

Organisation of African,  
Caribbean and Pacific States  
(OACPS)



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**REFERENCE ACP/84/080/23Rev.1Final**

**Brussels, 12 May 2023**

**INITIAL SUBMISSION BY THE ORGANISATION OF AFRICAN,  
CARIBBEAN AND PACIFIC STATES (OACPS<sup>1</sup>) ON THE  
PRELIMINARY RESULTS OF THE UNITED NATIONS HIGH-LEVEL  
PANEL OF THE MULTIDIMENSIONAL VULNERABILITY INDEX**



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<sup>1</sup> OACPS Members: Angola, Antigua and Barbuda, Belize, Cabo Verde, Comoros, Bahamas, Barbados, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo (Brazzaville), Congo (Kinshasa), Cook Islands, Côte d'Ivoire, Cuba, Djibouti, Dominica, Dominican Republic, Eritrea, Eswatini, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Republic of Guinea, Guinea-Bissau, Equatorial Guinea, Guyana, Haiti, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia, Mozambique, Namibia, Nauru, Niger, Nigeria, Niue, Palau, Papua New Guinea, Rwanda, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Solomon Islands, Samoa, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, Sudan, Suriname, Tanzania, Timor Leste, Togo, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Vanuatu, Zambia and Zimbabwe.

# INITIAL SUBMISSION BY THE ORGANISATION OF AFRICAN, CARIBBEAN AND PACIFIC STATES (OACPS) ON THE PRELIMINARY RESULTS OF THE UNITED NATIONS HIGH-LEVEL PANEL OF THE MULTIDIMENSIONAL VULNERABILITY INDEX

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The **Organisation of African, Caribbean and Pacific States (OACPS)** welcomes the opportunity to submit its members' views to the UN High-Level Panel of the MVI on the draft Conceptual Framework & Methodology, Indicators and Preliminary Results, Vulnerability-Resilience Country Profiles, and Governance Arrangement for a universal Multidimensional Vulnerability Index (MVI).

**HAVING REGARD** to the Georgetown Agreement that established the OACPS, as revised in 2019;

**RECALLING** the Nairobi Nguvu Ya Pamoja Declaration, adopted at the 9th Summit of OACPS Heads of State and Government, held on 9 and 10 December 2019, which expressed concern about the exclusion of many Small Island Developing States (SIDS) from concessional financial resources on the basis of their status as middle and high-income countries and the persistent use of per capita Gross National Income (GNI) as a criterion for determining access eligibility; and, called for the establishment of a vulnerability index as a criterion to be used for accessing development finance;

**RECOGNISING** the unique vulnerability of the 79 developing Member States of the OACPS (48 from Africa, 16 from the Caribbean and 15 from the Pacific), comprising 39 SIDS, 36 Least Developed Countries (LDC) and 15 Landlocked Developing Countries (LLDC), who are already the subjects of dire, life-changing impacts of the climate emergency and the food and energy, and financial system crises;

**ACKNOWLEDGING** the request made by the Chair of the Alliance of Small Island States (AOSIS) to the UN Secretary-General in 2020, and the support from the High-Level Panel to advance work on a Multidimensional Vulnerability Index to redefine eligibility for concessional financing for the sustainable development in SIDS;

**RECALLING** the Paris Agreement, which recognises the unique constraints and particular vulnerabilities of SIDS and LDCs to the adverse impacts of climate change, the 2030 Agenda for Sustainable Development, the Addis Ababa Action Agenda, the Sendai Framework for Disaster Risk Reduction, the SIDS Accelerated Modalities of Action (SAMOA Pathway), the Doha Programme of Action for the LDC and the Vienna Programme of Action for the LLDC;

**UNDERLINING** the unique specificities, smallness and remoteness of Small Island Developing States, which present an existential threat to the well-being, livelihood and security of the 39 SIDS Members of the OACPS;

**DRAWING ON** the preliminary results of the draft Report for OACPS Multidimensional Vulnerability Index (OMVI);

**HEREBY** submits the following comments, noting OACPS' alignment to the position of the Alliance of Small Island States (AOSIS) to the UN High-Level Panel of the MVI:

**A. The Global response through the development of the universal Multidimensional Vulnerability Index must respond to the root cause of the Problem faced by all Members of the OACPS:**

- 1) The primary criterion currently used by Multilateral Development Banks to determine a developing country's eligibility to access concessional finance is Gross National Income (GNI) per capita. This means that 70% (or 55 countries) of the 79 Member States of the OACPS are either already or at imminent risk of being excluded from concessional financial resources, based on their status as middle and high-income countries. 8 OACPS Members (all are SIDS) are high-income countries, 22 Members of the OACPS (18 are SIDS) are upper middle-income countries, and 25 Members of the OACPS (11 are SIDS) are lower middle-income countries. 24 OACPS Members (including 2 SIDS) are from low-income countries.
- 2) All 79 Member States of the OACPS, including its 39 SIDS, require external finance to help prepare, respond and recover, and to finance the building of their resilience and sustainability. Based on their submissions in Nationally Determined Contributions, the OACPS Members will need US \$1.32 trillion between 2020 and 2030, or US \$13.2 billion annually, to effectively respond to the escalating climate crisis. For the 39 OACPS SIDS Members, 28 countries' (~71.7%) Nationally Determined Contributions (NDCs) are "conditional" on external support, with a financial requirement of US \$287.2 billion by 2030, or US \$28.7 billion annually. OACPS Least Developed Countries (LDCs) require US \$692.2 billion between 2020 and 2030, or US \$69.2 billion annually. OACPS Landlocked Developing Countries (LLDCs) need US \$449.9 billion between 2020 and 2030, equivalent to US \$45.0 billion annually. It should be acknowledged that additional finance would be required on top of the mentioned costs to implement NDCs of OACPS Members.
- 3) Similarly, when Least Developed Countries (LDC) graduate, they will lose out on certain privileges and special recognition to benefit from grant incentives and funding opportunities available to LDCs. Although the eligibility for graduation covers progress against measurements of income, human assets and vulnerability, there is more emphasis on the "income criterion", allowing a country to graduate based on the income criterion alone, if it exceeds twice the income threshold and satisfies an assessment that the revenue is sustainable. 36 of the 46 global LDCs are Member States of the OACPS. Of those, 6 are OACPS SIDS LDCs at imminent risk of losing concessional financing privileges, as they are in the pipeline for graduation, with 4 OACPS SIDS LDCs having recently graduated.
- 4) The fundamental problem is that the current criteria determining access to financing for development does not sufficiently capture the inherent vulnerabilities, scatteredness, remoteness, small size of their economies and specificities of middle-income and high-income SIDS. For example, GNI per capita measures the income of a country, but it does not tell us how much it costs the country to respond to major threats such as sudden, catastrophic extreme weather events, or the cost of servicing debts, or the cost to build resilience to increasing external shocks.
- 5) Although the UN MVI aims to be universal, the OACPS is of the view that there should be strict principles on the choice and number of indicators to include for each dimension. This will ensure that the MVI is credible and responds to the needs of the countries that are already impacted by the fundamental problems outlined above. The OACPS respectfully

submits that the UN MVI should consider the real vulnerability challenges of SIDS, LDCs and LLDCs to complement the GNI per capita eligibility criterion for concessional financing for sustainable development.

- 6) While all developing countries are vulnerable, the issue at hand is the inability of some developing countries to access concessional finance because of their income status as middle-income or high-income countries. This also has a bearing on those LDCs subject to imminent LDC graduation. While the UN MVI can and should be universal by calculating the MVI for all developing and developed/OECD countries, the selection of indicators should be prioritised, based on those that have credible available data over a period, and, importantly, are relevant to the most impacted groups of countries, that is SIDS, LDCs and LLDCs. A list of new, recommended indicators is submitted as Attachment 1 to this submission.
- 7) Building on the position of AOSIS, the OACPS reaffirms that the MVI will not replace the GNI per capita criterion but complements and addresses the necessary complexity that GNI alone cannot address, in accounting for human well-being, planetary sustainability and the unequal ways in which different communities are able to handle massive shocks such as climate change and pandemics.

## **B. The Conceptual Framework & Methodology of the UN Multidimensional Vulnerability Index**

- 8) The OACPS notes the following information:
  - The UN General Assembly Resolution was specifically to develop and disseminate a Multidimensional Vulnerability Index (MVI);
  - The key principles for the MVI framework in the UNSG report were:
    - i. Multidimensionality – indicators be drawn from all three dimensions of sustainable development;
    - ii. Universality – the vulnerability of all developing countries must be included in the index, and the index needs to employ “available, recognised comparable and reliable data”;
    - iii. Exogeneity – only factors that are inherent should be considered, independent from current policy choices;
    - iv. Evidence-based – there should be evidence relating index concepts to vulnerability; and
    - v. Simplicity – the MVI framework should be based on a simple structure.
  - From the UNSG’s report (A/76/211), two (2) pillars were proposed – Vulnerability and Resilience; and,
  - The High-Level Panel decided to focus on Structural Vulnerability and Structural Resilience.
- 9) The OACPS further notes from the draft documents shared that the MVI framework:
  - Integrates 3 dimensions of sustainable development (economic, social and environmental);
  - Includes dimensions defined by concepts shown to be related to exposure to external shocks and stressors (vulnerability), or structural factors that reduce loss in case risk materialises (resilience); and,
  - Aims to avoid a long list of indicators.

The OACPS recalls the position of AOSIS that “Building Resilience to vulnerability is important but should be the ultimate purpose of any resource intervention that the MVI enables. States should be strictly assessed on their actual state of vulnerability”-and seen from their particular challenges-“it is unfair to penalise States on their perceived capacity for resilience due to governance structures in place relative to less stable countries. Ideally, a resilience mechanism should exist separately to help measure progress and the effectiveness of interventions over time. This will mitigate against perpetual dependency on external financial support”. This will enhance the ability of States to assess the cost of building and/or maintaining resilience.

10) On the key principles for the UN MVI framework, the OACPS makes the following observations:

- a) *Universality* – the UN MVI framework recognises the importance of including the vulnerability of all developing countries in the index, and for the index to employ “available, recognised, comparable and reliable data”. The OACPS notes that the universal MVI prototype preliminary results ranks only developing countries against each other. From internal consultations on the draft OACPS Multidimensional Vulnerability Index, it was realised that ranking individual countries against each other is unhelpful and places unnecessary pressure on those SIDS and LDCs ranked lower than other, large developing countries and wealthy high, emitting developing countries. Therefore, the OACPS has sought to focus the MVI on groupings such as SIDS, LDC, LLDC, OECD, HIE, UMIE, LMIE, and LIC, rather than on individual countries. The OACPS has determined from its work on MVI that although some individual countries are ranked lower on vulnerability, their status of being recognised as highly vulnerable is accounted for when the results are presented as groups. This approach will leave no country behind. Out of the 177 countries assessed by the OACPS, preliminary results have confirmed that SIDS, followed by LDCs and LLDCs, are the most vulnerable compared to OECD Members and High-Income Countries.

The OACPS supports AOSIS’ position for a universal MVI that includes both developing and developed countries. The special circumstances of SIDS and LDCs can be explicitly proven, justifying the adoption and practical utilisation of the MVI by the MDBs and IFIs in the real world, if developed countries are included in the UN MVI. The draft OACPS Multidimensional Vulnerability Index covers 177 countries and includes OECD Member States and High-Income Countries. When the results are presented as groups, and developed countries are included, the results clearly demonstrate the unique vulnerability of SIDS, LDCs and LLDCs as compared to OECD Members. The OACPS is of a firm view that it is not necessary to rank individual countries against each other if the MVI results for the groups they associate with can demonstrate their unique vulnerability and specificities. MDBs and IFIs usually assess the eligibility of countries to access concessional finance based on the income status group that each country belongs to. In addition, including developed countries has also helped the OACPS to demonstrate that while some SIDS members are high-income countries and other OACPS Members are upper-middle-income or lower-middle-income economies, their vulnerability nevertheless remains high, and most OECD members and high-income developed States have a low vulnerability index.

On the UN MVI employing the “available, recognised, comparable and reliable data” approach, the OACPS requests clarification in the final report of the High-Level Panel on the following issues:

- How many of the 143 countries assessed have data available for each of the 27 indicators, and which countries do not have data for respective indicators?
- What was the approach taken for countries that lack consistent credible data?
- What is the timespan of the data used in the calculation of the MVI, and have all single indicators benchmarked against the same timespan?
- Are data sources publicly accessible and simple to understand, transparent, affordable and reproducible?

The OACPS has employed the STAR (Simple, Transparent, Affordable and Reproducible) approach, and has assessed data over a time span of 10 years for all of the selected indicators (for the period 2010 – 2020).

### C. UN MVI Framework Indicators

- 11) The OACPS notes that while the UN MVI Framework “aims to avoid a long list of indicators”, the draft Outline of Concepts and Indicators table includes a total of 27 indicators, with 14 indicators for Vulnerability and 13 indicators for Resilience. This is likely to increase as countries and international organisations provide their comments on the UN MVI preliminary results. The OACPS also notes that the UNDP MVI (2021), Commonwealth UVI (2021) and the Caribbean Development Bank’s MVI (2019) had more comprehensive structures. Therefore, it is important to: have clear guidelines for the prioritisation of indicators to a manageable level for the biennial reporting on the MVI by Members to the UN General Assembly (to reduce the reporting burden on developing countries); ensure there is equal balance in the number of indicators ascribed for each of the three variables; and, ensure selected indicators are based on available, transparent, affordable and reproducible datasets. The OACPS is submitting new indicators ([Attachment 1](#)), which include: (i) Value-add to primary sectors as a percentage of GDP (Economic Vulnerability), (ii) Ratio of coastal areas over total landmass (Environmental Vulnerability), (iii) Ratio of arable land over total landmass (Environmental Vulnerability), (iv) Malaria deaths (Social Vulnerability), and (v) Risk of Epidemics death (Social Vulnerability).
- 12) In addition to the four criteria used by the High-Level Panel to choose or accept indicators (data availability, data quality, indicator selection transparency, and indicator acceptability), the OACPS is recommending the STAR (Simple-Transparent-Affordable-Reproducible) approach be considered. While the use of UN data is encouraged and preferred, the OACPS is of the view that this should not restrict countries’ access to other data sources that satisfy the STAR approach. This would circumvent the need for SIDS and LDCs to access credible data sources that are not publicly accessible or simple to understand, affordable and reproducible.
- 13) Furthermore, the OACPS requests that more information be provided to the following questions:
  - How many of the 143 countries assessed have data available for each of the 27 indicators, and which countries do not have data for respective indicators?

- What was the approach taken for countries that lack consistent credible data?
- What is the time span of the data used in the calculation of the MVI, and have all single indicators benchmarked against the same timespan?
- Are data sources publicly accessible and simple to understand, transparent, affordable and reproducible, also considering resource constraints in the use of such data sources in some countries?

14) The OACPS is using an at least 10-year timespan criterion for the draft OACPS Multidimensional Vulnerability Index to ensure the credibility of data used in the indicators selected.

#### **D. Vulnerability-Resilience Country Profiles**

15) The OACPS supports the intention to test the relevance and utility of the UN MVI Framework through Country Profiles. The High-Level Panel is encouraged to, beyond country profiles, consider including both regional and thematic MVI profiles, to enhance the utility of the UN MVI.

16) The developing Member States of the OACPS will require financial support from development partners to engage in developing country and regional profiles, which of themselves must not impose any additional financial or reporting burden on SIDS, LDCs and LLDCs.

17) The OACPS reiterates its alignment with the position of the AOSIS Group that “... Ideally, a resilience mechanism should exist separately to help measure progress and the effectiveness of interventions over time.” Such a mechanism will help measure progress over time and the effectiveness of interventions mobilised through the MVI framework, and builds on the OACPS recommendation to focus on groups rather than individual country ranking. In this regard, it may be prudent to, in place of the proposed vulnerability-Resilience Country Profiles, consider a peer-to-peer learning and exchange mechanism (e.g., MVI Peer-to-Peer Review) to assess progress and the effectiveness of interventions and actions related or linked to the UN MVI framework and National Development Plans. The OACPS is of the firm view that there is no need to reinvent or redefine what the MVI has already determined, and the establishment of an MVI Peer-to-Peer Review mechanism would add value, including to the relevance and credibility of the UN MVI.

18) In terms of Coordination and the role of the MVI Custodian Body, the role of non-UN and Regional Organisations should be considered. The OACPS contends that while the UN plays a very important role in OACPS Regions, her existing regional organisations of the OACPS are extended arms of public services of Member States of the OACPS and custodians of data and expertise. To be efficient and effective, the coordination could be a “Hub and Spokes” / “Network of Networks” arrangement where the MVI Custodian Body serves as the central Global Hub, and a designated regional organisation from each of the regions could serve as the Spoke. This will enable and engender the sharing of data, facilitate a coordinated approach, and provide requisite political visibility and commitment of the MVI in the respective regions of developing countries.

## E. Governance Arrangement for the MVI

- 19) The OACPS has considered the recommendations put forward by the UN High-Level Panel on the governance arrangements for the MVI, and assessed the strengths and weaknesses of each option, as summarised below.

<b>Recommendation 1, <u>Option 1</u>: Creation of MVI Secretariat and additional mandate to a UN Agency to act as an “Independent Expert Panel for review of the MVI</b>	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Dedicated secretariat overseeing follow-up work, maintenance and review of the MVI, and responsible for securing financial resources to assist developing countries undertake the country and, or regional profiles.</li> <li>• Provides permanence and prominence to the MVI as a key priority and ensures dedicated support to facilitate its implementation.</li> <li>• Avoids establishing a new body or bodies for the MVI.</li> <li>• A UN Agency to act as the “Independent Expert Panel for review of the MVI” limits additional budget implications.</li> </ul>	<ul style="list-style-type: none"> <li>• Budget implications to create an MVI Secretariat.</li> <li>• UN monopoly on critical decisions for the implementation and review of the MVI, based on the mandated UN agency’s priorities and budget.</li> <li>• Less ownership of the MVI by the UN Member States and regions.</li> </ul>
<b>Recommendation 1, <u>Option 2</u>: Creation of MVI Secretariat and establishment of an independent high-level Panel of Experts (co-located in the UN agency) to review the MVI</b>	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Dedicated secretariat overseeing follow-up work, maintenance and review of the MVI, and responsible for securing financial resources to assist developing countries to undertake the country or regional profiles.</li> <li>• Provides permanence and prominence to the MVI as a key priority, and ensures dedicated support to facilitate its implementation.</li> <li>• Avoids establishing a new body or bodies for the MVI.</li> <li>• The Independent High-level Expert Panel for review of the MVI will not be remunerated and will bring diverse, external perspectives and expertise to regularly review and refine the MVI.</li> <li>• Promotes ownership of the MVI by UN Member States (and other stakeholders) which could facilitate political visibility, will and commitment to the MVI.</li> </ul>	<ul style="list-style-type: none"> <li>• Budget implications to create an MVI Secretariat.</li> <li>• The proposal that the Members of the Independent High-Level Panel of Experts would serve in their personal capacity may impact country and government-wide ownership, and support for the MVI at national and regional levels.</li> <li>• Co-locating the Independent High-Level Panel of Experts in a UN agency may impact the key principle of inclusivity.</li> </ul>



**Recommendation 2: Member States to provide a national update on the MVI every 2 years to the UN General Assembly**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Lighter, cost-effective arrangement with no direct budget implications to create and support an MVI entity.</li> <li>• Ensures the MVI remains a political issue in the agenda of the UN General Assembly, enabling monitoring and evaluating the implementation of the universal MVI against relevant UN resolutions.</li> <li>• Encourages States to take ownership and leadership on MVI implementation, by States providing biennial reports on MVI utility and impact in the UN General Assembly.</li> </ul>	<ul style="list-style-type: none"> <li>• There is a risk that the MVI will not be prioritised, progressed or used since no central entity/agency would have dedicated oversight and responsibility for facilitating the effective implementation of the MVI nor its ongoing development, maintenance and review.</li> <li>• No apparent structured follow-up to the national updates on the MVI, to be reported biennially by States in the UN General Assembly.</li> <li>• No UN agency responsible to guide and provide a consistent reporting template on the MVI to the UN General Assembly.</li> <li>• Member States being left to their own devices may disadvantage States' capacity and resource-constrained administrations in progressing their country MVI profiles, with consequent implications for the overall utility and implementation of the MVI as a complementary instrument.</li> </ul>

20) Based on the three governance arrangement options proposed by the UN High-Level Panel for the MVI, the OACPS wishes to propose the following “hybrid” option, for consideration:

- Expand the mandate of a UN Agency to host a dedicated Secretariat for the MVI to oversee the implementation and review of the MVI. The Secretariat would ensure that dedicated capacity and resources are in place to progress further work on the MVI and secure requisite financial resources to support developing countries with their country profiles, as well as the MVI Peer-to-Peer Reviews. It would also serve as the Secretariat for the “Independent High-Level Panel of Experts for the review of the MVI”;
- Select panel members for the Independent High-Level Panel of Experts for the review of the MVI Members from expertise within Regional and International Organisations, which are already working on an MVI (e.g., Commonwealth Secretariat, OACPS Secretariat, Caribbean Development Bank, UNDP etc) and ensure there is balanced representation from all regions and their regional agencies. For example, in the case

of Africa, Caribbean and the Pacific regions this would be the AUC, CARICOM, PIF. This arrangement would have several benefits, including:

- (i) Using an existing architecture with no need for co-location of the HLPE in a UN agency;
  - (ii) No costs needed for remuneration of panel members;
  - (iii) Enabling representative regional organisations to coordinate and collaborate with other regional technical agencies and their Member States - to share data and assist with the maintenance and review of the MVI; and
  - (iv) Facilitate political decisions and visibility from respective regions and Member States therein.
- (v) In addition to the proposed “hybrid” option outlined above, the OACPS respectfully recommends that to inculcate the highest-level ownership and commitment for a UN MVI in the UN General Assembly, the UN Secretary-General may wish to consider appointing a Special Envoy for the MVI, to ensure the: MVI is prioritised by the UN system and within the UN General Assembly, especially the proposed biennial reporting; and, global advocacy and engagement for MVI acceptance and utility, to build the resilience of SIDS, LDCs and LLDCs to address their increasing vulnerabilities by providing access to additional and concessional finance, is achieved.



## **Attachment 1: MVI Indicator Suggestion Form**

The MVI is a composite index measuring structural vulnerability and structural (lack of) resilience at the national (member state) level. The selected indicators relate to concepts which have been shown to directly increase vulnerability or resilience in one of three dimensions – economic, environmental, or social. The selected indicators meet the principles and criteria agreed upon by the Panel (for example: multidimensionality, universality, exogeneity, data availability and data quality). Any indicators added must also meet these criteria.

The Panel Secretariat kindly requests that suggestions of new or substitute indicators be offered using this form.

1. Name of indicator, units, database where it is disseminated and maintained, including web address
2. Pillar, dimension, and concept where indicator should be located within the MVI framework
3. Is your suggested indicator an addition or replacement?
4. Provide a short justification focussing on the relationship of the indicator to structural vulnerability or structural resilience (**100 words**)

**Example:**

- **export concentration:** Indicator measures vulnerability to (negative) changes in export volumes/values.

[Please include empirical evidence on whether the variable measures a concept which is inherent or inherited]

5. Provide a simple Theory of Change (**250 words**)

**Example: Theory of change for export concentration**

- Export revenue supports (i) import capacity (terms of trade effect), (ii) fiscal balance, because developing country governments tend to rely on export taxes (e.g., mineral rents and tourism taxes), and (iii) external debt service (because developing countries need to rely on external capital).
- The more diversified a country's export structure, the smaller the effect on the economy from an externally driven negative export price shock (caused by a fall in demand).
- Conversely, the less diversified a country's export structure, the more the country is exposed to a fall in demand for one of its exports and therefore the higher the damage to income, wealth, and living standards that an externally-driven export value fall can have.

[Briefly discuss any literature on the evidence for the Theory of Change, including the assumptions behind the Theory of Change]

6. Indicate which developing countries have missing data

\*Please take note of the following rules:

- Indicator has to be structural in nature
- There has to be clear evidence relating the indicator to the concept and dimension
- UN data source must be prioritised

1. Name of indicator, units, database where it is disseminated and maintained, including web address
  - **Agriculture, forestry, and fishing value added** (% of GDP from the agriculture, forestry and fishing sectors), World Development Indicators, World Bank: (<https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS>)
2. Pillar, dimension, and concept where indicator should be located within the MVI framework
  - **“Vulnerability” Pillar, “Economic” dimension**, and “Exposure to fluctuations in international trade and financial flows” concept.
3. Is your suggested indicator an addition or replacement?
  - **Replacement indicator** – The proposed indicator (Agriculture, forestry, and fishing value added) should replace the current indicator on “Merchandises and Services Export Concentration” which is very broad and not relevant to most SIDS and LDCs that do not have the capacity to export services and merchandises.
4. Provide a short justification focussing on the relationship of the indicator to structural vulnerability or structural resilience (**100 words**)
  - This indicator is inherent and important because it measures vulnerability to (negative) changes to GDP due to the lack of value-adding on primary sectors for example, agriculture, forestry, and fisheries.
5. Provide a simple Theory of Change (**250 words**)
  - Theory of Change for Value-added to Primary Sectors (Fisheries, Agriculture, Forestry):
    - Primary sector includes fisheries, agriculture and forestry.
    - Being overly reliant on the primary sector can imply a higher exposure to exogenous shocks due to the primary sector being inelastic, by not having substitutes, and being more difficult to adjust to the variations of external market pressures and, or oscillations.
    - Conversely, the less dependent on the primary sector an economy can be the higher the capacity to withstand variations in the international market prices and adjust its supply based on the demand of such products.
    - A mix of factors, including ones inherited colonial past, remoteness from key central marketplaces, and geomorphological characteristics, makes this indicator inherent, especially in the short and medium term.
  - Literature:
    - Anríquez, G., & Stamoulis, K. G. (2007). Rural Development and Poverty Reduction: Is Agriculture Still Key?. eJADE: electronic Journal of Agricultural and Development Economics, 4(853-2016-56113), 5-46.
    - Sunding, D., & Zilberman, D. (2001). The agricultural innovation process: research and technology adoption in a changing agricultural sector. Handbook of agricultural economics, 1, 207-261.
6. Indicate which developing countries have missing data
  - Cook Islands, Cuba, Eritrea, Marshall Islands, Nauru, Niue, Palau, Somalia and Tuvalu.

1. Name of indicator, units, database where it is disseminated and maintained, including web address
  - **Ratio of coastal areas over the total landmass**, % of coastal areas over the total landmass, World Vector Shoreline, United States Defense Mapping Agency, 1989: (<https://web.archive.org/web/20120419075053/http://earthtrends.wri.org/text/coastal-marine/variable-61.html>)
2. Pillar, dimension, and concept where indicator should be located within the MVI framework
  - **“Vulnerability” Pillar**, **“Environmental” dimension**, and **“Impact of Natural Hazard”** concept.
3. Is your suggested indicator an addition or replacement?
  - **Replacement indicator** - The proposed indicator “Ratio of coastal areas over total landmass” should replace the indicator “Victims of Natural Hazards” noting SIDS and their small population sizes being compared with countries with larger population being impacted by any natural hazard.
4. Provide a short justification focussing on the relationship of the indicator to structural vulnerability or structural resilience (**100 words**)
  - This indicator (Coastal areas over total landmass) is inherent and important because it measures vulnerability to for example, sea level rise, coastal erosion and groundwater pollution - with a high ratio of the coastal area of the total landmass.
5. Provide a simple Theory of Change (**250 words**)
  - Theory of Change for Coastal areas over total landmass:
    - A high ratio of coastal area over the total landmass means reduced, if any, capacity to use sufficient territory to withstand the negative impacts of natural hazards risks.
    - Such a high ratio, which is completely inherent, exposes countries to the negative impacts of climate change impacts, including sea level rise, coastal erosion, forceful wind and waves leading to coastal flooding, groundwater pollution, among others.
    - Conversely, a low ratio of coastal areas over total landmass ensures there is sufficient territory to retreat, use inland space to recover quickly from natural hazards and climate change risks, or simply to have sufficient territory to continue providing services to citizens and to society, economy and the environment.
  - Literature:
    - Gargiulo, C., Battarra, R., & Tremiterra, M. R. (2020). Coastal areas and climate change: A decision support tool for implementing adaptation measures. *Land Use Policy*, 91, 104413.
    - Glicksman, R. L. (2006). Global Climate Change and the Risks to Coastal Areas from Hurricanes and Rising Sea Levels: The Costs of Doing Nothing. *Loy. L. Rev.*, 52, 1127.
6. Indicate which developing countries have missing data
  - Cook Islands, Cuba, Eritrea, Marshall Islands, Nauru, Niue, Palau, Somalia and Tuvalu.

1. Name of indicator, units, database where it is disseminated and maintained, including web address
    - **Ratio of arable land over the total landmass**, % of arable land over the total landmass, FAO STAT: (<https://www.fao.org/faostat/en/#data/RL>)
  2. Pillar, dimension, and concept where indicator should be located within the MVI framework
    - **“Vulnerability” Pillar**, **“Environmental” dimension**, and “Exposure to ecosystem pressure” concept.
  3. Is your suggested indicator an addition or replacement?
    - **Additional indicator** – This proposed indicator (Ratio of arable land over the total landmass) should be additional to the current indicators “Low elevated coastal zones” and “Drylands”.
  4. Provide a short justification focussing on the relationship of the indicator to structural vulnerability or structural resilience (**100 words**)
    - This indicator (Arable land over total landmass) is inherent and important because it measures vulnerability based on the ratio of arable land over the total landmass. Countries with a lower percentage of arable land are potentially more exposed to water crisis, droughts and lack of water for agricultural irrigation.
  5. Provide a simple Theory of Change (**250 words**)
    - Theory of Change for Ratio of arable land over the total landmass:
      - Arable land supports the production of primary products that are essential to sustain livelihoods and export capacity of countries.
      - The higher the ratio of arable land, the stronger the capacity to sustain food and industrial production and to be sheltered from negative external shocks such as natural hazards or a rapid change in demand.
      - Conversely, the lower the ratio of arable land, the more reduced is the capacity for a country to use the land to produce food and industrial products and therefore to adapt to the negative impacts of externally driven factors, such as natural hazards and changes in demand.
    - Literature:
      - Zhang, X., & Cai, X. (2011). Climate change impacts on global agricultural land availability. *Environmental Research Letters*, 6(1), 014014.
  6. Indicate which developing countries have missing data
    - Cook Islands, Cuba, Eritrea, Marshall Islands, Nauru, Niue, Palau, Somalia and Tuvalu.
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1. Name of indicator, units, database where it is disseminated and maintained, including web address
    - **Malaria deaths**, per 1,000 population at risk, WHO:  
[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/malaria-incidence-\(per-1-000-population-at-risk\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/malaria-incidence-(per-1-000-population-at-risk))
  2. Pillar, dimension, and concept where indicator should be located within the MVI framework
    - **“Vulnerability” Pillar**, **“Social” dimension**, and “Exposure to global health shocks” concept.
  3. Is your suggested indicator an addition or replacement?
    - **Additional indicator** – this proposed indicator (Malaria deaths, per 1,000 population at risk) should be additional to the current indicator “Victims of Epidemics”.
  4. Provide a short justification focussing on the relationship of the indicator to structural vulnerability or structural resilience (**100 words**)
    - This indicator (Malaria deaths) is important because it measures vulnerability to malaria which causes incapacitation, illness and death in mostly tropical and subtropical areas of the world. Although malaria is not present in all developing countries, it is present in most developing countries and there is consistent data for a time span of 10 years or more, and therefore, it is a good proxy compared to an indicator such as Dengue Fever deaths.
  5. Provide a simple Theory of Change (**250 words**)
    - Theory of Change for Malaria deaths, per 1,000 population at risk:
      - Malaria is endemic in many countries around the world, especially in tropical and sub-tropical areas, and malaria incidence is considered as a permanent feature of humid and hot countries.
      - High morbidity and mortality rates can impact quality of life and production possibilities of countries.
      - Conversely, lower or absent rates of malaria incidence can improve the quality and quantity of life and productivity.
    - Literature:
      - Ebi, K. L., Capon, A., Berry, P., Broderick, C., de Dear, R., Havenith, G., ... & Jay, O. (2021). Hot weather and heat extremes: health risks. *The lancet*, 398(10301), 698-708.
      - Githeko, A. K. (2009). Malaria and climate change: special feature. In Commonwealth health ministers' update 2009. Commonwealth Secretariat: Pro-Brook Publishing, GB.
  6. Indicate which developing countries have missing data.
    - All countries are covered, including countries that report no incidences of malaria.
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1. Name of indicator, units, database where it is disseminated and maintained, including web address
  - **Epidemics**, total affected people over total population, EM-DAT, CRED / UCLouvain, Brussels, Belgium: (<https://public.emdat.be/data>)
2. Pillar, dimension, and concept where indicator should be located within the MVI framework
  - **“Vulnerability” Pillar, “Social” dimension**, and “Exposure to global health shocks” concept
3. Is your suggested indicator an addition or replacement?
  - **Replacement indicator** – This proposed indicator (Total number of people affected by epidemics over total population) is a more comprehensive indicator than the number of deaths from epidemics, given the importance of measuring the overall impact on countries. Therefore, this indicator “total number of people affected by epidemics over total population” should replace the current indicator “number of deaths from epidemics”.
4. Provide a short justification focussing on the relationship of the indicator to structural vulnerability or structural resilience (**100 words**)
  - This indicator (Epidemics) is important because it measures the total number of people over the total population affected by all bacterial, fungal, parasitic, prion, viral and other unknown diseases from the year 2000 and onwards.
5. Provide a simple Theory of Change (**250 words**)
  - Theory of Change for Epidemics, total affected people over total population:
    - The total number of people over the total population affected by all epidemics is a more comprehensive indicator rather than the number of deaths from the same, given the importance of measuring the overall impact on countries.
    - Epidemics are endemic in many countries around the world and their incidence is considered as a quasi-permanent feature that impacts quality of life and production possibilities of countries.
    - Conversely, lower or absent rates of people affected by epidemics can improve quality of life and productivity.
  - Literature:
    - Delivorias, A., & Scholz, N. (2020). Economic impact of epidemics and pandemics.
    - Queiroz, M. M., Ivanov, D., Dolgui, A., & Fosso Wamba, S. (2022). Impacts of epidemic outbreaks on supply chains: mapping a research agenda amid the COVID-19 pandemic through a structured literature review. *Annals of operations research*, 319(1), 1159-1196.
    - Zhang, S., Wang, S., Yuan, L., Liu, X., & Gong, B. (2020). The impact of epidemics on agricultural production and forecast of COVID-19. *China Agricultural Economic Review*, 12(3), 409-425.
6. Indicate which developing countries have missing data
  - Cook Islands, Cuba, Eritrea, Marshall Islands, Nauru, Niue, Palau, Somalia and Tuvalu.