



GUIDELINES
FOR THE PREPARATION
OF A
VULNERABILITY-RESILIENCE
COUNTRY PROFILE (VRCP)

< Working Document >

Note

This working document entitled “Guidelines for the Preparation of a Vulnerability-Resilience Country Profile (VRCP)” has been prepared by the UN Department for Economic and Social Affairs (UN DESA). It is a working document to be used for capacity-building purposes at the national and sub-regional level in the context of the UN Development Account project and could serve as a reference document by our implementing partners.

Comments received by the users and lessons learned through the project implementation, shall be reflected in the final version.



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Acronyms and abbreviations

BPoA	Barbados Programme Of Action
CBDRM	Community-Based Disaster Risk Management
CIDA	Canadian International Development Agency
CZM	Coastal Zone Management
DAC	Development Assistance Committee
DESA	Department of Economic and Social Affairs
DRR	Disaster Risk Reduction
EU	European Union
GEF	Global Environment Facility
HFA	Hyogo Framework for Action
IOC	Indian Ocean Commission
LDC	Least Developed Country
MSI	Mauritius Strategy of Implementation
NCDs	Non-Communicable Diseases
OECD	Organisation for Economic Co-operation and Development
SAMOA	SIDS Accelerated Modalities Of Action
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SOPAC	South Pacific Applied Geoscience Commission
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VRCP	Vulnerability-Resilience Country Profile

Executive summary

These guidelines explain how to formulate a **Vulnerability-Resilience Country Profile (VRCP)** to help small island developing States (SIDS) track their progress in the implementation of the Samoa Pathway. The VRCP provides guidance for monitoring progress in each of the thematic areas of the Samoa Pathway and using the resulting analyses to formulate policy and implement activities at the national level to strengthen resilience. The VRCP will complement ongoing national planning processes and facilitate future review of the implementation of the Samoa Pathway. The VRCP could also be used as an analytical tool for identifying key issues and indicators for other international initiatives relevant to SIDS, such as the post-2015 Development Agenda and the elaboration of the Sustainable Development Goals (SDGs).

The VRCP addresses the vulnerability-resilience nexus. The vulnerability assessment done by the national stakeholders themselves, is based on both qualitative and quantitative indicators and indices that reflect a country's vulnerabilities to threats in terms of the three dimensions of sustainable development: environmental, economic and social. The resilience assessment evaluates the measures that strengthen the coping capacity of the country to prevent, adapt to, or mitigate these exogenous and endogenous risks and threats for each of the three dimensions of sustainable development in terms of actions at three levels: national, regional and international. The national actions would include government policies, plans and projects, as well as actions by communities, civil society and the private sector – all of which would ultimately build a country's resilience. These national efforts would be supported by regional responses such as technical assistance, information sharing and capacity building activities provided by regional organizations; and by international responses - technical, logistical and financial support - from the United Nations system and development partners.

An earlier version of the guidelines was used as a training resource for initial piloting activities under the EU-funded DESA-IOC *ISLANDS* Project from November 2013 to March 2014. This revised and updated version has benefitted from the lessons and best practices learned from that project.

The VRCP methodology is intended to serve three purposes:

- a. to enable SIDS to assess their own progress in addressing vulnerabilities in each of the thematic areas of the Samoa Pathway, and to help them develop appropriate responses at the national level to strengthen their resilience,
- b. to enable individual SIDS to chart, monitor and evaluate their own progress towards achieving the goals of the Samoa Pathway, as well as the eventual SDGs, and
- c. to identify and share best practices and lessons learned in formulating and designing appropriate responses to build resilience to each of the selected Samoa thematic areas.

The experiences in the initial piloting phase under the *ISLANDS* Project showed that the VRCP could be a tool in helping countries to align their national planning processes with the international agreements of relevance to SIDS. The VRCP methodology also lends itself for use as a tool for monitoring and evaluating national development plans and programmes. The methodology can be embedded into SIDS’ national planning for development and will help governments determine priority areas for intervention. It could also help identify areas where the international community can support the efforts of small states to improve their resilience to shocks and help them to grow sustainably.

The VRCP methodology is based on a five-step systematic and participatory process (figure I). These five steps are to be carried out by each SIDS using an inclusive process based on multi-stakeholder and multidisciplinary consultations.

Figure I The VRCP at a glance

Preparatory Step	<i>Preparing for the VRCP</i> Prepare a baseline report based on data sources, reports and indicators on Samoa thematic areas. Identify VRCP team representing cross section of public, private and civil society organisations and knowledgeable of some of the thematic areas
Step 1	<i>Selecting priority themes and major issues</i> Develop criteria and rank the priority themes in the Samoa Pathway Identify and select economic, social and environmental issues facing each of the identified themes
Step 2	<i>Selecting criteria for determining vulnerability and resilience</i> Develop economic, social and environmental criteria for determining vulnerability and resilience of identified themes in step 1.
Step 3	<i>Selection of indicators</i> Select/develop indicators for the criteria identified in step 2
Step 4	<i>Assessment and rating</i> Develop and rate vulnerability and resilience scores using the criteria and indicators developed in steps 2 and 3
Step 5	<i>Mapping and justification</i> Map the vulnerability and resilience scores using an Excel scatter chart Create a country vulnerability-resilience profile for the selected themes and formulate a narrative to justify the vulnerability and resilience scores (see VRCP map on page 32)

Once the vulnerability and resilience scores for each thematic area have been calculated these scores are mapped in a single diagram (shown in page 32). This diagram not only profiles the vulnerability and resilience of each of the thematic areas but also provides for comparing the profiles between thematic areas.

The VRCP responds to the recognized need for a practical tool and appropriate indices that help to:

- a. Track progress in the implementation of the Samoa Pathway at the national level;
- b. Better reflect and profile the vulnerabilities faced by the respective countries to guide them “to adopt more informed polities and strategies for building and sustaining long-term resilience”; and
- c. Develop databases and national indicators for monitoring and evaluating all three dimensions of sustainable development – economic, social and environment, which also help to monitor SDGs in the future.

The value added of the VRCP methodology described in these guidelines is that the vulnerability of a SIDS to a particular Samoa Pathway thematic area is analysed together with the level of resilience that the SIDS have developed to mitigate that vulnerability. Furthermore, the vulnerability and resilience is examined through a single lens but with 3 dimensions – economic, social and environmental. Finally, since the vulnerability and resilience scores for each of the thematic areas are profiled in a single map, it provides the opportunity to:

- a. Review the performance (vulnerability and resilience) of each thematic area against all the other thematic areas in the map;
- b. Evaluate the gap between the vulnerability and resilience to each thematic area; and
- c. Identify those areas where the SIDS needs to improve its resilience.

Chapter 1: Introduction

The *Vulnerability-Resilience Country Profile (VRCP)* has been developed through a series of expert- and inter-agency consultations engaging the Technical Advisory Group of the EU-funded “ISLANDS” project. It was introduced and piloted in selected SIDS, since March 2013. These current guidelines are a companion to the publication for SIDS policy makers entitled: “*Vulnerability-Resilience Country Profile (VRCP): An Overview*”. The VRCP Overview is a reference document for senior policy makers and other key stakeholders aimed at helping to enhance their understanding and awareness of the value of a nationally-owned VRCP approach for SIDS. The 9th tranche UN Development Account project, as well as the Second Phase of the IOC-ISLANDS project allows further application of VRCP.

Small island developing States have been recognised as a special case for sustainable development in view of their unique and particular vulnerabilities, including their small size, remoteness, narrow resource and export base, and exposure to global

Vulnerability – is the inherent susceptibility of a country to harm from exposure to exogenous or endogenous risks. Some risks can be managed through appropriate policies and measures whilst others may be inherent or structural constraints that can best be managed through the adoption of appropriate policy measures or other Government, private sector and/or community actions. Examples include: **economic** aspects such as the exogenous shocks resulting from the recent financial crisis; **environmental** aspects such as natural hazards or climate change; and **social** aspects that focus on the impacts of these shocks on people, their communities and society, and their ability to cope with the stress or change. For example, both the BPoA and the Samoa Pathway identify vulnerabilities faced by SIDS in each of the priority areas.

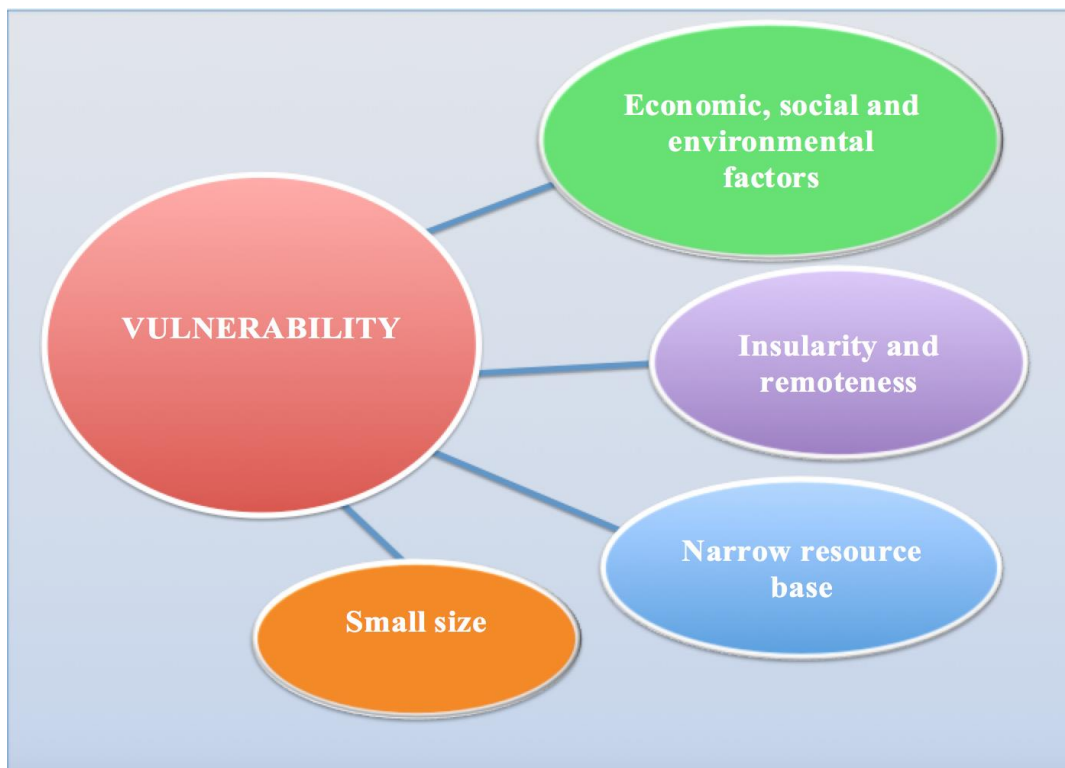


Figure II Contributing factors to SIDS vulnerabilities

environmental challenges and external economic shocks, including to a large range of impacts from climate change and potentially more frequent and intense natural disasters. Vulnerability is observed in connection with the incidence of certain phenomena of varying magnitudes, which impact the geographic, economic, social and environment/ecological profiles of SIDS over time.

The categories of vulnerabilities faced by SIDS and the causes of these vulnerabilities are presented in **Table 1** below.

Table 1 Illustrative factors contributing to vulnerabilities faced by SIDS		
Cross-cutting issues: gender, governance, capacity-building, technology, data and statistics		
Economic	Social	Environmental
<u>Economic growth</u> <ul style="list-style-type: none"> • High levels of poverty • High rates of unemployment and for some, underemployment <u>Trade</u> <ul style="list-style-type: none"> • High transportation costs • Remoteness from global markets • Lack of diversity in exports <u>Financing</u> <ul style="list-style-type: none"> • High debts • Lack of access to concessionary financing despite vulnerabilities <u>Tourism</u> <ul style="list-style-type: none"> • Overdependence on tourism sector • High susceptibility to external shocks <u>Energy</u> <ul style="list-style-type: none"> • Dependence on imported fossil fuels • Inadequate access to sustainable energy technology <u>Food security and nutrition</u> <ul style="list-style-type: none"> • Reliance on food imports • Inadequate access to safe and nutritious food (also social issue) 	<u>Institutional</u> <ul style="list-style-type: none"> • Low institutional capacity including inadequate human resources • Lack of integrated planning, and inadequate monitoring and evaluation • Lack of data and science-policy interface to facilitate informed decision-making <u>Population</u> <ul style="list-style-type: none"> • High population densities in urban areas • High rates of rural-urban and international migration • High proportion of youth <u>Health</u> <ul style="list-style-type: none"> • Limited access to health care • High incidence of non-communicable diseases <u>Education</u> <ul style="list-style-type: none"> • Lack of access to quality education • Inadequate investment in education and training <u>Culture</u> <ul style="list-style-type: none"> • Loss of traditional knowledge and know-how • Loss of cultural practices 	<u>Climate change</u> <ul style="list-style-type: none"> • Sea level rise • Ocean acidification and coral bleaching • Coastal erosion <u>Natural disasters</u> <ul style="list-style-type: none"> • Increased intensity and frequency of natural disasters • Inadequate early warning systems <u>Oceans and seas</u> <ul style="list-style-type: none"> • Over exploitation of marine resources • Marine pollution <u>Biodiversity</u> <ul style="list-style-type: none"> • Invasive alien species • Deforestation and desertification <u>Water</u> <ul style="list-style-type: none"> • Over exploitation of surface ground and coastal water • Saline intrusion <u>Waste</u> <ul style="list-style-type: none"> • Insufficient waste treatments

Resilience is a measure of the actions undertaken at the national, regional and international levels to mitigate economic, social and environmental vulnerabilities. Resilience is a result of the

response mechanisms to the vulnerabilities experienced by a SIDS. Some of the strategies to strengthen resilience include:

- a. An enabling environment comprising appropriate policies, legislation and institutional arrangements that would help to reduce the impact of vulnerabilities.
- b. Strengthened education and vocational training for enhanced professional and technical skills supported by appropriate human resource policies aimed at resilience building.
- c. Use of appropriate tools and methodologies for planning and development that again boost resilience for a country or community.
- d. Allocation of national budgets to sectors that are most vulnerable so as to help build resilience.
- e. Capacity building for risk management and post-disaster recovery.
- f. Regional integration resulting in combined responses to vulnerabilities that cross borders, such as climate change and natural disasters.

Resilience – is the ability or capacity of a country or a population to withstand, adapt to, or recover from, exposure to the negative effects of these shocks, and is often embedded within the concept of vulnerability. Though the BPoA only mentions resilience in terms of local communities and disaster risk management, the Samoa Pathway sets out specific national, regional and international measures to build resilience of SIDS.



Figure III Elements for building resilience

Chapter 2: The Vulnerability-Resilience Country Profile (VRCP)

The VRCP addresses the vulnerability-resilience nexus and consists of an assessment of a country's vulnerabilities and its capacity to cope with these vulnerabilities. The vulnerability assessment is based on qualitative and quantitative indicators and indices that reflect a country's vulnerabilities to threats in terms of the three dimensions of sustainable development: environmental, economic and social.

The resilience assessment evaluates the measures that strengthen the coping capacity of the country to prevent, adapt to, or mitigate these exogenous and endogenous risks and threats for each of the three dimensions of sustainable development in term of actions at three levels: national, regional and international. The national actions include government policies, plans and projects, and actions by communities, civil society and the private sector – all of which would ultimately build a country's resilience. These national efforts are often complimented by regional support for such activities as technical assistance, information sharing and capacity building; and international assistance, from the UN systems and other development partners, in technical, logistical and financial support.

2.1 Purpose of the VRCP

The VRCP is intended to serve a dual purpose:

- a. The primary aim is to enable SIDS to assess their own progress in addressing vulnerabilities, and their response to these vulnerabilities, in each of the thematic areas of the Samoa Pathway. This would facilitate the periodic review for the Samoa Pathway.
- b. The secondary aim is to enable individual SIDS to compare their own progress towards achieving the goals of the Samoa Pathway in order to identify best practices and to build up a knowledge base.

In addition to these two goals the VRCP can also be used to monitor national plans, strategies and programmes.

2.2 How does the VRCP add value?

The most important contribution of the VRCP is that it provides SIDS with a clear pictorial presentation of the vulnerability-resilience nexus that uses existing information and data and which can aid decision-making. The VRCP methodology is intended to complement on-going local, national and international processes rather than to duplicate or replace these initiatives. It

is also envisaged that the VRCP methodology will assist a SIDS to monitor its SGD goals and targets.

The VRCP serves as a policy tool for:

- a. Evidence-based policy formulation, planning, decision-making and monitoring.
- b. Periodic self-assessment of a country's progress to address identifiable vulnerabilities and resilience building efforts
- c. Monitoring of the implementation of the Samoa Pathway and other relevant international commitments, including the SDG
- d. Negotiations with the international donor community for financing resilience measures

Additional benefits of the VRCP include:

- a. Flexibility to tailor countries' specific circumstances and priorities
- b. Visual presentation that makes it easy to understand the links between the vulnerabilities and resilience
- c. Systematic process of self-monitoring that can be used to monitor progress over time.
- d. Opportunity for capacity building in data collection and management
- e. Brings together existing indicators from a wide range of sources
- f. Enables countries to identify and share best practices.
- g. Helps to explore policy options
- h. Provides a snapshot of both vulnerability and resilience and the links between them.
- i. Countries can tailor the VRCP to their own special situation, issues and concerns.
- j. Enables countries to identify best practices that can be applied within the country and shared with other countries where common vulnerabilities exist.

Chapter 3: The VRCP methodology

The VRCP methodology is based on a systematic and participatory process which is set out in figure IV.

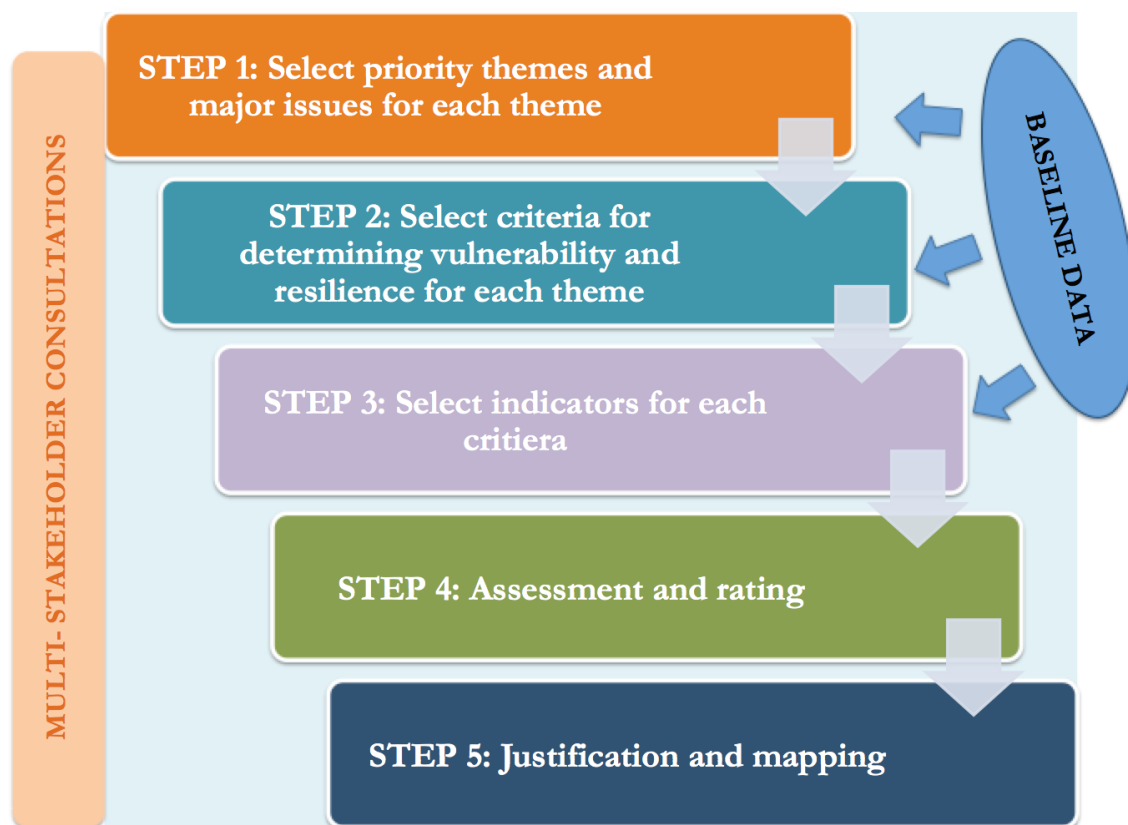


Figure IV The VRCP process

The methodology:

- Builds on a baseline study that is prepared by national experts and which assembles relevant disaggregated data, on the thematic areas in the Samoa Pathway, from various national, regional and international sources.
- Is based on a five-step systematic and participatory process.
- Uses an inclusive process based on multi-stakeholder and multidisciplinary consultations.
- Assesses country performance in strengthening resilience for achieving sustainable development.
- Provides a numerical score on a scale of 1 to 5 to assess the extent of vulnerabilities and resilience
- Presents the scores graphically within a low to high range showing the vulnerability and associated resilience of each identified thematic area.

i. Assembling data sources and reports on the Samoa Pathway thematic areas

The purpose of this phase is to:

- a. Conduct a baseline study:** Identify and assemble data sources and reports on the thematic areas of the Samoa Pathway. The data sources should include indicators of vulnerability and resilience from various published sources at the national, regional and international levels. The data should also include a list of references to useful background documents and publications.

The thematic areas covered in the Samoa Pathway are presented in **Table 2**. During this phase, all relevant information, data sources, and reports on each of the thematic areas should be assembled in a central location. National plans and other programming documents should also be resourced. The collection of relevant background documents and reports should be assisted by an understanding of the major issues surrounding each of the Samoa Pathway thematic areas and of relevant national development documents.

Table 2 The priority themes of the Samoa Pathway	
<ul style="list-style-type: none"> • Sustained and sustainable, inclusive and equitable economic growth with decent work for all <i>Sustainable Tourism</i> • Climate change • Sustainable energy • Disaster risk reduction • Oceans and seas • Food security and nutrition • Water and sanitation • Sustainable transportation • Sustainable consumption and production 	<ul style="list-style-type: none"> • Management of chemicals and wastes, including hazardous waste • Health and non-communicable Diseases • Gender equality and women’s empowerment • Social development <i>-Culture and sport</i> <i>-Promoting peaceful societies and safe communities</i> <i>-Education</i> • Biodiversity <i>-Desertification, land degradation and drought</i> <i>-Forests</i> • Invasive alien species • Means of implementation, including partnerships

- b. Identify stakeholders and assemble the VRCP Team,** representing a cross section of public, private and civil society organisations that will form part of the team responsible for preparing the VRCP. As the VRCP assessment process encompasses the whole of the Samoa Pathway, and covers the social, economic and environmental dimensions of sustainable development, it is crucial to have an inclusive assessment process that addresses all the different priority themes of the Samoa Pathway adequately. Therefore, the team preparing the VRCP must be familiar with a number of the themes of the Samoa Pathway so that team members can pool their ideas and knowledge. At a minimum, a multidisciplinary team

should consist of individuals with experience or expertise in the following identified in **Table 3** and **Annex 1**.

Table 3 Examples of disciplines needed for VRCP assessment team	
• Agriculture and fisheries	• Health
• Biodiversity conservation	• ICT
• Climate change	• Land management
• Coastal and marine resources management	• Planning and development
• Disaster management	• Social policy
• Education	• Statistics
• Energy and transport	• Tourism
• Environmental management	• Trade
• Finance and economic planning	• Water
• Forestry	

Ideally, team members would each have expertise or experience in more than one of the sectors corresponding to a Samoa Pathway thematic area, and would be drawn from the major stakeholders – government, communities, civil society and the private sector. This will require representation by all major stakeholders so that all groups are fully engaged in the assessment process. This could be best achieved by selecting a small core team of no more than 10 people to guide the assessment. The core team of primary stakeholders would be supported by focus groups of secondary stakeholders that would concentrate on clusters of priority themes thus allowing a wider range of stakeholders to contribute their expertise and experience to the VRCP formulation. This core team should include at least 2 members from civil society and 2 more members from the private sector. The team will be supported by the lead agency, which will be responsible for coordinating and facilitating the preparation of the VRCP in the country.

A good approach to selecting the team members is the conduct of a stakeholder analysis. The aim of multi-stakeholder process is to promote better decision making by ensuring that the views of the main actors concerned about a particular decision are heard and integrated at all stages through dialogue and consensus building. More information on this process is provided in **Annex 1**.

ii. Assembling working groups

After the introductory session, the participants should be organized into their thematic groups for the work group sessions. Each group should nominate a coordinator and a rapporteur, both of whom will be responsible for finalising the group assignments and preparing the necessary documentation for the selected thematic areas. See **Annex 1** for additional information.

The Facilitator(s) should start with an overview of the VRCP. Four sample slides are provided in **Annex 2** to assist the Facilitator.

Step 1: Select priority themes and major issues for each theme

Step 1 seeks to:

- Rank the priority themes of the Samoa Pathway in the order of importance for the country; and
- Select at least three major issues/concerns facing the country for each theme, identifying the social, economic and environment vulnerabilities and possible resilience measures for each issue.

Each country should focus its main analysis on those themes that are considered to be the most important for the country, but should also consider the other priority themes of the Samoa Pathway, in less detail, to ensure that their VRCP addresses the whole of the Samoa Pathway.

Stage 1 Group exercise: Developing criteria for prioritising Samoa Pathway themes

The objective of this exercise is for each group to develop appropriate criteria and then to use this criteria to review the Samoa Pathway and identify at least 5 to 8 priority themes¹. The group as a whole determines 3 criteria (economic, social and environmental) that it will use to review and prioritise the Samoa Pathway thematic areas. The 3 criteria are then prioritised and given a score with 1 being the lowest and 3 being the highest. An example is provided in Table 4.

Table 4 Examples of criteria for prioritising the Samoa Pathway themes

Criterion 1	Criterion 2	Criterion 3
Potential impact on/benefit to the economy	Effect on people's basic needs	Contributes to environmental degradation

Stage 2 Group exercise: Prioritising the Samoa Pathway themes

Each participant in the Group applies the criterion and reviews the themes and scores each one of them – 1 being the lowest and 3 being the highest

- Each participant then provides the group with his/her own top 6 to 9 priority themes. **Table 5** provides an example.
- The group takes the average score for each theme and based on those scores identifies top 6 to 9 themes. Refer to **Annex 3** for a template that can be used for the exercise.

Table 5 Example of a Ranking Matrix

Priority theme	Criteria			Mean Score	Prioritised Scoring
	Potential impact on/benefit to the economy	Effect on people's basic needs	Contributes to environmental degradation		
1.Climate change	3	3	2	2.7	2
2.Disaster risk reduction	3	3	3	3	1
3.Social development	3	2	2	2.3	3

¹ A country may choose to do all themes. Alternatively the country may choose to spread out the process over 2 or 3 years and do about 5 to 8 themes a year.

Stage 3 Group exercise: Selecting major issues for each of the thematic areas

- Each group brainstorms and identifies at least 3 issues that contribute to the vulnerability for each of the assigned thematic area.
- Identify the economic, social and environmental dimensions for each of the issues.

For each of the issues of vulnerability identified for the selected thematic areas, identify the corresponding coping mechanisms that have contributed to building resilience. Identify actions at the national, regional and international levels that contribute to the country coping with each of the vulnerabilities.

Countries should use analytical tools to evaluate and prioritize the three most important issues for each priority theme, using the list of generic issues identified in the Samoa Pathway and MSI as a starting point for their discussions. However, countries may also identify other issues including new and emerging issues that they consider to be important.

Refer to **Tables 6 and 7** below for examples. **Annex 3** provides additional information on how to undertake the prioritising and scoring. A template for prioritising and scoring Samoa Pathway themes is also provided in **Annex 5**.

Table 6 Example of issues impacting vulnerability due to climate change			
Vulnerability			
Issues	Dimensions		
	Economic	Social	Environmental
Land degradation and desertification	Size of arable land reduced	Displacement of settlements	Ecological balance affected
Impact on rural livelihoods	Decline in rural livelihoods	Increase in level of indigence	Loss of indigenous plants and animals
Loss in Agricultural productivity	Decline in agriculture's contribution to GDP	Decline in food consumption/calorie intake per capita in affected areas	Reduction in forest cover

Table 7 Example of coping mechanisms (resilience) addressing vulnerability due to climate change			
Resilience			
Issues	Dimensions		
	Economic	Social	Environmental
Land degradation and desertification	Programmes on sustainable land management introduced	# of rural and coastal communities that have implemented initiatives to curtail land degradation	Sustainable land management legislation introduced
Impact on rural livelihoods	Programmes for rural youth and other vulnerable groups in place	Social programmes in place to reduce rural poverty and indigence	Agroforestry programmes introduced
Loss in Agricultural productivity	New cropping systems introduced	Introduction of backyard gardening in affected areas	Afforestation programmes introduced on degraded lands

Step 2: Select criteria for determining vulnerability and resilience for each

The purpose is to select criteria for assessing vulnerability and resilience for the three main issues, identified in step 1, for each of the priority themes to be managed by each group. For vulnerability, these criteria would reflect exposure to exogenous and endogenous risks in terms of the social, economic and environmental dimensions of sustainable development. For resilience, these criteria would reflect the country's coping capacity in terms of actions at the national, regional and global levels that address the potential social, economic and environmental impacts.

Group exercise: Selection of major issues for each thematic area

Each group:

- a. Identifies 3 criteria for each of the themes that it has been allocated
- b. Each of the 3 criteria must have 3 dimensions – economic, social and environmental

An example is provided in **Table 8** below.

Table 8 Sample criteria for climate change				
	Issues	Dimensions		
		Economic	Social	Environmental
1	Land degradation and desertification	Size of arable land reduced	Displacement of settlements	Ecological balance affected
2	Decline in rural livelihoods	Decline in rural livelihoods	Increase in level of indigence	Loss of indigenous plants and animals
3	Decline in agriculture's contribution to GDP	Decline in agriculture's contribution to GDP	Food consumption/calorie intake per capita in affected areas	Reduction in forest cover

Annex 4 provides examples of major issues/vulnerabilities that face SIDS. Examples are also provided of the major issues of resilience identified in the Samoa Pathway. These examples are provided to assist participants conceptualise the pertinent issues surrounding the vulnerabilities and/or resilience of many of the thematic areas in the Samoa Pathway.

For ease of reference and also for ease of tabulation, a template of the consolidated table is provided in **Annex 5**.

Step 3: Select indicators for each criteria

This step seeks to identify indicators for the criteria selected in step 2 for each of the three major issues selected in step 1. These indicators would provide measures of the:

- a. Social, economic and environmental vulnerabilities of each issue; and
- b. Specific resilience measures that would address these social, economic and environmental vulnerabilities through actions at the national, regional and international levels.

- *Note to facilitator* -

An indicator is a “precise metric from identified databases to assess if a target is being met” (UN). According to the Inter-Agency and Expert Group on the Sustainable Development Goal Indicators each indicator should be;

1. Relevant

- The indicator should be linked to the target/theme, policy relevant and applicable at the appropriate level. Indicators for each vulnerability should be linked to a corresponding resilience.

2. Methodologically sound

- Do not restrict to qualitative indicators only; however numeric indicators are desirable as they provide more useful and understandable information
- Selection of indicators for resilience should focus on how a country seeks to prevent, adapt, or lessen the impacts of a particular vulnerability

3. Measurable

- The indicator should be sustainable, high quality and disaggregated. Nature of the issues and availability of disaggregated data should determine type of indicator(s)

4. Easy to communicate and access

- Easy to interpret and communicate and easily accessible: the indicator should be easily and openly accessible to the general public, policy makers and other stakeholders.

5. Limited in number and outcome focused at the global level

- Aim to strike for impact or outcome indicators for both vulnerability and resilience. It is important to distinguish between the different types of indicators. This is particularly important when identifying resilience indicators. Indicators for resilience should be outcome or impact indicators.
- An indicator framework should be reviewed and updated periodically to accommodate methodology development.

Types of indicators

Output indicator: Monitoring indicators which measure progress of the products/goods or services that are the result of an activity/project/ programme.

Outcome indicator: Quantitative or qualitative measure that gives information on the outcome.

Impact indicator: Quantitative or qualitative measure that provides insights on progress made in achieving long term benefits.

Group exercise: selection indicators for the criteria selected in Step 2

The process is as follows:

- The group determines the vulnerability and resilience indicators for each of the criterion selected in step 2.
- For each criterion the group identifies the indicators that provide measures of social, economic and environmental vulnerabilities for each issue.
- The group then identifies the corresponding resilience measures that could be used to determine coping capacity for dealing with each of the social, economic and environmental dimensions, i.e. promoting a coherent approach to decision-making. The resilience measures should include actions at national, regional and global levels to address the three dimensions of sustainable development. Please refer to **Table 9** below for examples.

Table 9 Samoa Pathway thematic area: Disaster Risk Reduction

Table 9 Samoa Pathway thematic area: Disaster Risk Reduction				
Vulnerability			Resilience	
	Examples of criteria	Examples of indicators	Examples of criteria	Examples of indicators
Economic	<ul style="list-style-type: none"> Degree of economic dependence on a sector vulnerable to cyclones/hurricanes and storm surges Level of exposure of economic infrastructure to cyclones/hurricanes and storm surges 	<ul style="list-style-type: none"> % of contribution to GDP by vulnerable sector(s) % of economic infrastructure vulnerable to impacts of cyclones/hurricanes and storm surges 	<ul style="list-style-type: none"> Extent to which mitigation measures are integrated into national development programming 	<ul style="list-style-type: none"> Status of government plans and allocation of resources to manage impacts of cyclones/hurricanes and storm surges % of financial support needed for DRR funded by national budget
Social	<ul style="list-style-type: none"> Vulnerability of population to storm surges Capacity of population to manage risk of storm surges 	<ul style="list-style-type: none"> % of population living in coastal areas vulnerable to storm surges % of population dependent on sector(s) vulnerable to storm surges for livelihoods and food security 	<ul style="list-style-type: none"> Formulation and implementation of community-based disaster management plans Early warning systems for cyclones/hurricanes and storm surges Access to storm shelters for vulnerable populations 	<ul style="list-style-type: none"> Status of CBDRM plans to manage impacts of cyclones/hurricanes and storm surges Status of early warning systems for cyclones/hurricanes and storm surges
Environmental	<ul style="list-style-type: none"> Vulnerability of land and marine resources to storm surges Vulnerability of coastal ecosystems to storm surges 	<ul style="list-style-type: none"> % of coastal ecosystems vulnerable to impacts of storm surges % of groundwater sources vulnerable to salt water intrusion % cover of mangroves that have not been destroyed by anthropogenic causes 	<ul style="list-style-type: none"> Formulation and implementation of integrated coastal zone development plans Extent to which environmental considerations are integrated into DRR and CBDRM plans 	<ul style="list-style-type: none"> Status of integrated coastal zone management plans Status of DRR and CBDRM plans
<p><i>Sources of Data / Information: National statistics, National reports to Hyogo Framework for Action (HFA), Studies, UN reports, HFA website, National and sectoral development plans</i></p>				

Step 4: Assess and rate

This step seeks to develop benchmarks for the indicators developed in step 3 so that each of the indicators can be scored. Each indicator is scored on a scale from 1 (low) to 5 (high). In the case of the vulnerability criterion a higher score indicates a high level of exposure while for the resilience criterion a higher indicator indicates a higher level of resilience.

The process is as follows (an example for one thematic area can be found in **Table 11**, pg.22):

- i. Develop benchmarks for each of the indicators for each criterion.
- ii. Score each of the benchmarks based on a scale of 1 to 5 with (1) being lowest and (5) being the highest. These are the **Benchmark Scores**.
- iii. Review the benchmark scores and identify the **Indicator Score**.
- iv. Take the average of the Indicator Scores. This is the **Composite Indicator Score**. Refer to **Table 12**.

The rating process requires judgment and subjective assessments and should be carried out through multi-stakeholder consultations working in small focus groups.

The scores for each indicator for each dimension for each thematic area then inputted on an Excel Spreadsheet. The layout of this sheet should resemble **Table 10** below.

Table 10 Sample composite Scores for vulnerability and resilience for each thematic area of the Samoa Pathway		
Thematic areas in the Samoa Pathway	Vulnerability Score	Resilience Score
Sustained and sustainable, inclusive and equitable economic growth with decent work for all	3	3
<i>Sustainable tourism (Subtheme of above)</i>	4	3.8
Climate change	4.7	3.1
Sustainable energy	4.2	2.8
Disaster risk reduction ²	2.7	2.4
Oceans and seas	4	2.8
Food security and nutrition	3	2.4
Water and sanitation	4	2.8
Sustainable transportation	4.2	3.2
Sustainable consumption and production	3.8	3.9
Management of chemicals and waste, including hazardous waste	3.8	3.9
Health and non-communicable diseases	4.5	2.3
Gender equality and women's empowerment	2.5	2.3
Social development	4.8	3.9
Biodiversity	4.2	3.1
Invasive alien species	3.2	1.8

² Calculated in table 11 and table 12

Table 11 Identifying benchmarks and rating indicators for vulnerability and resilience

Disaster Risk Reduction										
Vulnerability					Resilience					
	Vulnerability	Indicators	Benchmark	Benchmark Scores	Indicator Score	Resilience	Indicators	Benchmark	Benchmark Scores	Indicator Score
Economic	Degree of economic dependence on a sector vulnerable to cyclones/hurricanes and storm surges	% of contribution to GDP by vulnerable sector(s)	<5%	1		Extent to which mitigation measures are integrated into national development programming	Status of government plans and allocation of resources to manage impacts of cyclones/hurricanes and storm surges	No mention of disaster management plans in national development plans	1	
			5-15%	2				Disaster management plans formulated but not integrated into national policy	2	
			15-20%	3	✓			Disaster management plans formulated & integrated into policy but not funded.	3	✓
			20-25%	4				Disaster management plans formulated & integrated into policy but not fully funded.	4	
			>25%	5				Disaster management	5	

		Composite Indicator Score for Economic dimension; $(3+2)/2= 2.5$				Composite Indicator Score for Economic dimension; $(3+1)/2= 2$				
Social	Vulnerability of population to storm surges	% of population living in coastal areas vulnerable to storm surges	<5%	1		Formulation and implementation of community-based disaster management plans	Status of CBDRM plans to manage impacts of cyclones/hurricanes and storm surges	No CBDRM plans	1	
			5-20%	2				CBDRM plans formulated but not operational	2	✓
			20-50%	3	✓			CBDRM plans partially operational but not funded	3	
			50-80%	4				CBDRM plans operational and funded;	4	
			>80%	5				CBDRM plans fully operational and fully funded	5	
	Vulnerability of population whose livelihoods are affected by storm surges	% of coastal population dependent on sector(s) vulnerable to storm surges for livelihoods and food security	<5%	1		Early warning systems for cyclones/hurricanes and storm surges	Status of early warning systems for cyclones/hurricanes and storm surges	No early warning systems	1	
			5-20%	2				Early warning systems planned at national and regional levels	2	
			20-50%	3	✓			Early warning systems in place but not operational at national and regional levels	3	✓
			50-80%	4				Early warning systems operational at national and regional levels	4	

								but not funded		
			>80%	5				Early warning systems operational and fully funded at national and regional levels	5	
Composite Indicator Score for Social dimension; $(3+3)/2= 3$						Composite Indicator Score for Social dimension; $(2+3)/2= 2.5$				
Environmental	Vulnerability of land and marine resources to storm surges	% of coastal ecosystems vulnerable to impacts of storm surges	<5% of coastal ecosystems vulnerable	1		Formulation and implementation of integrated coastal zone development plans	Status of integrated coastal zone management plans	No CZM plan	1	
			5-20% of coastal ecosystems vulnerable	2				Only partially completed CZM Plan	2	
			20-50% of coastal ecosystems vulnerable	3	✓			Completed CZM plan but not funded	3	✓
			50-80% of coastal ecosystems vulnerable	4				Completed CZM plan and partially funded	4	
			>80% of coastal ecosystems vulnerable	5				The CZM plan is completed and is fully funded	5	
			Vulnerability of coastal ecosystems to storm surges	% of groundwater sources	<5% of groundwater sources vulnerable			1		Extent to which environmental considerations

		vulnerable to salt water intrusion	5-20% of groundwater sources vulnerable	2	✓	are integrated into DRR and CBDRM plans		Environment mentioned in DRR and CBDRM plans	2	
			20-50% of groundwater sources vulnerable	3				Environment included in DRR and CBDRM plans	3	✓
			50-80% of groundwater sources vulnerable	4				Environment integrated into DRR and CBDRM plans	4	
			>80% of groundwater sources vulnerable	5				Environment fully integrated into DRR and CBDRM plans	5	
		% cover of mangroves that have not been destroyed by anthropogenic causes	<5% have been destroyed	1		Extent to which EIAs are undertaken for all coastal development	Status of EIAs for development which impact coastal and marine resources	EIAs are not required	1	
			5-20% have been destroyed	2				EIAs are required but are not well articulated	2	✓
			20-50% have been destroyed	3	✓			EIAs are required and are well articulated	3	

			50-70% have been destroyed	4				The EIAs are mandatory but the recommendations from the EIA are not enforced	4	
			>70% of mangroves destroyed	5				The EIAs are mandatory and the recommendations are enforced	5	
	Composite indicator score for Environmental dimension; $(3+2+3)/3=2.67$					Composite indicator score for Environmental dimension; $(3+3+2)/3=2.67$				

Table 12 Disaster Risk Reduction: Composite indicator scores		
	Vulnerability	Resilience
Economic	2.5	2
Social	3	2.5
Environmental	2.67	2.67
Composite score	$(2.5+3+2.67)/3=2.7$	$(2+2.5+2.67)/3=2.4$

Step 5: Map and justify

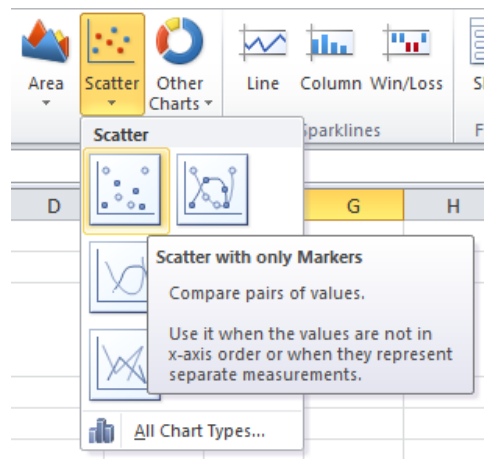
This step seeks to map out the score calculated in step 4 and then to describe and explain the scores for each of the thematic areas; justifying the scores and then identifying ways in which the vulnerability for each of the thematic areas can be mitigated and its resilience profile improved.

This step is made up of two stages:

- i. Stage 1: mapping the vulnerability and resilience scores using the excel spreadsheet from step 4 (table 10).
- ii. Stage 2: discussing the scores.

Group work: Stage 1- Mapping the scores

- 1: Using the Excel spreadsheet from step 4, insert a blank scatter graph as illustrated in [figure V](#) below



	A	B	C	D	E	F	G	H	I	J	K
1	Priority Area	Rating Score	Rating Score								
2		Vulnerability	Resilience								
3	Sustained and sustainable, inclusive and equitable economic growth with decent work for all										
4	Sustainable tourism	3	3								
5	Climate change	4	3.8								
6	Sustainable energy	4.7	3.1								
7	Disaster risk reduction	4.2	2.8								
8	Oceans and seas	2.7	2.4								
9	Food security and nutrition	4	2.8								
10	Water and sanitation	3	2.4								
11	Sustainable transportation	4	2.8								
12	Sustainable consumption and production	4.2	3.2								
13	Management of chemicals and waste, including hazardous waste	3.8	3.9								
14	Health and non-communicable diseases	3.8	3.9								
15	Gender equality and women's empowerment	4.5	2.3								
16	Social development	2.5	2.3								
17	Biodiversity	4.8	3.9								
18	Invasive alien species	4.2	3.1								
19		3.2	1.8								

Figure V Insert blank scatter graph

2: Right click on the blank scatter diagram and from the dropdown menu choose ‘*Select Data*’. Refer to figure VI.

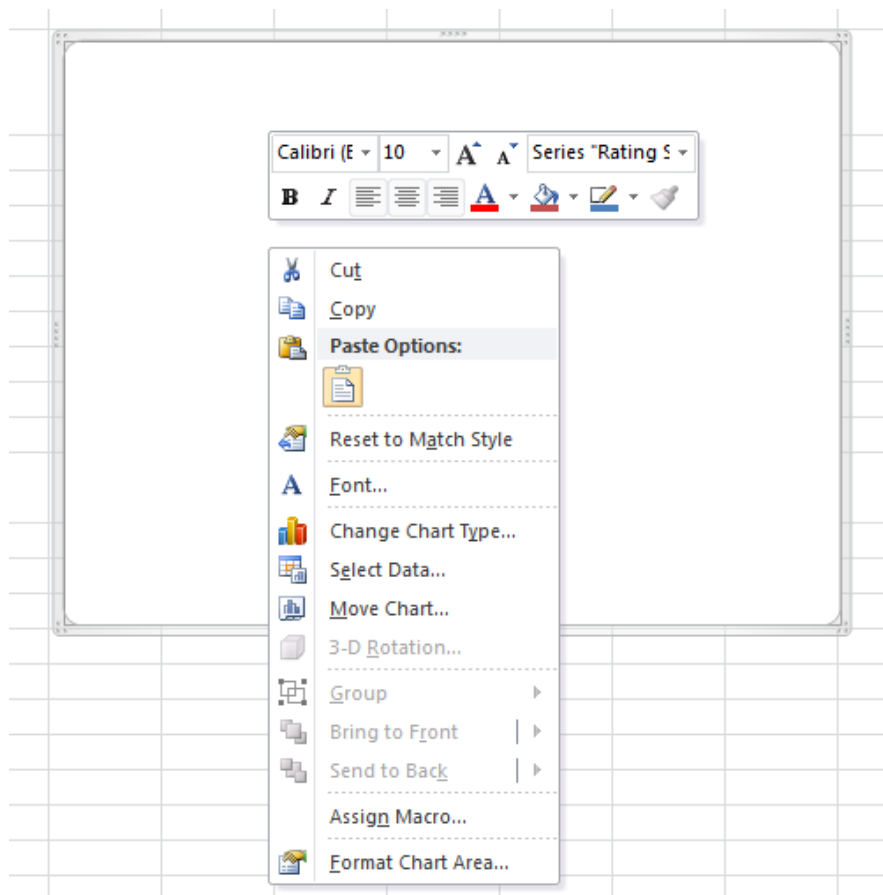


Figure VI Select data

3: From the submenu box click on ‘*Add*’.

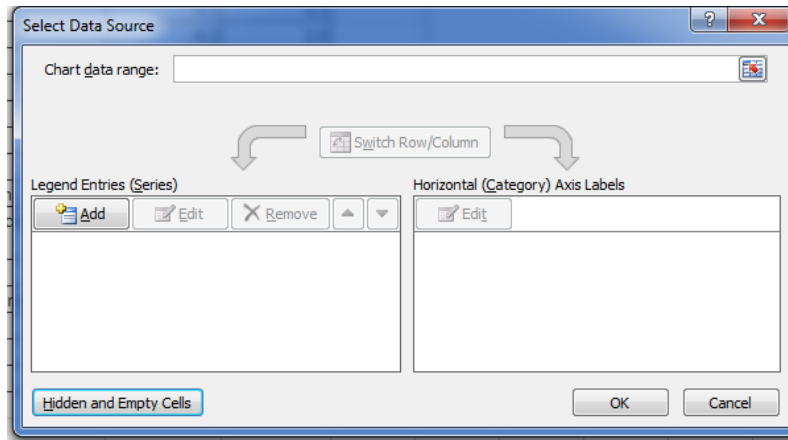


Figure VII Click “Add” from submenu box

- 4: From the pop-up menu add the series started with the first priority area as displayed in figure VIII below

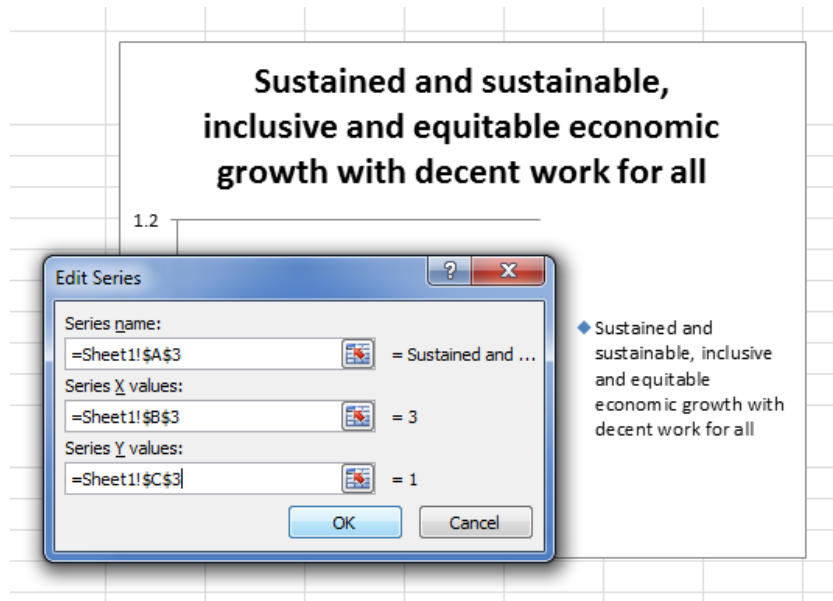


Figure VIII Add series data

- 5: Fix the axis before entering the remaining series i.e. priority areas. Place your cursor on any axis value then right click. From the pop-up menu select ‘Format Axis’ as displayed in figure IX.

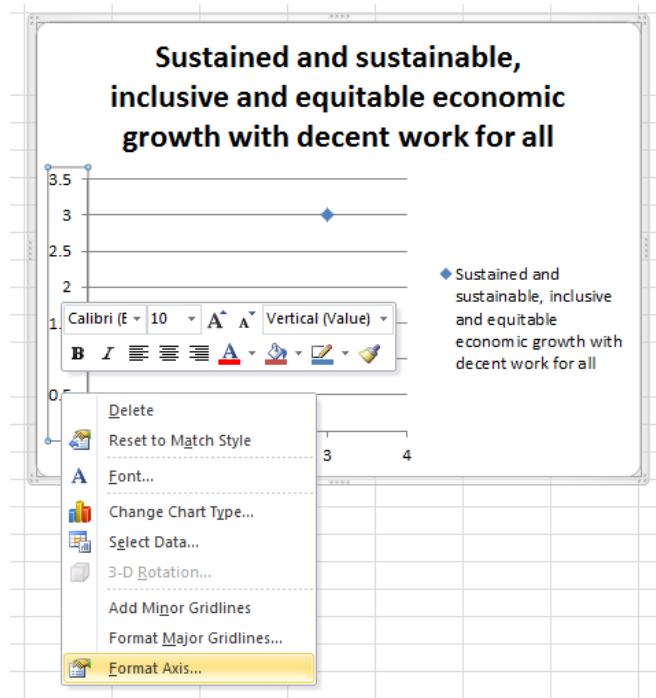


Figure IX Format axis

6: From the 'Axis options' enter the information accordingly as depicted in **figure X**. Be sure to do this for both the x-axis and the y-axis.

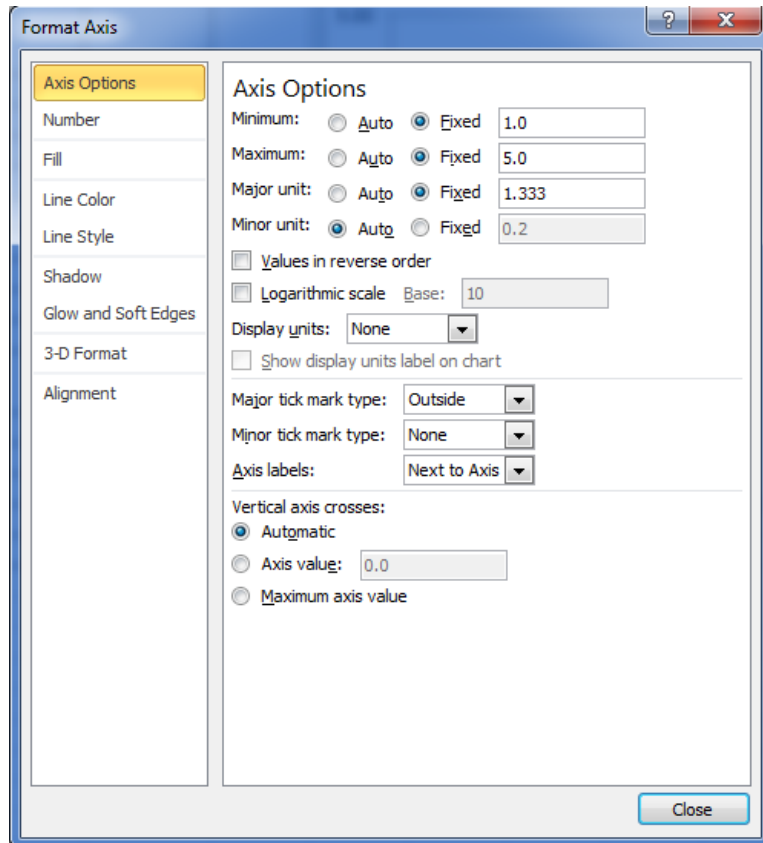


Figure X Format axis options

7: Repeat 2 – 4 above for the remaining ‘Priority Areas’ as demonstrated in figure XI.

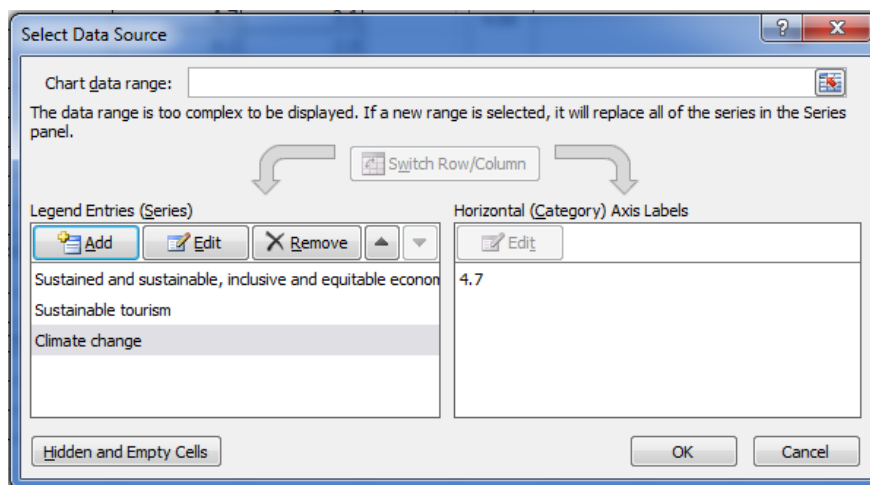
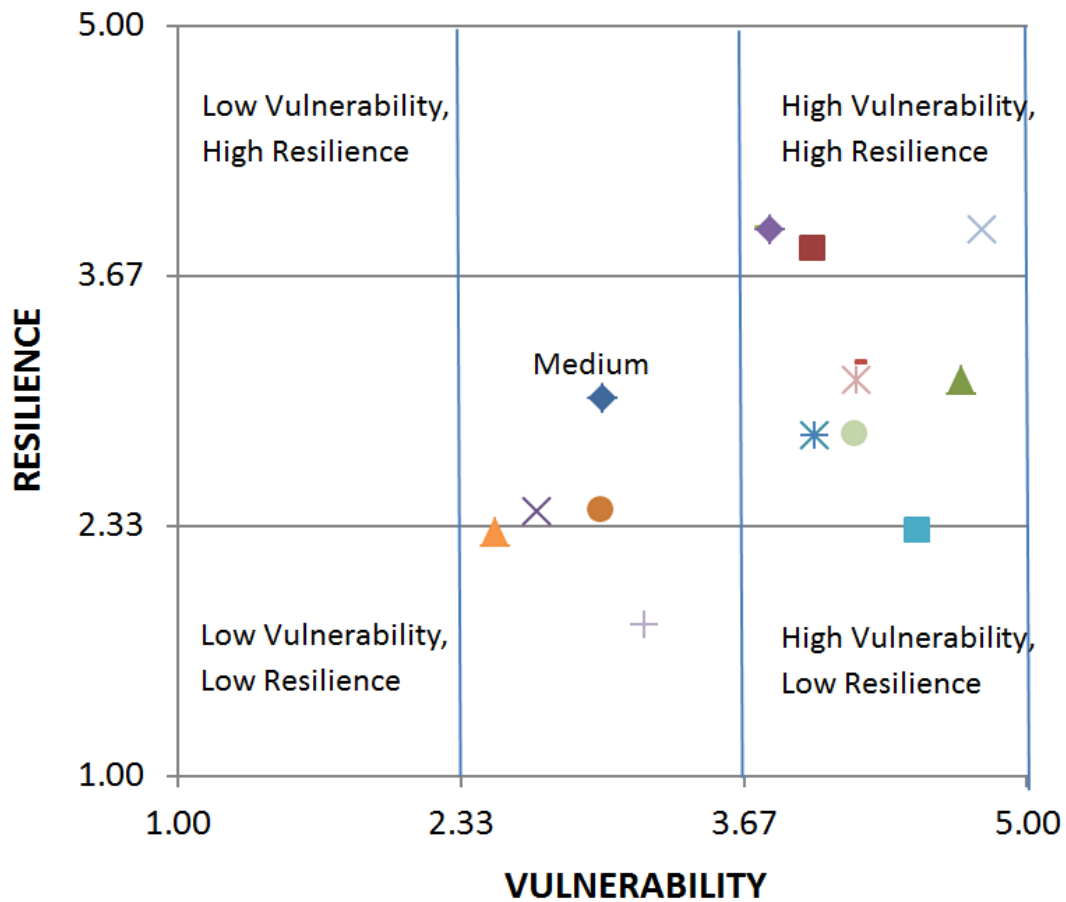


Figure XI Complete each step for remaining priority themes

Figure XII Sample VRCP



- ◆ Sustained and sustainable, inclusive and equitable economic growth with decent work for all
- Sustainable tourism
- ▲ Climate change
- Sustainable energy
- × Disaster risk reduction
- ✱ Oceans and seas
- Food security and nutrition
- + Water and sanitation
- Sustainable transportation
- Sustainable consumption and production
- ◆ Management of chemicals and waste, including hazardous waste
- Health and non-communicable diseases
- ▲ Gender equality and women’s empowerment
- × Social development
- ✱ Biodiversity
- + Invasive alien species

Group work: Stage 2 - Justifying the scores

At this stage, after the map has been created, participants are asked to;

- Justify the choice of priority themes and the major issues identified for each theme.
- Justify the criteria used in scoring the indicators.
- Justify the scoring of the indicators – how you chose the scoring system and the reason for choosing the vulnerability and resilience scores for the indicators.

The VRCP Map is a numerical score for each priority theme based on a qualitative assessment, which is presented graphically. In this chart, the vulnerability scores are represented on the x-axis, and those for resilience on the y-axis. The point at which the mean scores for vulnerability and resilience intersect indicates the situation of a country in terms of its vulnerability and resilience for a particular thematic area. The chart is divided into nine sections of varying levels of vulnerability and resilience. By doing this for each of the thematic areas, it is possible to build up a VRCP – figure XII illustrates this for an imaginary country for the Samoa Pathway thematic areas.

It is hoped that the scores and the map can assist in decisions countries make in prioritizing certain thematic areas in terms of resource allocation, requesting development assistance, etc. For instance, a country may choose to prioritise those areas which indicate a high vulnerability score and a low resilience score. In the example above, health and non-communicable diseases appears to have the highest vulnerability with lowest resilience, indicated by its position on the chart.

Group Work: Stage 3 - Discussing the scores

Referring to the diagram developed in Stage 1 summarise the vulnerability and resilience scores for each of the priority themes using a narrative to justify the scores and to formulate a VRCP based on these overall scores.

The significance of the sample VRCP Map is that it identifies within a single graph the vulnerability and corresponding resilience scores – based on a scale of 1 to 5, with 5 being the highest score - for each of the thematic areas.

As an example and referring to figure XII, the vulnerability score for health and NCDs is 4.5 while resilience is only 2.3. In the case of this imaginary SIDS, the rate of diabetes and heart diseases, for instance, is very high as is obesity. There also continues to be an outbreak of a mosquito borne disease which many in that country seem to think could be the result of climate variability. The health care service is underfunded and the primary health care facilities are understaff and under equipped. All of this has contributed to the health sector being very vulnerable. The resilience of the sector is low because of the inadequate levels of financing,

other externalities caused by climate variability, the lack of a strategic plan for strengthening the health sector, a significant gap between the health needs of the population and the level of services provided by the public sector, inter alia.

Similarly, the vulnerability for climate change is 4.7 while the resilience is 3.1. Like all SIDS, this imaginary SIDS is also very exposed to climate variability, sea level rise and climate change resulting in longer dry seasons and shorter but more intensive rainfall. There has also been increased storm surge activity. However the SIDS participates very actively in all UNFCCC negotiations and has received financing from GEF and from the Convention Secretariat to undertake many enabling activities which have resulted in sound policy and legal frameworks. The SIDS has established a Climate Adaptation Financing Facility within the national development bank to allow for private enterprises and households to apply for low interest financing for adaptation activities. The country has also received financial and technical assistance from a number of other donor agencies for undertaking many sectoral and community based adaptation activities which have focussed on livelihoods protection. All of this has contributed to an increased resilience to climate change. Yet because of the nature of climate change the country will always remain vulnerable.

Next Steps

Once the VRCP has been prepared, it should be presented at a National Consultation with participants from the public and private sectors, the NGO community and Civil Society. The consultation can also be used to determine those areas of resilience that need strengthening in order to reduce their respective vulnerabilities. The consultation is also an opportunity to prioritise those areas that need immediate attention. The VRCP should be made a public document that is readily available for national planning and development.

Given the importance of the VRCP it would be useful to present it to the Cabinet Ministers for their review and endorsement. Once it has been endorsed then the VRCP should also be shared with the international donor community and should be used as an important reference document when negotiating with donors or when donors are preparing the country's programming strategy.

A country may opt to prepare a VRCP for only a selected number of thematic areas. In this instance, the country may decide to undertake a VRCP for another cluster of thematic areas the following year(s). It is however important that there is a regular review and updating of the VRCP. It is recommended that the review and updating is done at least once every 3 to 5 years. The importance of the review is that it allows a country to monitor its various programmes and strategies aimed at building resilience, in order to ascertain their effectiveness and/or the gaps that still exist.

Annex 1

Assembling data sources and reports; and the VRCP Team

During the preparatory phase, all relevant information, data sources, and reports on each of the thematic areas the Samoa Pathway should be assembled in a central location. National plans and other sectoral programming documents should also be resourced. These will compliment, where necessary, the baseline data that will be assembled prior to the beginning of the VRCP.

The collections of relevant background documents and reports will be assisted by an understanding of the major issues surrounding each of the Samoa Pathway thematic areas.

Assembling the team - who should be involved in the formulation of a VCRP?

Before a country starts to formulate a VRCP, it is important to decide who should be involved in the process.

As the VRCP assessment process encompasses the whole of the Samoa Pathway, covering the social, economic and environmental dimensions of sustainable development, it is crucial to have an inclusive assessment process that addresses all the different priority themes of the Samoa Pathway adequately. Therefore, the team preparing the VCRP must be familiar with all the themes of the Samoa Pathway so that team members can pool their ideas and knowledge. At a minimum, a multidisciplinary team should consist of individuals with intersectoral and inter-agency experience or expertise.

Members of the VRCP team should:

- i. Be familiar (through work experience or study) with most of the themes of the Samoa Pathway;
- ii. Understand the national (and sectoral) development planning process and related documents;
- iii. Have a good knowledge of one or more sector(s) relevant to the Samoa Pathway;
- iv. Have an in-depth knowledge of their respective field of work/sector/agency;
- v. Be a professional or middle management or higher level;
- vi. Have a good knowledge of the global environment/socio-economic/socio-political issues;
- vii. Have some knowledge of other disciplines beside their respective one
- viii. Be representatives from Government/civil society /private sector or academia

Ideally, team members should each have expertise or experience in more than one of the Samoa Pathway thematic areas, and should be drawn from the major stakeholders – government, civil society, academia and the private sector. This will require representation by all major stakeholders so that all groups are fully engaged in the assessment process and are able to make

contributions³. This could be best achieved by selecting a small core team of about 10 people to guide the assessment. The core team of primary stakeholders should be supported by focus groups of secondary stakeholders that would concentrate on clusters of priority themes thus allowing a wider range of stakeholders to contribute their expertise and experience to the VRCP formulation. The team should be supported by the lead agency which will be responsible for coordinating and facilitating the preparation of the VRCP.

A good approach for selecting the team members is the conduct of a stakeholder analysis. The aim of multi-stakeholder process is to promote better decision making by ensuring that the views of the main actors concerned about a particular decision are heard and integrated at all stages through dialogue and consensus building. The process takes the view that everyone involved in the process has a valid view and relevant knowledge and experience to bring to the decision making. Because of the inclusive and participatory approaches used, stakeholders have a greater sense of ownership for decisions made. More information on this process is provided below.

Stakeholder identification and analysis

Stakeholder analysis is the identification of the key stakeholders who should be part of the interdisciplinary and multi-agency team undertaking the VRCP for the country. Without the participation of all stakeholders, it will be impossible to develop a VRCP that is meaningful. The intention is to make the development of the VRCP a participatory process that relies on multi-stakeholder consultations to ensure that all sectors of society in a country – government, communities, civil society and the private sector – are fully engaged in the assessment process and are able to make contributions. Since the assessment process encompasses the whole of the Samoa Pathway, covering the social, economic and environmental dimensions of sustainable development, it is crucial that all sectors are involved in the assessment process so that all the different priority themes of the Samoa Pathway are addressed adequately.

This exercise is completed in two steps: stakeholder identification and consolidating the list of stakeholders.

The stakeholder identification can be undertaken by the Lead Agency which is responsible for coordinating and facilitating the formulation of the VRCP. If necessary the Lead Agency may wish to seek the assistance of a couple of other sectoral agencies. For instance, if the Lead Agency is a Planning and or Development Agency, consideration may be given to bringing in other agencies which are competent in social and environmental issues.

There is collective brainstorming and a listing of all the stakeholders that possibly could be involved in the VRCP exercise. These stakeholders are then classed into primary and secondary

³ Agenda 21, the main outcome of UNCED provides guidance on major groups; see: <http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

stakeholders. Primary stakeholders are those who are actively involved in planning, and implementing programmes, projects and other interventions relevant to any of the Samoa Pathway thematic areas. Secondary stakeholders are those who are not directly involved in planning and implementation but who have an interest in any of the Samoa Pathway thematic themes; they may possess information, reports and other documents necessary for the VRCP assessment.

Preparing the VRCP is a rather intense process and therefore every attempt should be made to keep the Team small but representative of the Samoa Pathway thematic areas. Thus a second review of the list of primary stakeholders should be undertaken to ensure that only the necessary agencies and persons have been selected. Those primary stakeholders who become deselected join the ranks of the secondary stakeholders. The primary stakeholders in the final list will become the core team undertaking the VRCP. The secondary stakeholders become important resource agencies and persons.

The purpose of this exercise is to work in small groups, encouraging creative and flexible thinking to quickly identify a large number of possible stakeholders who should be involved in implementing sustainable development in their country.

Procedure

- 1) Break into groups that share a common interest, such as social, economic or environmental interests.
- 2) Each group should identify a facilitator who will moderate group discussions
- 3) Each interest group should brainstorm for 10 minutes.
- 4) Ask group members to list all possible stakeholders that come to mind without censorship.
- 5) Write down all names on a white board, using two people if necessary to capture all the ideas.
- 6) Encourage people to build on each other's ideas.
- 7) At the end of the session, take five minutes to analyse the ideas by arranging stakeholders into groups of common interests.
- 8) Summarize the results by classifying them into major groups, such as civil society, government and private sector.
- 9) Using this list of stakeholders, each group discusses the interests of each group of stakeholders. These could include any current or potential involvement in any of the thematic areas of the Samoa Pathway and what type of direct or indirect influence the stakeholder may have over these areas.
- 10) Each group draws a circle in the middle of a large sheet of paper to represent the Samoa Pathway.

Consolidating the lists of stakeholders

- a) When all groups have completed their discussions, bring everyone together and ask each group to present and explain their selection of stakeholders
- b) Discuss the different groups of stakeholders presented by the groups, looking for commonalities and differences.
- c) Group the stakeholders into two groups with one group for those stakeholders who have an interest in the VRCP and another group for those stakeholders who have influence and can influence the outcome of the VRCP.
- d) On a white board, draw a matrix with the names of all stakeholder groups (from the contributions of all interest groups) down the left-hand side. In the next two columns, place a cross against all stakeholders who have influence and interest and other who have either interest or influence. The group of stakeholders who have both interest and influence will become the primary stakeholders while all others will be secondary stakeholders.
- e) The primary stakeholders will be involved in the formulation of the VRCP while the secondary stakeholders will become part of technical/thematic committees and will be useful resource persons when needed.

The journey for SIDS

SMALL ISLAND DEVELOPING STATES (SIDS)

- 1994- Barbados Programme of Action (BPoA) for the Sustainable Development of SIDS – 1st international conference on SIDS
- 2005 – Mauritius Strategy for the further Implementation (MSI) of the BPoA – 2nd international conference on SIDS
- 2010 – MSI + 5 (High Level review at UNGA)
- 2012 – Rio +20 THE FUTURE WE WANT
- 2014 – S.A.M.O.A. Pathway – 3rd international conference on SIDS
- Post-2015 Agenda / SDGs

An overview of the VRCP

The purpose of the VRCP:

- Enables SIDS to assess progress in addressing vulnerabilities in each of the thematic areas of the SAMOA Pathway; and
- Data from VRCP is useful for identifying interventions to develop and/or strengthen resilience
- Relevant definitions – vulnerability and resilience. It may be useful to ascertain extent to which participants understand the concepts by first asking them to provide the definitions
- Usefulness of the VRCP methodology
- Challenges of the VRCP methodology
- Overview of the VRCP methodology as provided in the manual. Stress the importance of multi-stakeholder and participatory consultations through the process.

How does the VRCP add value?

The most important contribution of the VRCP is that it provides SIDS with a clear pictorial presentation of the vulnerability-resilience nexus that uses existing information and data, in particular disaggregated data and can aid decision-making. The VRCP methodology is intended to complement on-going local, national and international processes rather than to duplicate or replace these initiatives.

At the **local level**, the VRCP is a tool for:

- Communities and local governments to select appropriate practical responses to their vulnerabilities within the framework of government policies to enhance resilience.
- Identifying lessons and best practices and building up a knowledge base of what works and what does not.

At the **national level**, the VRCP is a tool for:

- Decision-making and implementation based on sound information and analysis for evidence-based policy formulation.
- Periodic self-assessment of a country's progress towards implementation of the SAMOA pathway.
- Using multi-stakeholder processes to help identify key indicators at the national level that would then help the country to monitor their progress towards the SDGs.

Benefits of the VRCP

- Easy to understand results that are accessible to all stakeholders
- Systematic process of self-monitoring that can be used to monitor progress over time
- Visual presentation gives a clear picture
- Selection of indicators that reflect social, economic and environmental dimensions and the linkages between them
- Brings together indicators from a wide range of sources used for various purposes, providing a framework for integrating existing knowledge on indicators
- Possible to integrate crosscutting issues such as gender and good governance into the assessment
- Provides snapshot of both vulnerability and resilience and the links between them
- SIDS can tailor the VRCP to their own special situation, issues and concerns
- Enables SIDS to identify best practices that can be applied within the country and shared with other countries where common vulnerabilities exist

Annex 3 Tool for ranking priority Samoa Pathway themes

Brainstorming

This tool can actually be used at various steps of the VRCP process: identifying issues for each priority theme (Step 1); selecting criteria (Step 2); and identifying indicators (Step 3). The aim is to generate a large number of ideas quickly and to encourage creative and flexible thinking.

Procedure

- 1) Choose a facilitator
- 2) Choose a specific timeframe – for example, five or 10 minutes.
- 3) Ask participants to call out ideas related to the problem or issue that comes to mind without censorship and as fast as possible. Do not allow people to discuss either their own or other people’s contributions.
- 4) Write all ideas down on the white board, using two people if necessary to capture all the ideas.
- 5) Encourage people to build on each other’s ideas.
- 6) At the end of the session, take about 15 to 20 minutes to analyze the ideas by grouping them into categories that help to further define the problems, causes or solutions.
- 7) Summarize the results by drawing out the main conclusions, writing them up on the white board.

Ranking exercise for selecting priority themes

The aim of this exercise is to help a group rank the priority themes of the Samoa Pathway in order of importance for their country. The tool can also be adapted for use in the other steps of the VRCP methodology, including identifying the three major issues for each country for each of the priority themes and for selecting indicators for the criteria that are identified for each of the major issues.

Procedure

- 1) List the priority themes of the Samoa Pathway and agree on three criteria that will be used to rank them in order of importance for a country. The criteria could include relevance for the country or constraint to sustainable development. Brainstorming can provide the initial ideas for these criteria.
- 2) On the board, list the Samoa Pathway themes down one side and the criteria along the top.
- 3) Ask the group to decide on the scoring system – for example, from 1 to 3, with 1 being not important, 2 a priority and 3 a high priority.
- 4) Consider each theme in terms of the criteria and allocate a score for each theme and each criterion. Allow the group to discuss the score to be given to each box.
- 5) Calculate the scores for each theme and write down the mean in the last column. Discuss these either in the larger group or in smaller groups.
- 6) Rank the different themes in order of importance.

Example of a ranking matrix

Priority theme	Criteria			Mean score
	Relevance to country	Constraint to sustainable development	Impact on development	
Climate change	3	3	2	2.5
Food Security and Nutrition	3	3	3	3
Oceans and Seas	3	2	2	2.3

Template for prioritising and scoring Samoa Pathway themes

Thematic Areas in the Samoa Pathway	Participant					Average Score	Ranking
	1	2	3	4	5		
Sustained and sustainable, inclusive and equitable economic growth with decent work for all							
Sustainable tourism (<i>Subtheme of above</i>)							
Climate change							
Sustainable energy							
Disaster risk reduction							
Oceans and seas							
Food security and nutrition							
Water and sanitation							
Sustainable transportation							
Sustainable consumption and production							
Management of chemicals and waste, including hazardous waste							
Health and non-communicable diseases							
Gender equality and women's empowerment							
Social development							
Biodiversity							
Invasive alien species							

Annex 4 Samoa Pathway priority themes, background and illustrative examples of vulnerabilities and resilience measures

Theme	Overview	Examples of Vulnerabilities	Recommended resilience measures for vulnerabilities in the Samoa Pathway
<p>Sustained and sustainable, inclusive and equitable economic growth, with decent work for all</p> <p><i>-sustainable tourism</i></p>	<p>Economic growth and the job creation in Small Island Developing States (SIDS) have been hindered by various factors - the global economic crisis, plunge in foreign direct investment, trade imbalances, increased indebtedness, the lack of communication technology infrastructure networks, and limited human and institutional capacity. Promoting sustainable tourism in SIDS is crucial as it is one of the main economic pillars for many SIDS.</p>	Increased indebtedness	Encourage traditional and innovative approaches to responsible borrowing and lending; and debt sustainability.
		Limited human and institutional capacity	Investments in formal and non-formal education and training. Also to build capacity and increase the competitiveness and social entrepreneurship of micro, small and medium-sized enterprises and State-owned enterprises.
		Declining foreign direct investment	Create sound macroeconomic policies and sustainable economic management, fiscal predictability, investment and regulatory certainty.
		Lack of adequate transportation, energy and ICT infrastructure networks	Enhance the enabling environment in order to attract more public and private investments by building and maintaining appropriate infrastructure such as roads, ports, transportation, electricity and ICT.
		High youth unemployment	Promote and enhance the use of information and communications technologies for, inter alia, education, the creation of employment, in particular youth employment.
<p>Climate Change</p>	<p>Climate change has significant adverse impact on Small Island Developing States - damages coral reefs; alters the distribution of zones of upwelling and affects both subsistence and commercial fisheries production; affects vegetation; saline intrusion and may adversely affect freshwater resources. Increased frequency and intensity of storms that may result from climate change will also have profound effects on the economies and environments of the</p>	<p>Extreme weather events, droughts, sea-level rise, coastal erosion and ocean acidification.</p>	<p>Build resilience to impacts of climate change and improve adaptive capacity through the design and implementation of climate change adaptation measures appropriate to respective vulnerabilities and economic, environmental and social situations.</p>

	SIDS.		
Sustainable energy	Due to remoteness of the Small Island Developing States (SIDS), they highly depend on imported fossil fuels as their major source of energy. SIDS are faced with challenges on accessibility to modern energy services, energy efficiency and economically viable and environmentally sound technology.	Dependence on imported fossil fuels	Diversify energy sources; promote energy efficiency and foster sustainable energy systems based on all energy sources, in particular renewable energy sources.
		Limited access to affordable modern energy services including renewable energy and energy efficient technologies.	Develop integrated approaches and innovative energy road maps which take into account social, environmental and economic considerations, as well as access to energy for the poor and people in remote areas.
Disaster risk reduction	Small Island Developing States (SIDS) are susceptible to natural disasters, for which some effects are exacerbated by climate change. It is thus significant for SIDS to enhance their resilience and preparedness to achieve sustainable development through raising awareness amongst their citizens and strengthening monitoring and prevention for disasters.	Increased intensity of natural disasters	Gain access to technical assistance and financing for early warning systems, disaster risk reduction, risk assessment and post-disaster response and recovery.
Oceans and Seas	SIDS dependence on coastal and marine resources for their livelihood and food security has left them highly vulnerable due to the degradation of coastal habitats through pollution as well as the exploitation of natural resources. Nevertheless, SIDS have played a leadership role in advocating for global efforts to promote the conservation, sustainable use and management of oceans and seas.	Environmental implications from oil spills	Protect coral reefs and other vulnerable marine ecosystems through the development and implementation of comprehensive and integrated approaches for the management and the enhancement of their resilience.
		Unsustainable fishing	Support the sustainable development of small-scale fisheries, improved mechanisms for resource assessment and management and enhanced facilities for fisheries workers

Food security and nutrition	SIDS depend on imported food due to their remoteness, which makes them particularly vulnerable to price volatility and fluctuating availability of food. Therefore, it is crucial for SIDS to ensure the right of everyone to access safe, sufficient and nutritious food through sustainable agriculture, sustainable fisheries, and sustainable aquaculture. In addition, promotion of health food production and consumption is important to reduce risks by an unhealthy diet.	Fluctuating availability of food imports	Secure year-round access to sufficient, safe, affordable, diverse and nutritious food
		Excessive price volatility of food imports	Promote open and efficient domestic markets
Water and sanitation	Challenges remain for Small Island Developing States in the area of freshwater resources - water pollution, the overexploitation of surface, ground and coastal waters, salinization, drought, soil erosion, inadequate water and wastewater treatment, and the lack of access to sanitation and hygiene.	Inadequate water and wastewater treatment and the lack of access to sanitation and hygiene	Develop institutional and human capacities for integrated management of water resources
		Saline intrusion	Improve water-use efficiency and eliminate over-extraction, especially of groundwater, and mitigate effects of saltwater intrusion.
Sustainable transport	Small Island Developing State face development challenges due to their geographic remoteness and smallness of economies. In this context, sustainable transport can enhance economic growth, promote trade opportunities and improve accessibility.	High transport costs	Increase energy efficiency in the transport sector
		Lack of infrastructure	Develop viable transportation arrangements, including improved air, land and sea transport policies that take a life-cycle approach to the development and management of transport infrastructure

Sustainable consumption and production	Sustainable consumption and production is an essential requirement for sustainable development. Although developed countries are expected to take the lead, it is important to take into account the special needs of the SIDS and to ensure that their development is not impeded.		Develop and implement programmes on sustainable consumption and production, with emphasis on micro, small and medium-sized enterprises, sustainable tourism, waste management, food and nutrition, lifestyles.
Management of chemicals and waste, including hazardous waste	As the urban population of Small Island Developing States (SIDS) continues to grow significantly, the need for extensive waste management systems has like-wise increased. Given SIDS' limited land areas, and landfills acting as the primary method of waste, their capacity to manage waste leaves them at risk to potential environmental damage and public health risks.	Sound disposal of chemical and hazardous waste	Strengthen national mechanisms for the management of waste, including chemical and hazardous waste, ship- and aircraft-generated waste and marine plastic litter
		Environmental hazards	Strengthen management of specific risks, including control programmes for chemical and other toxic and environmental events
Health and non-communicable diseases	Health is a precondition for and an outcome and indicator of all three dimensions of sustainable development. However, an increasing trend of communicable and non-communicable diseases is a serious threat globally, and poses a great challenge to Small Island Developing States with limited capacity to cope with it.	Communicable and non-communicable diseases	Develop and implement comprehensive, whole-government multi-sectoral policies and strategies for the prevention and management of diseases.
Gender equality and women's empowerment	Gender equality, women's empowerment and the full realization of human rights for women and girls have a transformative and multiplier effect on sustainable development.	High rates of unemployment especially among women	Strengthen women's economic empowerment and ensure equal access to full and productive employment and decent work

Social development -Culture and Sport -Promoting peaceful societies and safe communities -Education	<p>Social development, as one of the three dimensions of sustainable development, is crucial to ensuring development progress by Small Island developing States.</p> <p>-SIDS' rich culture is an important driver for their sustainable development.</p> <p>-The sustainable development of SIDS can be negatively affected by crime and violence. In particular, the lack of sustainable livelihoods and opportunities for further education and the breaking down of community support structures can lead to increasing numbers of young men and women becoming involved in violence and crime.</p> <p>-Equal access to education is an essential condition for achieving sustainable development.</p>	<p>Crime and violence, including conflict, gang and youth violence, piracy, trafficking in persons, cybercrime, drug trafficking and transnational organized crime.</p>	<p>Enact and use legislation that prohibits trafficking, promote strong institutions and improve protection mechanisms to ensure adequate care for victims of sex trafficking and forced labor</p>
		<p>Lack of opportunities for further education</p>	<p>Increase investment in education, training and skills development for all in particular youth and girls and the most vulnerable, in particular persons with disabilities</p>
		<p>Break down of community support structures</p>	<p>Conserve, promote, protect and preserve natural, tangible and intangible cultural heritage practices and traditional knowledge</p>
Biodiversity <i>- Desertification, land degradation and drought</i> <i>- Forests</i>	<p>SIDS have extraordinary marine and terrestrial biodiversity that in many cases is fundamental to their livelihoods and identity. However, their valuable biodiversity and the ecosystem services it provides are at grave risk due to environmental degradation. Addressing desertification, land degradation and drought is a significant challenge for SIDS; for their food security and nutrition, climate change adaptation, and protection of biodiversity.</p>	<p>Major livelihood dependence on biodiversity</p>	<p>Conserve biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources</p>
		<p>Desertification caused by deforestation</p>	<p>Achieve appropriate and effective reforestation, restoration and afforestation</p>
<i>Invasive Alien species</i>	<p>Invasive alien species pose a threat and undermine the efforts of Small Island Developing States to protect biodiversity and livelihoods, preserve and maintain ocean resources and ecosystem resiliency enhance food security and adapt to climate change.</p>	<p>Threat to agriculture and biodiversity</p>	<p>Improve efforts to eradicate and control invasive alien species, including through the provision of support for research on and the development of new technologies</p>

Annex 5: Consolidated matrix of criteria for selected themes

Criteria	Thematic Areas in the Samoa Pathway	Economic Dimension	Social Dimension	Environmental Dimension
	<i>Sustained and sustainable, inclusive and equitable economic growth with decent work for all</i>			
1				
2				
3				
	<i>Sustainable Tourism</i>			
1				
2				
3				
	<i>Climate Change</i>			
1				
2				
3				
	<i>Sustainable energy</i>			
1				
2				
3				
	<i>Disaster risk reduction</i>			
1				
2				
3				
	<i>Oceans and Seas</i>			
1				
2				
3				
	<i>Food security and nutrition</i>			
1				
2				
3				
	<i>Water and sanitation</i>			
1				
2				
3				
	<i>Sustainable transportation</i>			
1				
2				
3				
	<i>Sustainable consumption and production</i>			
1				

2				
3				
	<i>Management of chemicals and waste, including hazardous waste</i>			
1				
2				
3				
	<i>Health and non-communicable diseases</i>			
1				
2				
3				
	<i>Gender equality and women's empowerment</i>			
1				
2				
3				
	<i>Social development</i>			
1				
2				
3				
	<i>Biodiversity</i>			
1				
2				
3				
	<i>Invasive alien species</i>			
1				
2				
3				

Annex 6 Historical background

The 1994 Barbados Programme of Action (BPoA) for the sustainable development of Small Islands Developing States (SIDS) is the blueprint for addressing the vulnerabilities of SIDS. The BPoA outlined a multidisciplinary and cross-sectoral programme detailing priority actions to respond to the special challenges faced by SIDS. These commitments were reaffirmed through the 2005 Mauritius Strategy for the Further Implementation (MSI) of the BPoA.

In 2014 the Samoa⁴ Pathway adopted at the Third International Conference on Small Island Developing States and subsequently by the 69th UN General Assembly (A/CONF.223/3) reaffirmed the role that data and statistics play in development planning in small island developing States and stressed the need to support their efforts in strengthening the availability and accessibility of their data and statistical systems, in accordance with national priorities and circumstances, and enhance their management of complex data systems; and in improving the collection, analysis, dissemination and use of disaggregated data in a systemic and coordinated manner at the national level.

The Samoa Pathway also called upon the greater use of the national statistics and development indicators of SIDS, as well as underlined the importance of supporting sustainable development statistics and information programme for small island developing States. Of particular relevance to the present Guidelines is how the Samoa Pathway made the specific reference to, and urged for, the elaboration of appropriate indices for assessing the progress made in the sustainable development of SIDS that better reflect their vulnerability and guide them to the development of vulnerability-resilience country profiles in relation to a) more informed policies and strategies for building and sustaining long-term resilience; b) strengthening national disaggregated data and information systems; and c) enhanced analytical capabilities for decision-making and the tracking of progress.

The VRCP addresses the vulnerability-resilience nexus and consists of an assessment of a country's vulnerabilities and its capacity to cope with these vulnerabilities. The vulnerability assessment is based on both qualitative and quantitative indicators and indices that reflect a country's vulnerabilities to threats in terms of the three dimensions of sustainable development: environmental, economic and social. The resilience assessment evaluates the measures that strengthen the coping capacity of the country to prevent, adapt to, or mitigate these exogenous and endogenous risks and threats for each of the three dimensions of sustainable development in term of actions at three levels: national, regional and international.

There are relatively few examples, in the literature, of how the models developed over the last 3 decades might work as practical tools to aid decision-making and planning by SIDS themselves. The most important vulnerability resilience framework developed to date is that formulated by Lino Briguglio, his recent publication being in 2014⁵. This framework proposes a revised vulnerability/resilience framework, building on the work of Briguglio et

4 Samoa stands for SIDS Accelerated Modalities of Action

5 Briguglio, Lino, 2014. A Vulnerability and Resilience Framework for Small States. University of Malta

al.6, who defined vulnerability in terms of inherent features which render countries exposed to external shocks, and resilience in terms of policy-induced measures that enable countries to minimize or withstand the harmful effect of such shocks. The juxtaposition of vulnerability and resilience, as measured by the vulnerability and resilience indices, would indicate the overall risk of an economy being harmed by external shocks. The major implication of the vulnerability/ resilience framework is that small states can succeed economically in spite of their economic vulnerability if they adopt policies conducive to good economic, social, political and environmental governance.

Other conceptual frameworks deal with specific areas such as hazards and disasters, global climate change or identifying vulnerabilities in terms of Least Developed Country (LDC) status. The Environmental Vulnerability Index developed by SOPAC⁷ for instance was designed to reflect the extent to which the natural environment of a country is prone to damage and degradation. It does not address the vulnerability of the social, cultural or economic environment. Similarly, the Social Vulnerability Index, created by Cutter et al.⁸ provides scientific basis for disaster and hazard reduction policies through the development of methods and metrics for only analyzing societal vulnerability and resilience to environmental hazards and extreme events. For additional information on vulnerability-resilience frameworks refer to **Annex 1**.

6 Briguglio, L., Cordina, G., Vella, S., & Vigilance, C. (2010). Profiling vulnerability and resilience: A Guidelines for small states. Commonwealth Secretariat and Islands and Small States Institute of the University of Malta

7 SOPAC 2004. "Building Resilience in SIDS: The Environmental Vulnerability Index". SOPAC-UNEP, 16 pp

8 Cutter, S. et al 2009. "Social Vulnerability to Climate Variability Hazards: A Review of the Literature". Final Report to Oxfam America, 1-44