

Covid-19: Transport and Trade-related Implications for SIDS¹

Dual challenge of Covid-19 and the climate crisis for SIDS

The COVID-19 pandemic further threatens the climate resilience of SIDS: these small islands are already vulnerable to natural disasters and climate change,² and must simultaneously respond to the wide-ranging socio-economic challenges posed by the global public health crisis, with one crisis exacerbating the other³. In July 2020, for instance, the humanitarian response to Tropical Cyclone Harold in the Solomon Islands, Vanuatu, Fiji and Tonga was affected by COVID-19 and related measures.⁴ Islands face the challenge of ensuring national preparedness both for natural disasters, such as tropical cyclones, and COVID-19, along with associated challenges of food shortages, at a time when weaknesses in the response to either can undermine responses to the other.⁵ In short, SIDS face the dual challenge of responding to the high and growing risk of climate change impacts while simultaneously responding to the implications of the coronavirus pandemic.⁶

Transport-related implications of Covid-19 for SIDS

The vital role of transport in facilitating trade and trade-led development has been particularly exposed during the pandemic. A key policy response to the global health crisis has been the implementation of measures affecting mobility, in particular international travel and border restrictions, including the closure of air and maritime borders for passengers⁷. Tourism, transport and distribution services have suffered and, in some cases, collapsed as a result (WTO, 2020⁸): global passenger air travel demand decreased by 58.4% in the first half of 2020 (IATA, 2020)⁹, with international tourism suffering its deepest crisis with a drop of 74% in international arrivals in 2020 (UNWTO, 2021a).¹⁰ International tourist arrivals in the first seven months of 2021 were still 80% below to the same period of pre-pandemic year 2019 (UNWTO, 2021b).¹¹

SIDS are particularly hardly hit as health requirements, travel restrictions and low demand has forced the cruise ship and aviation industries to cancel journeys. Thus, COVID-19 has inflicted a substantial decline in international tourism in SIDS: the vast majority of SIDS experienced a fall of over 60% in international tourist arrivals in 2020 compared with 2019 (UNCTAD, 2021a¹¹). This fall in international tourism caused substantial international tourist receipt losses – ranging between 6.5% - 59.9% for the Caribbean and 17.3% - 72.2% for the Pacific (UNWTO, 2020¹²). In addition, the cruise sector, a key pillar of tourism industry for Caribbean SIDS, has been severely impacted (OECS, 2020¹²) due to the suspension of sailing (UNCTAD, 2020a¹³).

¹ Prepared by UNCTAD Policy and Legislation Section for <https://SIDSport-ClimateAdapt.unctad.org>

² FAO (2020), "[Small Island Developing States. Response to COVID-19. Highlighting food security, nutrition and sustainable food system](#)".

³ A. Thomas (2020), "[Coronavirus underscores small islands' climate vulnerability](#)", *Climate Analytics*, 17 April 2020.

⁴ P. Pringle (2020), "[Facing Covid and climate, Pacific island capacity stretched](#)", *Climate Analytics*, 27 May 2020.

⁵ FAO (2020), see note 1 above.

⁶ OECS Secretariat (2020a), [COVID-19 and beyond](#). Impact assessment and responses. An economic and social impact assessment evaluating the effects of the COVID-19 crisis on economies and populations of OECS Member States. OECS Commission, 2020.

⁷ See IATA [COVID-19 Travel Regulations Map](#).

⁸ WTO (2020), [Trade in Services in the Context of Covid-19](#). Information Note. WTO, 28 May 2020.

⁹ IATA (2020), [Economics' Chart of the Week](#), 30 July 2020.

¹⁰ UNWTO (2021a), [UNWTO World Tourism Barometer and Statistical Annex](#), January 2021.

¹¹ UNWTO (2021b), [UNWTO World Tourism Barometer and Statistical Annex](#), September 2021.

¹² UNCTAD (2021a), [Development and Globalization: Facts and Figures 2021, Small island developing States](#), Tourism,

¹³ UNWTO (2020), Tourism in SIDS: the challenge of sustaining livelihoods in times of COVID-19, UNWTO Briefing Note – Tourism and Covid-19, Issue 2, June 2020. Available at: <https://www.e-unwto.org/doi/book/10.18111/9789284421916>.

¹² OECS Secretariat (2020a), see note 5 above.

¹³ UNCTAD (2020a), [Covid-19 and Tourism: Assessing the Economic Consequences](#).

As tourism is a key socio-economic pillar for SIDS, SIDS experienced an estimated fall in GDP of 9% in 2020 (UNCTAD, 2021a)¹⁴.

Public measures addressing the health crisis have also led to disruptions in the transportation of cargo¹⁵, vital for the livelihoods of import-dependent SIDS, including for the health sector and in the context of disaster risk reduction, management, response and recovery (DRR). The loss of passenger flights and the substantial reduction of air cargo has led to serious concerns for Caribbean SIDS in the OECS region in the movement of medical supplies and vital goods necessary for the fight against COVID-19 (OECS, 2020¹⁶). Due to disruptions in maritime transport following pandemic-related restrictions (e.g. on maritime health declarations and screening requirements, maritime crew disembarkation and substitution etc.¹⁷), negative spill-over effects for both inter-Americas and trans-Atlantic trade to and from the Caribbean and further supply chain disruptions, reduced transshipment cargo volumes and increased costs were expected (OECS, 2020). The combined adverse effects of disrupted supply chains, limited transport options and climate-related extreme events already came to the fore in the context of the emergency response to tropical cyclone Harold that wreaked havoc on four Pacific SIDS¹⁸.

This dynamic presents a multidimensional threat with wide-ranging negative implications for SIDS, including a decline in available public spending for capital works projects such as coastal transport infrastructure and a shift away from climate resiliency aspirations.

Climate change adaptation and resilience-building for critical transport infrastructure remains an increasingly urgent challenge for SIDS, even in times of pandemic

Given the potentially extensive economic costs of inaction, climate-resilience of seaports and other critical transport infrastructure is a matter of strategic socio-economic importance (UNCTAD, 2020c¹⁹) particularly for SIDS (UNCTAD/UNEP, 2019a²⁰), which depend on their coastal transport infrastructure as lifelines (UNCTAD/UNEP, 2019b²¹) for external trade, food/energy security, tourism, and DRR. In many SIDS these critical infrastructure assets are at high and growing risk (IPCC, 2018²²) of climate change impacts such as coastal flooding, from as early as in the 2030s (Monioudi et al., 2018²³). In the absence of effective adaptation action, the related impacts on transport infrastructure and operations could severely jeopardize the trade and sustainable development prospects – and gains, of these vulnerable nations.

¹⁴ UNCTAD (2021a), see note 11 above.

¹⁵ See also: UNCTAD (2020b), [COVID-19: A 10-point action plan to strengthen international trade and transport facilitation in times of pandemic](#) - UNCTAD Policy Brief No. 79; [International transport and supply chains key to COVID-19 recovery: UN agencies](#) - Eight UN organizations urge governments to take a risk-based approach to restoring maritime, air, and inland connectivity with minimal restrictions

¹⁶ OECS (2020a), [COVID-19 and beyond](#). See note 5 above.

¹⁷ WTO (2020), [Trade in Services in the Context of Covid-19](#). See note 7 above.

¹⁸ Remarks by H.E. Lois Young, Permanent Representative, Permanent Mission of Belize to the United Nations, UN DESA Webinar Series: [Sustainable Transport and COVID-19: Response and Recovery](#), June 26, 2020, 8:30 a.m. EDT.

¹⁹ UNCTAD (2020c), [Report of the Multi-year Expert Meeting on Transport, Trade Logistics and Trade Facilitation on its eighth session](#), Geneva, 27 and 28 October 2020, (TD/B/C.I/MEM.7/24); see also: [Climate change adaptation for seaports in support of the 2030 Agenda for Sustainable Development, Note by the UNCTAD secretariat](#), (TD/B/C.I/MEM.7/23), Agenda item 3, Multi-year expert meeting on transport, trade logistics and trade facilitation, eighth session.

²⁰ UNCTAD/UNEP (2019a), [Outcome Document, High Level Panel discussion on “Climate resilient transport infrastructure for sustainable trade, tourism and development in SIDS”](#), 10 December 2019, UNFCCC COP 25 Madrid.

²¹ UNCTAD/UNEP (2019b), [Concept note, High Level Panel discussion on “Climate resilient transport infrastructure for sustainable trade, tourism and development in SIDS”](#), 10 December 2019, UNFCCC COP 25 Madrid.

²² IPCC (2018), [Special Report, Global Warming of 1.5 °C](#).

²³ Monioudi, I.N., Asariotis, R., Becker, A. et al. Reg Environ Change (2018), 18:2211–2225. [Climate change impacts on critical international transportation assets of Caribbean Small Island Developing States \(SIDS\): The case of Jamaica and Saint Lucia](#). doi 10.1007/s10113-018-1360-4, <https://rdcu.be/Q10Y>.

Related hazards and risks are growing (IPCC, 2021²⁴; Asariotis, 2021²⁵), making the need for accelerated action on adaptation and resilience-building an increasingly urgent sustainable development imperative.

Effective adaptation requires 'fit-for-purpose' risk assessment procedures (at local and facility levels), bridging of potential data and knowledge gaps (Asariotis et al., 2018²⁶), and the development of appropriate technical and management solutions that reduce vulnerability and allow for decision-making under uncertainty. It also requires finance, technology and capacity-building, as well as coordinated and coherent policy responses and supportive legal and regulatory approaches (UNCTAD, 2020d²⁷). In this context, there is an important need for upscaling technical assistance as well as investment in adaptation and resilience building, as well as support for Early Warning Systems, which, as highlighted by the UN SG in March 2022 should be available to protect all global citizens within the next five years.²⁸

While the extensive socio-economic impacts of the COVID-19 pandemic give rise to new priorities that may challenge climate-resilience building and adaptation efforts, the pandemic may also be considered a cautionary tale, underlining the critical importance of preparedness, risk assessment and resiliency building. Lessons learnt should provide renewed impetus for timely climate risk and vulnerability assessments and foster long term planning, essential to enhancing resiliency.

Changing circumstances arising from the impacts of the COVID pandemic (e.g. the need for health and safety measures at ports of entry; changes to tourism markets/patterns; greater reliance on local/national resources/supplies) will need to be taken into account as part of any strategy for transport infrastructure adaptation and resilience building.

Upscaling capacity for energy efficiency and renewable energy generation will also be important for continued energy security and may bring major co-benefits, in terms of climate change mitigation and adaptation (e.g. to limit the adverse impacts of extreme heat on health and on operations), as well as in terms of reduced energy imports and related expenditure. This is particularly critical for SIDS and other countries that are facing longer term supply-chain disruptions and a reduction in earnings potential as a result of the impacts of the pandemic on major economic sectors, such as tourism, for instance.

Transport-related economic impacts

Building long term climate resiliency requires a good understanding of the direct and indirect economic impacts of CV&C-induced damages/disruptions affecting the transport system, in particular in light of current recovery efforts of the COVID-19 pandemic. Floods and coastal inundation from extreme events can render transportation systems unusable for the event duration and damage terminals, freight villages, storage areas and cargo and disrupt supply chains for longer periods of time (UNECE, 2015²⁹). Impacts can include disruptions to operations and damages to port infrastructure and vessels, as well as to hinterland connections, in addition to impacts on regional network connectivity. The costs and economic

²⁴ IPCC (2021), [Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change](#) [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press.

²⁵ Asariotis (2021), [Climate change impacts on seaports: A growing threat to sustainable trade and development](#), Article No. 75 [UNCTAD Transport and Trade Facilitation Newsletter N°90 – Second Quarter 2021], 04 June 2021.

²⁶ Asariotis et al., (2018), [Port Industry Survey on Climate Change Impacts and Adaptation](#). UNCTAD/SER.RP/2017/18/Rev.1.

²⁷ UNCTAD (2020d), [Climate Change Impacts and Adaptation for Coastal Transport Infrastructure: A Compilation of Policies and Practices](#), Transport and Trade Facilitation Series, No 12, UNCTAD/DTL/TLB/2019/1.

²⁸ <https://public.wmo.int/en/media/press-release/%E2%80%8Bearly-warning-systems-must-protect-everyone-within-five-years>; <https://news.un.org/en/story/2022/03/1114462>.

²⁹ UNECE (2015), [Transport for Sustainable Development: The case of Inland Transport](#). United Nations Economic Commission for Europe, Transport Trends and Economics Series ECE/TRANS/251.

losses arising from damage to infrastructure, operational disruptions and delay can be extensive.³⁰ In addition, in areas affected by tropical cyclones and related storm surges and waves, damage to ports and other coastal transport infrastructure and associated losses can be particularly significant, as demonstrated by the 2017 Caribbean hurricane season, the most costly hurricane season on record.³¹

The potential of devastating socio-economic impacts resulting from disruptions in the transport sector (both passenger and cargo) have been recently demonstrated, as governments have imposed mobility-related restrictions during the global health crisis. While not arising from climate factors, the quasi halt of air and maritime transport unleashed an unprecedented shock to tourism in the Caribbean (IDB, 2020³²), causing wide-ranging adverse economic effects, including rise in unemployment and sharp declines in foreign exchange and tax revenues, which curb resources available for public spending. The Caribbean region suffered a travel & tourism GDP drop of 58% due to its strong reliance on international tourism, which decreased significantly (WTTC, 2021³³). Within the Caribbean, some of the worst affected countries were St Kitts and Nevis with a steep decline of 72.3%, and St Lucia experiencing a decline of 71.7% (WTTC, 2021). The region faced a 24.7% decline of travel & tourism jobs in 2020 (WTTC, 2021). Given the high reliance of OECS Member States on trade and tourism³⁴, the pandemic provides a stark warning and reminder of the ways in which climate-induced disruptions that affect coastal transportation assets can have similarly devastating economic impacts in addition to exacerbating existing socio-economic challenges.

Trade Impacts of Covid-19 on SIDS

For SIDS, the breadth and intensity of the economic impacts of COVID-19 has implications for existing trade relations and priorities. Across the world, the pandemic has highlighted the interconnectedness of countries, their reliance on global value chains, and the importance of a resilient trading system. SIDS have been hit particularly hard, as many of their economies rely heavily on one or two key sectors, including notably tourism, for domestic employment and foreign exchange earnings. From the Caribbean and the Pacific to the Atlantic and Indian Oceans, most small island economies run large trade deficits, with tourism accounting for most of exports, while food, oil and other essentials represent the bulk of imports which relies on maritime transport. As noted by UNDESA “[w]hile tourism exports are highly volatile and susceptible to downturns in developed economies, the import demand of many small island economies is typically inelastic.³⁵” Tourism revenues, which accounted for almost 30% of SIDS’ GDP on average pre-pandemic,³⁶ have been crippled by COVID-19 related travel bans, cancellations and health-related restrictions on hotels;³⁷ remittance flows from overseas workers, too, have dwindled in the face of employment downturns in other economies.³⁸ In addition, “some relatively larger islands with more developed commodity export economies such as the Solomon Islands’ wood exports and Papua New Guinea’s oil and minerals, or high value export economies such as Jamaica and the Dominican Republic, are experiencing a collapse in their export markets in terms of demand and prices. This places greater strain on fragile island economies.”³⁹ Widespread supply-chain disruptions resulting from the ongoing

³⁰ The cost of inaction in relation to infrastructure damages due to sea level rise alone (exclusive of hurricane damage) in the Caribbean has been projected to amount to US\$8.0 billion by 2025 (Bueno et. al., 2008).

³¹ With losses estimated at approximately US\$ 320 billion WMO (2018). [WMO Statement on the State of the Global Climate in 2017](#).

³² IDB (2020), [Extreme outlier: the pandemic’s unprecedented shock to tourism in Latin America and the Caribbean](#) / Henry Mooney, María Alejandra Zegarra — (IDB Policy Brief; 339), June 2020.

³³ WTTC (2021), [Travel & Tourism Economic Impact, Global Economic Impact & Trends 2021](#), June 2021.

³⁴ Tourism alone contributes over 50% to gross domestic product (GDP) and nearly 40% to employment across the OECS region. OECS Commission, 2020. [COVID-19 and Beyond: Impact Assessments and Responses](#).

³⁵ Hamid Rashid, Poh Lynn Ng and Hoi Wai Jackie Cheng (2020), [The COVID-19 pandemic puts Small Island Developing economies in dire straits](#), UN/DESA Policy Brief #64, 1 May.

³⁶ Ibid.

³⁷ OECS (2020b), [“Caribbean Unveils Initiatives to Support Reopening Tourism”](#), July 10.

³⁸ Pamela Coke Hamilton (2020a), [“Impact of COVID-19 on tourism in small island developing states”](#), UNCTAD.

³⁹ Hamid Rashid, Poh Lynn Ng and Hoi Wai Jackie Cheng (2020), see note 35 above.

pandemic and a dramatic increase in maritime freight rates (UNCTAD, 2021b⁴⁰) have added to the pressure on SIDS, while foreign exchange earnings have decreased significantly.

In addition to exacerbating the pandemic's impact on growth and employment in SIDS, COVID-19 has also shrunk foreign exchange earnings, which are critically needed to run the affairs of SIDS, including meeting the rising costs of energy and food imports and servicing foreign debt.³⁴ Given their substantial dependence on food imports – 50% of small island economies import more than 80% of their food, with nearly all SIDS importing 60% of their food – breakdowns in global supply chains (including export restrictions imposed by countries to guarantee domestic supplies, slowdowns in the shipping industry and logistical bottlenecks) and falling foreign exchange earnings present an obvious threat to food security in SIDS.³⁵ Similarly, energy demand - and costs - are expected to rise significantly in the light of projected temperature increases under climate change (Monioudi et al., 2018)³⁶.

Climate-resilient recovery

There have been numerous calls³⁷ for the economic response measures to the global pandemic to consider climate change in line with the Paris Agreement and the SDGs. “*Building back better*” and shaping a “*green recovery*” have been at the center of related considerations, which have important implications for transport, trade and development policy and strategies going forward. As highlighted by the UN Secretary General, “*climate risks and opportunities must be incorporated into [...] all aspects of public policymaking and infrastructure*”.³⁸

Recent World Bank research emphasises the role of resilient infrastructure as “a lifeline for sustainable development”, with net benefits of investing in more resilient infrastructure in low- and middle-income estimated at \$4.2 trillion, and 4\$ in benefit for each \$1 invested.³⁹ Climate change makes action on infrastructure resilience even more necessary and attractive: on average, it doubles the net benefits from resilience.⁴⁷ However, SIDS and other vulnerable developing countries urgently require better access to affordable green and blue infrastructure financing (UNCTAD, 2021c⁴⁸), including an increase of funding in the form of grants, as opposed to loans,⁴⁹ to avoid increasing debt-burdens further.⁵⁰ While transport infrastructure investments in 2020 have fallen significantly,⁵¹ major scaling up of investment and capacity building for developing countries will be critical to ‘building back better’. According to [OECD](#) estimates, US\$6.9 trillion in infrastructure investment will be needed annually, to meet the SDGs by 2030 (OECD, 2017).⁵²

⁴⁰ UNCTAD (2021b), [High freight rates cast a shadow over economic recovery](#), 18 November 2021.

³⁴ Ibid.

³⁵ Food imports represent more than 15% of all merchandise imports for a large number of small island economies, which is twice the world average. See Hamid Rashid, Poh Lynn Ng and Hoi Wai Jackie Cheng (2020), UN/DESA Policy Brief #64: The COVID-19 pandemic puts Small Island Developing economies in dire straits, UN DESA, 1 May; and Pamela Coke Hamilton (2020b), “[COVID-19 and food security in vulnerable countries](#),” UNCTAD, 14 April. Also see: FAO (2020), “Small Island Developing States. Response to COVID-19. Highlighting food security, nutrition and sustainable food system”.

³⁶ Monioudi, I.N., Asariotis, R., Becker, A. et al. *Reg Environ Change* (2018), see note 22 above.

³⁷ See: [Petersberg Climate Dialogue XI \(2020\), Co-Chairs' Conclusions](#); [UN Secretary General proposal for six climate-related actions to shape the recovery](#) (20 April 2020); speech of [UN Climate Change Executive Secretary Patricia Espinosa](#) on 13 July 2020; [Placencia Ambition Forum 2020](#); [UN chief urges ministers to provide 'decisive leadership' on climate action](#) (12 October 2020).

³⁸ UN Secretary General proposal for six climate-related actions to shape the recovery (22 April 2020).

³⁹ Hallegatte, Stéphane, Jun Rentschler, and Julie Rozenberg (2019) *Lifelines: The Resilient Infrastructure Opportunity*. Sustainable Infrastructure Series. Washington, DC: World Bank. doi:10.1596/978-1-4648-1430-3.

⁴⁷ Ibid.

⁴⁸ UNCTAD (2021c), [Leading the push for a sustainable ocean economy](#), 22 June 2021.

⁴⁹ Timperley (2021), The broken \$100-billion promise of climate finance — and how to fix it, *Nature* 598, 400-402 (2021), doi: <https://doi.org/10.1038/d41586-021-02846-3>.

⁵⁰ See also [Bridgetown Covenant](#), at para. 87.

⁵¹ According to [UNCTAD](#), the number of announced cross-border project finance deals declined significantly in 2020 with those related to transportation infrastructure and fossil fuel energy falling most. Investment in transport infrastructure, power generation/distribution (except renewables) and telecommunications was down 60% compared to 2019.

⁵² OCDE (2017), *Investing in Climate, Investing in Growth*, Éditions OCDE, Paris, <https://doi.org/10.1787/9789264273528-en>.

The COVID crisis has highlighted that a well-functioning, open trading system is vital for ensuring continued access to indispensable goods and services, including food and medical supplies. Instead of returning to 'business as usual', there is an opportunity to steer the recovery towards more resilient and greener international trade governance and trade patterns. Putting sustainability front and centre as governments devise trade policies and regulations can support efforts to 'build back better' by, for example, lowering the cost of trade, supporting diversification into green export sectors and expediting the movement of green goods and services across borders. It can also help policy makers to focus on recovery measures that internalize environmental externalities and address the negative effects of trade on the environment.

The call to link trade and environmental policy making in the context of COVID economic response and recovery measures is especially relevant to SIDS. Most SIDS are already actively exploring ways to strengthen their economic performance, diversification and resilience in the face of external shocks – whether economic or environmental – and to explore ways to benefit from new trade opportunities.⁴⁰

It is thus a strategic moment to integrate climate resiliency and adaptation considerations, as well as DRR into transport, trade and tourism policy in SIDS, including in the context of Covid-19 response and recovery measures. A central consideration in this context is the need to build and enhance the climate resilience of SIDS' key coastal transport infrastructure assets, such as ports and coastal airports, which are critical facilitators of trade and tourism and ultimately, sustainable development.

⁴⁰ Although the WTO has had a special work programme on small economies since 2001, SIDS have long argued that they warrant a special category similar (in recognition) to that of LDCs to ensure trade arrangements are tailored to their specific circumstances and needs. Further, even before Covid-19, SIDS were increasingly vocal in their call for boosted climate action and support for building the climate-resilience of their economies and trade. At the same time, SIDS have been exploring ways to boost the environmental sustainability of tourism and safeguard it from the risk that environmentally conscious tourists will cut back on international travel due to concerns about climate footprints. Meanwhile, some SIDS are implementing innovative strategies to revive tourism; Barbados for instance has offered 1-year working visas for those able to work remotely.