POLICYBRIEF

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Climate Change Displacement and the Right to Education in Small Island Developing States

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Highlights

While many of the world's small island developing states (SIDS) have achieved access to basic education, ensuring the quality and continuity of education in the face of climate change presents a unique challenge. Internal displacement and international migration stress urban infrastructure and threaten already vulnerable populations in SIDS and their access to education.

Recommendations:

- Build and maintain multiple facilities that can serve as evacuation centres so schools can continue as learning facilities in the aftermath of extreme weather events.
- Continue to develop teaching materials and pedagogies within SIDS' education systems to be employed during times of disruption, while ensuring learners' socialisation needs are met in the case of online or distance learning.
- Create parallel curricular competencies between SIDS and destination countries, and advocate for access to education and training in any bilateral or multilateral arrangements for mobility and migration.

Disruption in Education due to Climate Displacement

Access to education and training is frequently disrupted within populations displaced by climate change or migrating from areas impacted by it. This type of disruption can take the form of school closures due to flooding or storm damage, people being forced to move into an area where existing school systems lack the capacity to absorb learners from climate-displaced populations, as well as closure of schools in depopulated areas. In some cases, physical, language, and administrative barriers pose additional challenges to accessing education for climate displaced communities. While the 2019 Global Education Monitoring Report has emphasised the need to accommodate displaced people — including those displaced due to climate change — in national education systems, how this is to be achieved is highly contextualised.

This policy brief addresses issues of education rights in the context of climate change and potential climate change displacement for SIDS residents. Challenges to adapting learning systems in the context of climate change are common to many SIDS and other countries, but SIDS also face unique challenges due to their geography, culture, and economic activities.

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Challenges Facing SIDS' Education Systems in the Context of Climate Change

In contrast with the common media discourse, at present most SIDS are contending with issues of rapid urbanisation and internal migration into cities (Milan 2016; Trundle et al. 2019). While some rural households relocate to urban areas due to the effects of climate change (such as salt-water intrusion into aquifers), most internal migrants within SIDS move into urban areas for the economic opportunities and travel hubs offered in cities. This influx of internal migrants has placed pressure on existing urban infrastructure, making it more vulnerable to the impacts of climate change. Schools in urban areas of many SIDS are now built to be climate resilient and serve the dual purposes of education and emergency shelter (Curtain 2019). For example, in Tuvalu all school infrastructure has recently been upgraded so that school buildings serve as evacuation centres during cyclones, flooding, and other emergencies (Neaki 2022). However, some concerns remain about this approach to climate resilient infrastructure, as learning continuity may be disrupted if schools are the only source of shelter. This is because learners may be displaced during the aftermath of extreme weather events while the school building serves as a temporary shelter for people in the surrounding community who have lost their housing. Therefore, urban disaster risk reduction (DRR) planning should include separate shelters to the extent possible given the resources available.

Many SIDS' education systems must also contend with the greater existential threat of education being disrupted over the long term, or indeed permanently, because of climate change. While the stated aim of most SIDS' governments is to maintain sovereignty over their land and territorial waters, some governments are taking a proactive stance on how to respond to a worst-case scenario under climate change — an island nation's land area becoming uninhabitable due

of the state could be carried out even if the government had to move to another location, whether temporarily or permanently (Mcleod et al 2019; Kofe 2021). How education would be delivered in such a scenario remains in question.

While the quality and affordability of internet connectivity in SIDS has drastically improved over the last decade owing to the use of submarine fibreoptic cable (ITU 2019), affordable connectivity remains challenging due to the high cost of submarine maintenance and network expansion. Studies on online learning in SIDS have found that more countries are creating online learning content — especially for higher education (Reddy et al. 2021). But most of the content developed for primary and secondary education relates to literacy and numeracy (Neaki 2022). Furthermore, while online educational content now exists in a number of SIDS, there has been little evaluation of teaching methods using this online content. For SIDS, preservation of traditional knowledge, culture, and language for islanders in a fully digital learning environment is critical but presents challenges. The difficulty in transmitting traditional knowledge in a fully online environment is documented by Nalau et al. (2018), who note that this type of knowledge is both cognitive and experiential, and therefore when facts are divorced from experience, efforts to pass knowledge from one generation to another are ineffective. Furthermore, fully online learning modalities are linked to decreased socialisation among learners, especially for learners from marginalised communities (Joosten and Cusatis 2020). SIDS should explore hybrid models that pay particular attention to training teachers and allowing learners to experience and value traditional and indigenous knowledge in contextualised digital environments across generations.

While internally displaced persons face policy and legislative barriers during climate-related learning disruptions, the scale and impact is much more significant for international

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migrants and those displaced by climate change from SIDS. For example, the type of work visas granted for migrants from Pacific SIDS to neighbouring Pacific countries are often strictly for working adults only, and in most cases do not allow access to the destination country's educational system. Even if migration is possible,

to sea level rise. SIDS are working to maintain sovereignty over their governmental systems, including their education systems, in the context of climate change. This involves building a digital nation whereby administrative functions learners can face difficulty in adapting to a destination country's school or training system if they have not developed relevant skills and knowledge. Education systems in SIDS can build resilience in learners by emphasising parallel curricular

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competencies to those found in destination countries should learners need to migrate. In exploring mobility agreements, SIDS should prioritise access and connectivity to education and training opportunities in any visa scheme.

Policy Recommendations

The following actionable steps are recommended to build the resilience of education systems in SIDS to meet the needs of people displaced by climate change.

1. Build and maintain multiple evacuation centres so schools can continue as learning facilities in the aftermath of extreme weather events.

Maintaining the quality and safety of school buildings in the face of climate change should remain a top priority for SIDS

and their development partners. However, having schools alone serve as evacuation centres during cyclones, flooding, and other emergencies is insufficient. Other public infrastructure should be retrofitted, built, or maintained to be used for evacuation and shelter during and after emergencies, allowing schools to maintain their educational function. School within educational settings can be adapted to long-term disruption, focusing on the need of learners to interact with each other and their instructors outside of online platforms. These pedagogies must develop learners to be resilient as well as critical thinkers. This is especially relevant to language, culture, and traditional knowledge curriculums, much of which are tied explicitly to the land and seas of respective SIDS. Contingency plans are needed for delegating these aspects of education to communities and/or holding classes outside, which have proven effective and engaging approaches for learners to connect to their cultures and each other offline (Selby et al. 2020). Considering the possibility of a permanent diaspora for some SIDS learners, the experiences of other communities that have sought to cultivate cultural literacy and native languages in the face of mass emigration offer useful insights and best practices for curriculum and pedagogy, such as the Hmong community within the United States (Lee 2019).

School systems play a critical role in helping learners in post-disaster recovery as well as building resilience for future disruptions.

systems play a critical role in helping learners in post-disaster recovery as well as building resilience for future disruptions (Bikar et al. 2021; Xu & Lu 2018). However, when schools serve as evacuation centres for longer periods of time, teachers are unable to dedicate their efforts to teaching (Kawasaki et al. 2020). Therefore, SIDS should prioritise retrofitting existing public infrastructure such as community centres, government buildings, and office buildings to meet the design requirements to serve as evacuation centres, and ensuring that new public infrastructure projects meet these design standards. Overseas development assistance should also include these requirements for proposed public building infrastructure projects.

2. Continue to develop teaching materials and pedagogies within SIDS' education systems that can be employed during times of disruption, while ensuring that learners' socialisation needs and connections to culture and language are maintained.

The COVID-19 pandemic has created a need for new learning modalities, and in many SIDS the education systems have responded by shifting to online learning. Attention should now turn to how teaching materials and communication

3. Develop curricular competencies in parallel with destination countries through bilateral or multilateral arrangements that allow for mobility and migration whether temporary or permanent.

By creating parallel curricular competencies with education and training programmes in destination countries, SIDS' education systems can build resilience and critical skills that learners may need in the event of international displacement due to climate change. Pacific SIDS such as Nauru, Tonga, and Tuvalu have sought to maintain sovereignty over their educational systems, but harmonisation with some school curriculums in Australia and New Zealand has continued when international migration (temporary or permanent) has become necessary for some learners (Neaki 2022). Continued bilateral or multilateral cooperation between SIDS and destination countries would allow core educational competencies to be developed in parallel, providing students from SIDS with the curricular building blocks to adapt to schooling in other countries when there is no clear legal immigration pathway. Parallel curricular competencies, along with migration policies allowing access to education and training programmes, will minimise learning disruption in cases when international migration becomes a viable and desired option.

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References

Bikar, S.S., Rathakrishnan, B., Kamaluddin, M.R., Che Mohd Nasir, N. and Mohd Nasir, M.A. 2021. "Social Sustainability of Post-Disaster: How Teachers Enable Primary School Students to be Resilient in Times of Ranau Earthquake." *Sustainability* 13(13): 7308. https://doi.org/10.3390/ su13137308

Curtain, R. & Dorman, M. 2019. "A Pressure Release Valve? Migration and Climate Change in Kiribati, Nauru, and Tuvalu." Canberra: Development Policy Center. https://devpolicy.org/publications/reports/ Migration-climate%20change-Kiribati-Nauru-Tuvalu.pdf

International Telecommunication Union (ITU). 2019. "Small Islands Developing States (SIDS) and ICTs. Midterm Review of the Samoa Pathway." Geneva: ITU Publications. https://www.itu.int/en/ITU-D/LDCs/ Documents/2019/SIDS%26ICTS-Midterm-Review-Samoa-Pathway.pdf

Joosten, T. & Cusatis, R. 2020. "Online Learning Readiness." American Journal of Distance Education 34(3): 180–193. https://doi.org/10.1080/0 8923647.2020.1726167

Kawasaki, H., Yamasaki, S., Rahman, M.M., Murata, Y., et al. 2020. "Teachers-Parents Cooperation in Disaster Preparation When Schools Become as Evacuation Centers." *International Journal of Disaster Risk Reduction* 44: 101445. https://doi.org/10.1016/j.ijdrr.2019.101445

Lee, S. 2019. "Alternatives to Diasporic Return: Imagining Homelands and Temporary Visits Among Hmong Americans." In Diasporic Returns to the Ethnic Homeland, eds. Tsuda, T. & Song, C., 219–238. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-319-90763-5_12

Mcleod, E., Bruton-Adams, M., Förster, J., Franco, C., et al. 2019. "Lessons from the Pacific Islands – Adapting to Climate Change by Supporting Social and Ecological Resilience." *Frontiers in Marine Science* 6: 289. https://doi.org/10.3389/fmars.2019.00289

Milan, A. Oakes, R. & Campbell, J., 2016. Tuvalu: Climate Change and Migration — Relationships Between Household Vulnerability, Human Mobility, and Climate Change. Report No.18. Bonn: United Nations University Institute for Environment and Human Security. https://collections.unu.edu/eserv/UNU:5856/Online_No_18_Tuvalu_ Report_161207_.pdf Nalau, J., Becken, S., Schliephack, J., Parsons, M., et al. 2018. "The Role of Indigenous and Traditional Knowledge in Ecosystem-Based Adaptation: A Review of the Literature and Case Studies from the Pacific Islands." *Weather, Climate, and Society* 10(4): 851–865. https://doi. org/10.1175/WCAS-D-18-0032.1

Neaki, F., 2022. Tuvalu Rights to Education Consultation. 18 February, online.

Reddy, P., Sharma, B., &. Chaudhary, K. 2021. "Digital Literacy: A Review in the South Pacific." *Journal of Computing in Higher Education* 34: 83–108. https://doi.org/10.1007/s12528-021-09280-4

Selby, D., Kagawa, F. & Oberman, R. 2020. "Along the Cays and Bays: Climate Change Learning in a Small Island Developing State." *Policy* & *Practice: A Development Education Review* 30: 31–56. https://www. developmenteducationreview.com/issue/issue-30/along-cays-and-baysclimate-change-learning-small-island-developing-state

Trundle, A., Barth, B. & McEvoy, D. 2019. "Leveraging Endogenous Climate Resilience: Urban Adaptation in Pacific Small Island Developing States." Environment and Urbanization 31(1): 53–74. https://doi. org/10.1177/0956247818816654

United Nations Environment Programme. 2021. "A Practical Guide to Climate Resilient Buildings and Communities." Nairobi: United Nations Environment Programme. https://wedocs.unep.org/xmlui/bitstream/ handle/20.500.11822/36405/Adapbuild.pdf

Xu, J. & Lu, Y. 2018. "Towards an Earthquake-Resilient World: From Post-Disaster Reconstruction to Pre-Disaster Prevention." *Environmental Hazards* 17(4): 269–275. https://doi.org/10.1080/17477891.2018.1500878

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