific challenges faced by the countries. These include:

1. Overview and training on the **SimpleCoast** tools and methods, developed by Deltares. This collection of simple tools, targeting countries with limited data and capacity, are designed to help national practitioners make simple calculations and design coastal adaptation solutions. The set of tools is open source, and includes also hands-on simulation exercises that take people through different decision-making options (Website: http://www.simplecoast.com/).

2. Scholarships for short courses and Masters programs on disciplines related to water management and resilience are being offered to SIDS participants by UNESCO-IHE. Information on the application procedures and eligibility was shared with the participants. (Website: https://www.unesco-ihe.org/sids-fellowships)

3. The three newly published SISRI Knowledge Notes, which highlight good practices in climate and disaster resilience in small island states, were distributed among the practitioners. Knowledge Note 1 explains the SISRI framework for managing disaster and climate risk. Knowledge Note 2 gives an overview of the role of social protection and its relevance to resilience followed by country examples. Knowledge Note 3 provides an overview of managed population retreat as a strategy for adaptation and resilience,

including case studies from São Tomé and Príncipe and Samoa. The Knowledge Notes are accessible on the SISRI website: (https://www.gfdrr.org/small-island-states-resilience-initiative)

4. Three videos were also shown illustrating how countries are approaching coastal resilience:

   - The **Building with Nature in Suriname** video showed how simple, locally made sediment traps are being built to facilitate the re-growing of mangroves, in turn helping to regain coastal land
   - The **Sand Engine in the Netherlands** video shows a major beach nourishment initiative which offers a soft and more natural adaptation solution to previous structural attempts at coastal protection.
   - The **Improving Flood Resilience along the coast of Guyana** video shows how Guyana is handling coastal flood resilience through risk assessments linked with strategic investments.

5. Participant Feedback

The two-day face-to-face format of the workshop, combined with the two-and-a-half days of Understanding Risk Forum, offered a platform for resilience practitioners from 22 island nations in different oceans to interact with each other.

A structured feedback process was conducted to understand which features did or did not work well, and to identify future directions for building a community of practice. Practitioners emphasized that they face common challenges, and noted that they gained knowledge and appreciation for the different solutions that have been implemented. The mixture of finance, policy and planning staff – as well as more technical practitioners – was seen as fostering integrated discussions and practical solutions. Practitioners said they gained insights that they expect to apply in their national policy and projects.

The feedback is summarized in two tables below.

Summary of feedback and suggestions
What worked well?
• Information sharing, new ideas. • Examples from other countries (the presentations) • Sharing of good practices. • Interactions between countries. • Diversity of the participants. • Networking. • Technical expertise of the participants & presenters.
What can be improved?
• Language translation. • Bring in other issues not addressed due to time constraints (eg. food security) • Conduct a field visit. • Focus on four or five good practices and learn more intensively (longer and deeper exploration of most pertinent issues). • Regional approach: break out into groups to discuss issues between neighbors. • Bring in donors as part of the conversation.
Most important issues for SISRI to address
• Early warning systems: develop the systems, address multiple hazards, • Broader locations. • Public policies and strategies that may enable or hinder resilience. • Apply risk assessment models to precise experiences. • Data sharing. • South-south knowledge sharing on coastal issues, project management. • Continue on the SISRI pillars discussed: institutional and operational issues, risk-based spatial planning, coastal protection, social protection, financial protection.

Best insights and take-aways

- Guinea-Bissau's kite camera.
- Saint Vincent & Grenadine's insights on addressing coastal erosion.
- The value of networking to help us take bold steps.
- Consultation and value of the game approach.
- Simple but powerful tools to help move forward with projects.
- Social protection models.
- Disaster relief funds.
- Importance of integrating resilience across sectors and line ministries.

Specific comments from participants

"Thank you for the invitation to join in the UR2016 Forum, it was indeed a great learning experience, and an opportunity to see what else has worked in other islands."
– **Pacific country**

"It was a pleasure to participate in the seminar, which allowed us to broaden our horizon on the problems faced and the solutions adopted by many SIDS. We have seen that the risks are enormous, but many efforts adapted to the context of each country of SIDS are being developed to address these risks. We learned a lot and we believe that some of these solutions can be put into practice in a adapted way by the Government."
– **African country**

"We learned a lot and we believe that some of these solutions can be put into practice in an adapted way by our Government."
– **African country**

"I must commend you all for facilitating such excellent workshop. The workshop was very informative, educational and inspirational...all these are the take home messages."
– **Caribbean country**

"I enjoy the workshop and hope to implement best practices learned from various DRR and the participating island countries in our local context"
– **African country**

"I would like to add my voice to the predecessors to underline how important and interesting was this recent meeting of Venice for Guinea-Bissau. We'll take a maximum of the teachings that this left."
– **African country**

"I join with other colleagues to share my appreciation for your support to help us attend the workshop and share the best practices and learn from each other's examples."
– **Pacific country**

"Thanks again for the excellent facilitation and execution of the workshop logistics. The experience for me was professional and world class"
- **Caribbean country**

"I would like to thank you all for this informative workshop, especially the World Bank Team. You will agree that this meeting has been a platform for SIS to share our experiences in face of the innumerable hazards that are now affecting small islands. For sure, we will have to learn from each other to be leaders and to make us more resilient."
– **African country**

6. Proposed Next Steps

The participants identified the following priorities for next steps:

- Build a community of practice on resilience for small island states, starting with a virtual community/platform that allows internet-mediated interactions.

- Capture lessons learned on innovative approaches and key challenges through the SISRI Knowledge Notes.

- Convene regular web/teleconference based and face-to-face meetings of the network on specific issues in the future.

Participants supported holding a follow-up SISRI Workshop in future incorporating the feedback above.

For further information on SISRI, please contact:

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Annex 1 – Agenda

Small Island States Resilience Initiative Workshop

NG Laguna Palace Hotel, Viale Ancona, 2, 30172 Mestre, Venice
Room: Spazio 3

Monday May 16, 2016

Time	*Sessions*
8:30-9:00	**Welcome and Introductions** **Overview presentation of the Small Island States Resilience Initiative (SISRI):** Sofia Bettencourt, World Bank
9:00-10:45	**Session 1: Investment Planning and Institutional Coordination** *Sharing experiences of institutional arrangements for resilience programs; coordinating across sectors and for disaster risk management and climate resilience investments.* ***Facilitator***: Habiba Gitay, World Bank Lightning talks (2-3 minutes for each country): • **Samoa**: Ministry of Finance facilitating strategic coordination across sectors • **Belize**: Coordinating and scaling up financing for resilient roads • **Grenada**: Institutional coordination in a multi-sector investment project • **St Lucia**: Climate Adaptation Financing Facility • **Dominica**: Planning for long-term recovery following Tropical Storm Erika • **Solomon Islands:** Coordinating across climate and disaster resilience at community level ***Interactive discussion with inputs from other countries***
10:45-11:15	Coffee/tea break
11:15-12:15	**Session 2: Addressing Operational Bottlenecks** *Sharing key operational challenges in resilience programs – including procurement, financial management and safeguards – and lessons from national experience.* ***Facilitator***: Niels Holm-Nielsen, World Bank **Technical Presentation**: Innovative solutions for financial management in small island states: David I, World Bank ***Interactive discussion*** on key operational challenges that countries have faced and successful experiences in overcoming these bottlenecks. Examples from **Fiji and Kiribati** will be highlighted.
12:15-12:30	***Short presentation on SIDS Scholarship Scheme*** Maria Kennedy, UNESCO-IHE, Netherlands
12:30-13:30	Lunch

13:30-15:30	**Session 3: Risk-based Spatial Planning and Resilient Infrastructure** *Sharing experiences on spatial planning and resilient infrastructure that has included climate and disaster risk in coastal areas, whole islands or specific sectors.* ***Facilitator***: Denis Jordy, World Bank ***Technical Presentation***: Mamy Razakanaivo, Madagascar: *Resilience standards and codes for building the key infrastructure in Madagascar* Lightning talks (2-3 minutes): • **Samoa**: Integrated Management Plans to inform investments and policy • **Guyana**: Reducing the risk of catastrophic floods in low-lying areas • **São Tomé and Príncipe**: Participatory mapping and population retreat • **Saint Lucia**: National Spatial Data Initiative to inform spatial planning • **Tonga**: Safe schools and shelters • **SPC**: Pacific Context: Enabling Informed Decision Making for Planners ***Interactive discussion with inputs from other countries***
15:30-16:00	Coffee/tea break *Videos to be shown*
16:00-18:00	**Session 4: Coastal Protection** *Sharing experiences on the varied solutions that countries have developed to protect their coast from climate and disaster risks.* ***Facilitator***: Nicolas Desramaut, World Bank ***Technical presentation***: Professor Hajime Kayanne, University of Tokyo: *Ecosystem-based coastal protection of atoll island countries against sea level rise* *Short presentation* on Simple Coast workshop: Alessio Giardino, Deltares Lightning talks (2-3 minutes): • **Kiribati**: Coastal protection in an atoll nation • **Maldives**: Strategic choices on protecting atoll island • **St Vincent and the Grenadines**: Coastal protection of key infrastructure • **Marshall Islands**: King tide season and devastation to coastal areas • **Mauritius:** An alternative solution to beach sand mining • **Guinea-Bissau:** Experience with ecosystem-based approaches • **Haiti**: Building resilience of the coast through preparation ***Interactive discussion with inputs from other countries***
19:00 ---	Drinks and dinner at the hotel

Tuesday May 17, 2016

Time	*Sessions*
9:00-10:30	**Session 5: Social Protection** *Sharing experiences on including disaster-responsive safety nets, cash for work, public works and top-up for pensions as part of social protection within disaster risk management and climate resilience investments.* ***Facilitator***: Olivio Diogo, São Tomé and Príncipe ***Technical presentation***: Asha Williams, World Bank Lightning talks (2-3 minutes): • **Jamaica**: Integrating climate and disaster resilience into social protection. • **Comoros**: Adaptive social protection ***Interactive discussion with inputs from other countries***
10:30-11:00	Coffee/tea break
11:00-12:45	**Session 6: Risk Financing** *Highlights of various risk financing instruments and approaches that have been developed and are being used in small island countries including risk-pooling, budgetary planning, contingent finance.* ***Facilitator:*** Olivier Mahul, World Bank ***Technical presentation***: Barry Maher, World Bank • Q&A on risk financing options • **Seychelles**: Innovative finance for climate and disaster resilience including Catastrophe Deferred Drawdown Option (Cat-DDO), debt for resilience swap ***Discussion***: • Experiences from the Caribbean Catastrophe Risk Insurance Facility (CCRIF), Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) and South-West Indian Ocean Risk Assessment and Financing Initiative (SWIO-RAFI) • Mobilizing finance after disasters interventions by **Fiji** and **Vanuatu** General discussion
12:45-14:00	Lunch

Simple Coast Workshop	
14:00-14:30	**General Introduction to SimpleCoast** *Alessio Giardino, Deltares*
14:30-16:30	**Dealing with uncertainties in coastal management. Interactive serious game session** *Andrew Warren, Deltares*
16:30-16:45	*Coffee/tea break*
16:45-17:15	**Flooding on low-elevation reef-lined coasts** *Ap van Dongeren, Deltares*
17:15-17:45	**Paving the way to new technologies for small island communities: storm-surge early warning systems, design tools, etc.** *Alessio Giardino, Deltares*
17:45-18:00	**Final discussions / feedback from the audience**

Annex 2 – Participants list

PARTICIPANTS FROM SMALL ISLAND STATES				
Country	**Country group**	**Name**	**Institution**	**Email**
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