Multi-year Expert Meeting on Transport, Trade Logistics and Trade Facilitation
8th Session

Climate Change Adaptation for Seaports in Support of the 2030 Agenda for Sustainable Development

27–28 October 2020

Introduction

Presentation by

Ms. Regina Asariotis
Chief, Policy and Legislation Section
Trade Logistics Branch, Division on Technology and Logistics, UNCTAD

This expert paper is reproduced by the UNCTAD secretariat in the form and language in which it has been received. The views expressed are those of the author and do not necessarily reflect the views of the UNCTAD.
Climate Change Adaptation for Seaports in Support of the 2030 Agenda for Sustainable Development

– Introduction

Regina Asariotis
Chief, Policy and Legislation Section, TLB/DTL
UNCTAD
regina.asariotis@unctad.org

• Why? And Why Now?
• What do we hope for
• Overview of the Programme of Sessions
Maritime Transport: a critical facilitator of global trade and development

Over 80% of volume (70 % of value) of world merchandise trade is carried by sea (port to port): shipping and ports are key nodes in the network of closely linked international supply chains

Globalization: interconnectedness/interdependence of shipping/ports and of transport across supply chains

Seaborne trade: over 60% of goods loaded and unloaded in developing countries (UNCTAD)

Environmental challenges: two sides of the coin

• Effects of maritime transport on the environment (e.g. pollution, CO2 emissions)
• Environmental impacts on maritime transport (e.g. Climatic Variability and Change, CV&C)

Important to address these global challenges effectively, also in the light of the 2030 Sustainable Development Agenda and related international agreements

Relevance of climate change adaptation of seaports in the context of the 2030 Agenda on Sustainable Development

Consensus by international community on a ‘plan of action’ involving 17 sustainable development goals with 169 targets, which are ‘integrated and indivisible, global in nature and universally applicable’ - adopted in 2015, effective as of 2016:

Climate-resilient transport infrastructure is of cross-cutting relevance for achievement of progress on several of the goals and targets, including:

SDG 13  Take urgent action to combat climate change and its impacts
SDG 9  Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
SDG 14  Conserve and sustainably use the oceans, seas and marine resources for sustainable development
SDG 1.5  By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
Climate Variability and Change (CV & C)

A global challenge and “a defining issue of our era” (UN SG Ban Ki Moon, 2008)

Compelling scientific evidence of increasing CV & C / impacts (IPCC, 2013; 2018; 2019)

Huge potential costs associated with inaction

- WEF (2019 and 2020) Global Risks Report: Top 3 economic risks are extreme weather events, climate action failure, natural disasters
- Stern Review (2006): 5 - 20 % of GDP, annually
- By 2100, global flood damages due to sea-level rise (and related extreme events) might amount to up to US$ 27 trillion/year – about 2.8% of global GDP in 2100 (Jevrejeva et al 2018 Environ. Res. Lett)
- Global Comm. on Adaptation (2019): Investing US$1.8 trillion over next decade - in measures to adapt to climate change - could produce net benefits worth more than US$7 trillion

Very serious development threat, particularly for LDCs and the SIDS

Since 2008, integration of CV & C considerations into UNCTAD’s work; UNCTAD mandate strengthened in 2016 (Maafikiano)

---

UNCTAD: climate change impacts and adaptation for coastal transport

<table>
<thead>
<tr>
<th>Year</th>
<th>Follow-up</th>
<th>Event or Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Follow-up</td>
<td>UNCTAD Multiyear Expert Meeting: “Maritime Transport and the Climate Change Challenge”</td>
</tr>
<tr>
<td>2010</td>
<td>Follow-up</td>
<td>Joint UNECE-UNCTAD Workshop: “Climate change impacts and adaptation for international transport networks”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UNECE Group of Experts on Climate Change Impacts and Adaptation for International Transport Networks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2013 EG Report - Climate Change Impacts and Adaptation for International Transport Networks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2020 EG Report - Climate Change Impacts and Adaptation for International Transport Networks</td>
</tr>
<tr>
<td>2011</td>
<td>Follow-up</td>
<td>UNCTAD Ad Hoc Expert Meeting: “Climate Change Impacts and Adaptation: a Challenge for Global Ports”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Becker et. al, A note on climate change adaptation for seaports, Climatic Change, 2013</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>UNCTAD Ad Hoc Expert Meeting: “Addressing the Transport and Trade Logistics Challenges of SIDS: Samoa Conference and Beyond”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UNCTAD Multiyear Expert Meeting: “Small Island Developing States: Transport and Trade Logistics Challenges”</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>UNCTAD Port-Industry Survey on Climate Change Impacts and Adaptation</td>
</tr>
<tr>
<td>2015-2017</td>
<td>Follow-up</td>
<td>UNCTAD-DA Project: “Climate change impacts on coastal transport infrastructure in the Caribbean: Enhancing the adaptive capacity of Small Island Developing States (SIDS)”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monioudi et. al, Climate change impacts on critical international transportation assets of Caribbean SIDS: the case of Jamaica and Saint Lucia, Reg Environ Change 2018: 2211</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UNCTAD – UNEP “Climate-resilient transport infrastructure for sustainable trade, tourism and development in SIDS”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Climate Change Impacts and Adaptation for Coastal Transport Infrastructure: A Compilation of Policies and Practices</td>
</tr>
</tbody>
</table>
CV & C implications: Two sides of the “coin”: causes - effects

- **Mitigation**: action directed at addressing causes (long-term)
- **Adaptation**: action directed at coping with impacts (short- and long-term); requires assessment of impacts that can vary considerably by physical setting, type of climate forcing, sector/mode, region etc.

In (Maritime) Transport:
- much of the international debate/policy action focuses on mitigation (i.e. reduction / control of GHG emissions)
- comparatively little focus on study of impacts and development of adaptation policies/actions

*BUT: Maritime transport is not (just) a ‘culprit’, it is (also) a victim*

Climate change/extreme events likely to have *direct* and *indirect* impacts on maritime transport infrastructure, operations and services

Sea-level rise, temperature-, humidity-, precipitation- changes, extreme storms and floods are likely to
- **affect ports**, hinterland transport and the broader global supply-chain
  - potential for *damage, disruption and delay* – *economic/trade related losses*
- **affect demand** for transport
- **exacerbate other transport-related challenges**, including for SIDS and other vulnerable economies
- **open new arctic sea-lanes** due to polar ice melting

Enhanced climate resilience / adaptation for ports and other key transport infrastructure is of strategic economic importance
The special case of the SIDS

- Small (land mass, economies, population), remote & highly vulnerable to external shocks
- Large dependency on imports (i.e. international transport); high transport costs
- Key concerns: connectivity and transport costs (accessibility and affordability)
- High exposure to natural disasters and CV & C; low adaptive capacity
- Seaports (and coastal airports): critical lifelines for external trade, food, energy, tourism (cruise-ships / air transport) and DRR; fisheries and blue economy
- Strong nexus between transport and tourism: “Sun-Sea-Sand (3S) tourism”, often a most significant SIDS industry, is threatened by climate - driven beach erosion / coastal inundation, as is its facilitating transport infrastructure
- These assets are threatened by sea level rise and extreme events (storms)

There is an urgent need for accelerated policy action to enhance the climate-resilience of seaports – in support of the implementation of the 2030 Agenda and of related international agreements, including the Paris Agreement, Sendai Framework, SAMOA Pathway ...

Recent related international initiatives include the UN Climate Action Summit 2019 and the Global Climate Action Pathways launched at COP 25

- MPGCA Milestones for ‘Transport’ and ‘Resiliency’ focus inter alia on ensuring the climate resilience of critical transport infrastructure under future climate change

UNCTAD Expert Meeting: timely opportunity for expert consideration of relevant issues, also with a view to informing important upcoming IG meetings/processes, including

- UNCTAD XV (Barbados, April 2021)
- 2nd UN Global Conference on Sustainable Transport
- UN Ocean Conference
- UNFCCC COP 26
- United Nations Decade of Ocean Science for Sustainable Development (2021-2030)
Overview of the Expert Meeting Programme of Sessions

see also Note by the UNCTAD secretariat (TD/B/C.I/MEM.7/23)

Session 1: Understanding the Challenge

Session 2: Climate change impacts and adaptation – Key issues and experiences, recent initiatives and developments

Session 3: Cross-cutting issues – Energy efficiency, climate change mitigation and decarbonizing maritime transport

Session 4: The special case of small island developing States and other small island economies

Session 5: Interactive discussion on conclusions, key messages, recommendations and areas for further work

Thank you!