

# What are Challenges and Opportunities for International (Development) Cooperation?



## Summary of an Expert Dialogue implemented by GIZ GP L&D<sup>1</sup>

Fostering a **joint awareness and understanding** of existing and upcoming **challenges related to addressing slow onset processes** (SOP) in the **context of oceans and coasts** constituted main objectives of the dialogue which was held on November 23rd, 2021. Beyond that, practice examples as well as solutions and pathways for the future were presented and discussed among a group of experts and practitioners.

The situation is clear: the growing risk of losses and damages from climate change in oceans and coastal zones must be taken into account in **climate risk management strategies**, adaptation efforts, and planning.

A number of recent publications reveal latest and (as far as possible) accurate findings on the expected and possible changes and more importantly impacts. However, evidence on good practices and the impact of risk management and adaptation ambitions is insufficient. This is **particularly true for SOP that are not as regarded as extreme weather events** (EWE).

<sup>1</sup> This brief summarises the key messages and recommendations that were identified and discussed during an online expert dialogue. Please refer to the [accompanying presentation](#) for more detail on concrete examples that were presented during the dialogue.

From an **international cooperation perspective**, it appears inevitable to better understand and address SOP in order to ensure sustainable development since:

- Coastal zones are home to the majority of the world's population (IOC-UNESCO, 2017). More than 650 million people live in coastal areas less than 10 m above sea level (IPCC, 2019);
- More than three billion people depend on the oceans, coasts, and their ecosystem services for their livelihoods (UN, n.d.);
- Coastal zones encompass some of the most ecologically valuable ecosystems with over 1 million species globally (Martínez et al., 2007). These ecosystems provide a natural buffer and protection from climate-related coastal risks.

## Guiding questions of the dialogue & discussion outcomes

1. **What are the main facts and challenges for addressing SOPs in the context of oceans and coastal zones from the perspective of stakeholders?**

While research can provide facts on the science of oceans and coastal zones, the first and most essential aspect to take into account is how climate change will affect life,

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livelihoods, and related systems. Human communities rely heavily on the ocean and coastal environments, on their ecosystems and resources (see IPCC, 2019<sup>2</sup>).

**Climate change has the potential to severely disrupt such systems.** Furthermore, the linkages between the ocean and the *Agenda 2030*, in particular **Goal 14 were highlighted during the dialogue. It is known and recognised that Goal 14 links with all remaining Sustainable Development Goals** (SDGs), with regards to Climate Action (SDG 13), a range of co-benefits can emerge.

Going beyond echoing the known challenges of **i)** lack of data and local capacity, and **ii)** gaps in knowledge transfer and exchange, the experts underlined the **need to investigate interlinkages between SOP and EWE** that can lead to cascading effects and compound risks (for further details see GIZ, 2021<sup>3</sup>). Linked to the objective of designing and implementing effective measures and strategies, fully understanding the spectrum of hazards and accompanying risks is fundamental. The experts pointed to the **risks of maladaptation and ineffective or useless measures** that can have devastating consequences rather than averting or addressing losses and damages.

Critically discussed were also **opportunities and challenges related to Nature-based Solutions** (NbS). While consensus exists on the potential of NbS, the dialogue also revealed a range of discourses on the topic. Yet, no universally accepted definition exists for the concept; moreover, standardisation is not fully accepted nor applied globally, making it difficult to monitor the effective implementation of NbS. Lastly, the limits of applicability of NbS were discussed with regard to the lack of research findings and evidence on the ability of ecosystems to adapt to changing conditions. In the case of corals, an important component of natural coastal protection, it has been estimated that with only 1.5° C of global warming, as many as 70 % to 90 % of reef-building corals could be lost; under a 2 C scenario this might reach 99 % (Hughes et al., 2017; also see GIZ, 2021<sup>4</sup>).

## 2. Which action is needed concretely at different levels (national, private sector, science, local) to cope with SOP?

In many cases, discussions on required action and opportunities (see question 3 below) went hand in hand. It became clear that a variety of approaches – partially tried and tested or categorised as good practice exist already. Identified **areas and subjects for action** that are not yet elaborated sufficiently or lack evidence from implementation and use include:

- Staying with the example of NbS, two concrete required actions emerged from the discussion: following the challenges portrayed above, the creation of a universally valid definition and well selected standards that guarantee the harmonisation of benefits and the preservation of ecosystems can be underlined as the first required action. With regards to the fact that the life span of an ecosystem under changing climatic conditions is not understood to the degree needed, two options for actions have been put forward: further investigation of NbS and collection as well as assessment of evidence from practice and more ambitious mitigation of greenhouse gases (GHG), and in that way, limiting global warming has been presented as one way to slow down or even prevent the further degradation of ecosystems, such as coral reefs.
- Regarding the topic of losses and damages, it was pointed out that approaches and measures mostly target economic losses and damages but rather undermine the possible occurrence of non-economic losses and damages (NELD). In the case of assessments of risk or adaptation potentials for instance, the scope in many cases does not include NELD.
- Lastly, the also broader aspects of design of approaches and risk governance were touched upon. In the specific case of the ocean, holistic and sustainable governance approaches that target various interests are rare or lacking fully.

2 IPCC (2019). IPCC Special Report on the Ocean and Cryosphere in a Changing Climate [H. O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds.)]. In press.

3 GIZ (2021): Climate risk management – a framework. Promising pathways to avert, minimise, and address losses and damages

4 GIZ (2021): Report Expert Dialogue: The ocean in a changing climate

For **SIDS**, it has been argued repeatedly that **additional finance / capacity development** to access resources (e.g., funds) is **needed** not least because of the small economies of countries that prove insufficient to cover the costs related to prevention and recovery. Moreover, **consensus on the need to involve stakeholders such as the private sector** existed.

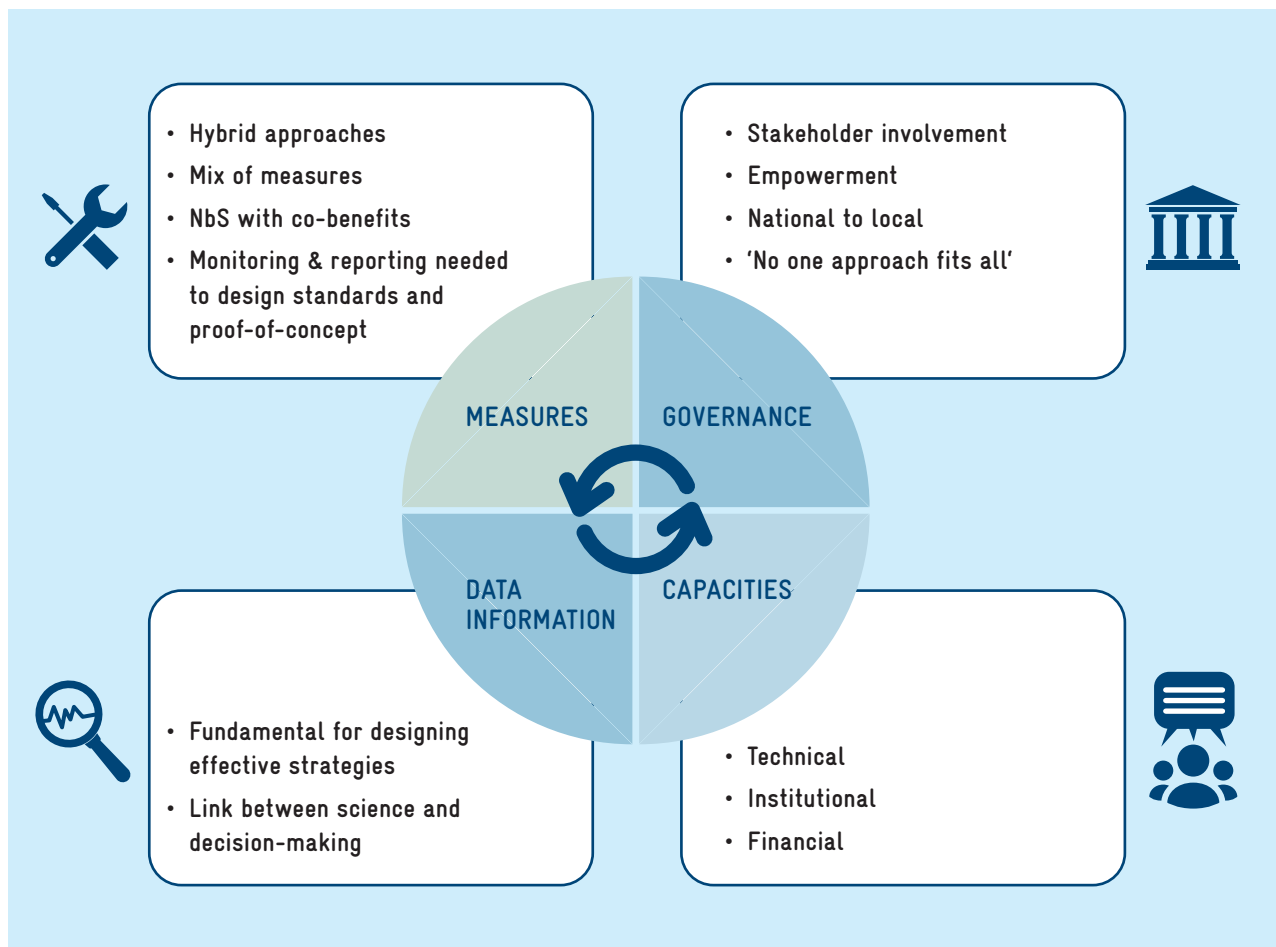
### 3. Which good practice approaches and potentials exist for international and development cooperation to address SOP?

During the expert dialogue, both innovative solutions and approaches from practice were discussed with regard to four key aspects: **i)** measures, **ii)** governance, **iii)** capacity, and **iv)** data:

In the following, a **summary of the discussion** is provided.

**i) Measures:** overall, concrete stand-alone measures that have proven successful, first order strategies that target risk management and advanced approaches that allow to avert, minimise, and address risk exist. The **application of a portfolio of measures** rather than single tools was highlighted during the dialogue. One example is the implementation of hybrid approaches, which refers to the combination of traditional “grey” infrastructure or measures complemented with NbS or so-called “green” measures. Through comprehensive assessments, the most appropriate mix of tools that addresses the given context can be identified. Depending on scope and resources, distinct measures can be implemented. Moreover, measures that specifically target impacts resulting from SOP, for instance for dealing with saltwater intrusion, are being developed and tested and were introduced during the dialogue. Although it was made clear that “**no one size [approach] fits all**” it was also argued that proven approaches may be replicable, and that peer-learning can be beneficial.

#### Dimensions and entry points for development cooperation



*(Developed based on the discussions; this figure does not claim to be all-encompassing but rather providing some out of further examples)*

- ii) Governance: as underlined, countries are already targeting risks from SOP and are also calling for joint international action. Approaches to align governance processes and include local stakeholders in strategy development are being tested and start showing positive outcomes. Experts noted that the nexus of the ocean and climate change has gained traction under the *United Nations Framework Convention on Climate Change* (UNFCCC) and has been suggested as topic for an annual dialogue by COP26. For both, the **governance sphere** as well as the **cooperation sphere**, involving stakeholders and enabling to enhancing dialogue and a joint design of processes are inevitable if effective and sustainable approaches are targeted at. The **necessity of sustainable Ocean stewardship** – informed by science, data and services – was stated as one example during the dialogue.
- iii) Capacity building: the dialogue emphasised that countries require support in building and enhancing of capacity. This includes technical capacity and institutional capacity, for example to access financial resources (the Green Climate Fund constitutes one example that was mentioned during the dialogue). While engagement between stakeholders at different levels takes place with increasing intensity, the mandate of international (development) cooperation also includes awareness raising in all parts of society, especially the most vulnerable sections, and the introduction of approaches that foster rather than undermine the importance of accepting any kind of measures. As a pathway for the future, the **joint creation, implementation, and evaluation** of measures and strategies was suggested during the dialogue; also, the role of international (development) cooperation for peer-learning and knowledge exchange was touched upon.
- iv) Data/information: research studies and findings on SOP are growing in quantity and quality. More accurate and context-specific data helps to better plan and design climate risk management interventions and inform decision-making processes. Local monitoring and data will contribute to better forecast and predict future trends, and strategies to improve on this are underway and can be mainstreamed. **Cooperation structures with science and research**, ideally at the local level are contributing to high-resolution and accurate data which in turn are essential to avoid unintended impact and ineffective interventions. At the international level, the United Nations Decade of Ocean Science for Sustainable Development which

follows the objective of ensuring that science responds to the needs of society launched in 2021. Through stronger international cooperation, the decade aims at bolstering scientific research and innovative technologies.



## Vision

It has been stated recently in a joint paper of DIE and GIZ (2021) : more ambitious action at distinct levels and a shift to a blue climate action paradigm is needed more than ever before.

The risk of losses and damages caused by extreme weather events is known and fairly addressed at various levels of governance. **Slow onset processes have the potential to impact communities, economies, ecosystems, (critical) infrastructure in an even more devastating way**, to cause economic and non-economic losses and destroy entire livelihoods. Although the science is becoming clearer, governance structure and adaptation strategies do not seem to take these risks into account sufficiently, and the general awareness must be increased. International processes and mechanisms such as the *Executive Committee* under the *Warsaw International Mechanism for Loss and Damage* (WIM) targets the topic in its rolling work plan and has initiated a *Technical Expert Group* (TEG-SOE) that specifically deals with the topic. Moreover, the nexus topic was spotlighted by the Presidency of the 25th Conference of the Parties (COP) to the UNFCCC and an annual dialogue to allow for knowledge exchange and enhanced action on the topic was mandated at COP26.

Reasons why international (development) cooperation in particular has to further advance its actions and exploit its opportunities are manifold, some are given at the begin-





ning of this paper and can be found in the accompanying presentation. The study ‘Managing Climate Risks, Facing up to Losses and Damages’ that was published recently by the OECD (2021) underlines once more the need for urgent action and identifies key areas as well as opportunities. The call for **comprehensive risk management**, for adopting approaches to decision making that allow the recognition of uncertainties, for more inclusive stakeholder engagement and for a strengthened global architecture for climate (and disaster) risk finance are only some of the recommended actions given, which were partly targeted during this dialogue. As the dialogue mainly focused on technical aspects of climate risk management, climate risk finance was not discussed in detail. However, it is **recognised that climate finance plays several crucial roles**. In the context of climate risk management, it is regarded an important instrument for transferring risk and addressing

residual risks, e.g. through insurance solutions. For the management of risks related to EWE, progress has been achieved over the past years. In the case of SOP, further progress and inventions are required to allow for a holistic management of climate-related risks triggered by SOP, especially in the context of ocean and coastal zones, and the depending communities.

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