# limits to climate adaptation

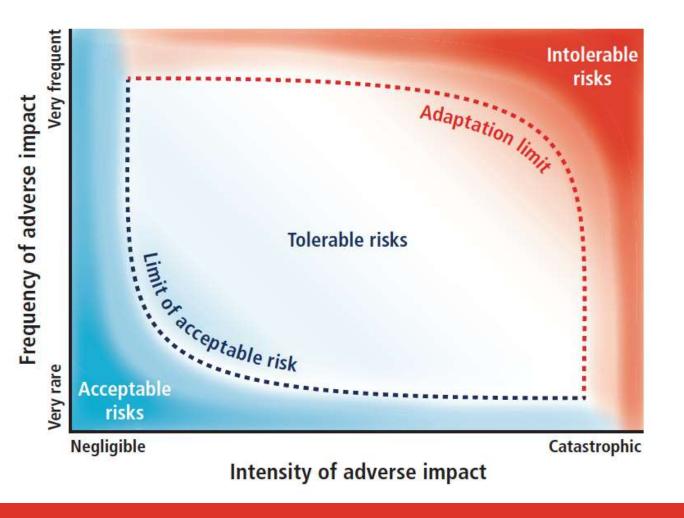
Dr Johanna Nalau, Griffith University Lead Author, IPCC AR6 WGII, Chapter 15



#### **Adaptation Limit**

"a limit is a point when an intolerable risk must be accepted; the objective itself must be relinquished; or some adaptive transformation must take place to avoid intolerable risk" (Klein et al., 2014, p. 906)







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Human capacity Social/ cultural Governance Financial Information Physical

Biological Biophysical

**~1** 

Economic

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Innovation

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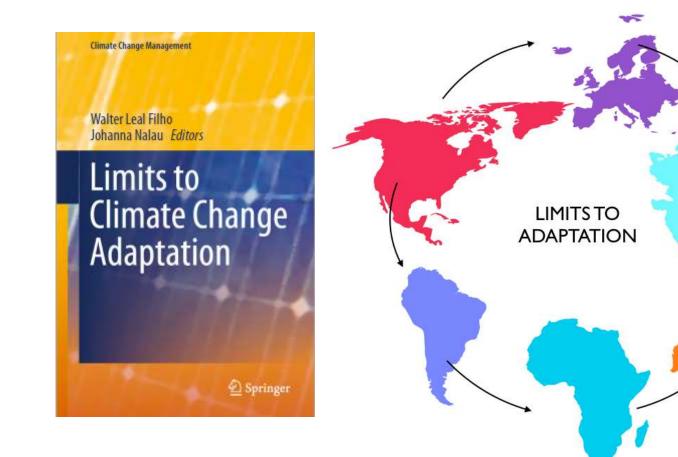
Tools

Policy

Learning

Awareness Capacity





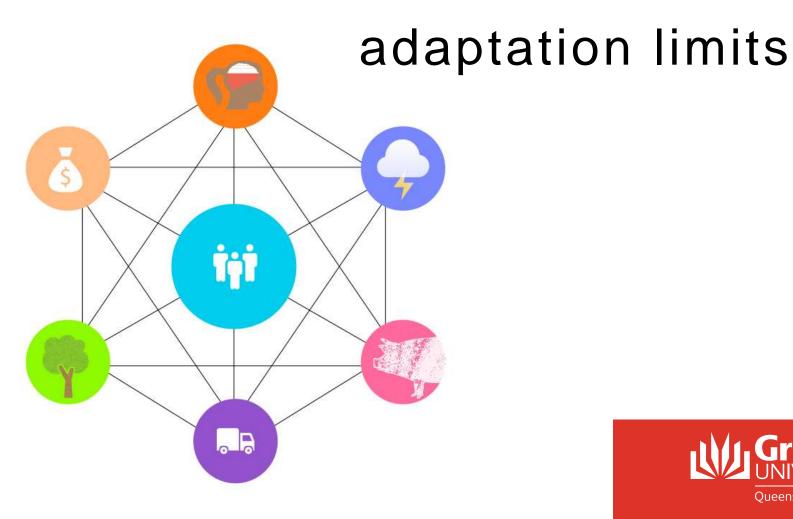
1	Introduction: Limits to Adaptation Johanna Nalau and Walter Leal Filho	1				
Par	t I Limits to Climate Change Adaptation in Asia					
2	Strategies and Barriers to Adaptation of Hazard-Prone Rural Households in Bangladesh G. M. Monirul Alam, Khorshed Alam, Shahbaz Mushtaq, Most Nilufa Khatun and Walter Leal Filho	11				
3	Governance Limits to Adaptation in Cambodia's Health Sector Daniel Gilfillan					
4	Land-Based Strategic Model by Integrating Diverse Policies for Climate Change Adaptation in Nepal Adish Khezri, Arbind Man Tuladhar and Jaap Zevenbergen					
5	Climate Change and Migration in Bangladesh: Empirically Derived Lessons and Opportunities for Policy Makers and Practitioners. Johannes Luetz	59				
Par	t II Limits to Climate Change Adaptation in Africa					
6	Limits to Climate Change Adaptation in Zimbabwe: Insights, Experiences and Lessons Nelson Chanza	109				
7	Pastoralists Shifting Strategies and Perceptions of Risk: Post-crisis Recovery in Damergou, Niger Karen Marie Greenough	129				

8	Political Limits to Climate Change Adaptation Practices: Insights from the Johannesburg Case	143
9	Constraints and Limits to Climate Change Adaptation Efforts in Nigeria Idowu O. Ologeh, Joshua B. Akarakiri and Francis A. Adesina	159
10	Adapting Agriculture to Climate Change: Suitability of Banana Crop Production to Future Climate Change Over Uganda Geoffrey Sabiiti, Joseph Mwalichi Ininda, Laban Ayieko Ogallo, Jully Ouma, Guleid Artan, Charles Basalirwa, Franklin Opijah, Alex Nimusiima, Saul Daniel Ddumba, Jasper Batureine Mwesigwa, George Otieno and Jamiat Nanteza	175
11	Local Adaptation to Climate Extremes in Domboshawa: Opportunities and Limitations Vincent Itai Tanyanyiwa and Rejoice Madobi	191
Par	t III Limits to Climate Change Adaptation in Australia, North-America and Europe	
12	The Limits of Imagination	211
13	Climate Change Adaptation in Coastal East Arctic Ecosystems: Complexity and Challenges of Monitoring and Evaluation Moktar Lamari, Line Poulin-Larivière and Johann L. Jacob	227
14	Limits to Adaptation on Climate Change in Bosnia and Herzegovina: Insights and Experiences Goran Trbic, Davorin Bajic, Vladimir Djurdjevic, Vladan Ducic, Raduska Cupac, Đorđe Markez, Goran Vukmir, Radoslav Dekić and Tatjana Popov	245



Part IV Limits to Climate Change Adaptation in the Pacific Region

15	Climate Change Adaptation Limits in Small Island States Stacy-ann Robinson		
16	Limits to Coastal Adaptation in Samoa: Insights and Experiences	283	
17	Limits to Capital Works Adaptation in the Coastal Islands: Lessons for the Pacific Brendan Mackey and Daniel Ware 18		325
	19	Michael Otoara Ha'apio, Walter Leal Filho and Morgan Wairiu Customary Land and Climate Change Induced Relocation: A Case Study of Vunidogoloa Village, Vanua Levu, Fiji Dhrishna Charan, Manpreet Kaur and Priyatma Singh	345
	20	Limits to Adapting to Climate Change Through Relocations in Papua-New Guinea and Fiji Dalila Gharbaoui and Julia Blocher	359
	21	Atoll Habitability Thresholds	381
	22	Conclusions: Overcoming the Limits to Adaptation	401



- Economic limits: hard infrastructure
- Ecological Limits: species tolerance to salt water on the islands
- Social and cultural limits: identity tied to land (Pacific) or livelihood activity (pastoralism in Niger)
- Relocation: lack of access to resources
- Political limits: administrative boundaries
- Imagination: perception-based limits

adaptation limits



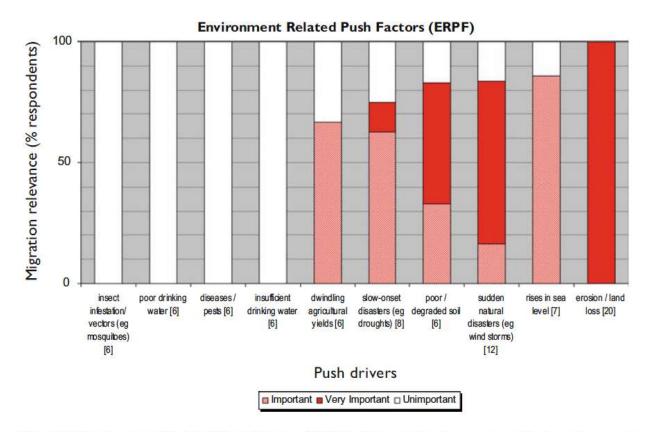


Fig. 5.4 Environment Related Push Factors (ERPF). Important and very important environment related pressures to migrate; Q = 49 FG = 289 N = []

Biophysical limits ————— Sociocultural limits

Luetz, chapter 5



**Biophysical limits** 

Forced to change livelihoods

Greenough, chapter 7





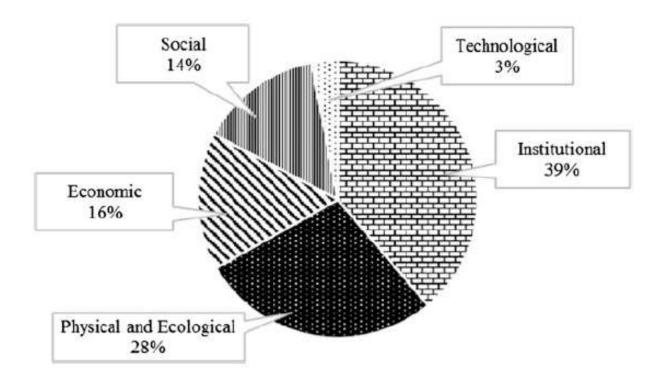


Fig. 15.1 Adaptation limits in SIDS by typology (%) (based on NCs analysed in this chapter)

Adaptation Limits in the SIDS (Robinson, S., chapter 15)



Fig. 20.3 A home in the Potsdam Care Centre in, Madang Provice, PNG. Most of the houses in the care centres for the Manam communities were built with the help of NGOs, as the Manam people have been largely forbidden by the mainland community from felling timber. (*Photo* © Julia Blocher 2015)



Adaptation Limits in the SIDS (Charbaoui, C. & Blocher, J. chapter 20)



### adaptation limits

### loss and damage



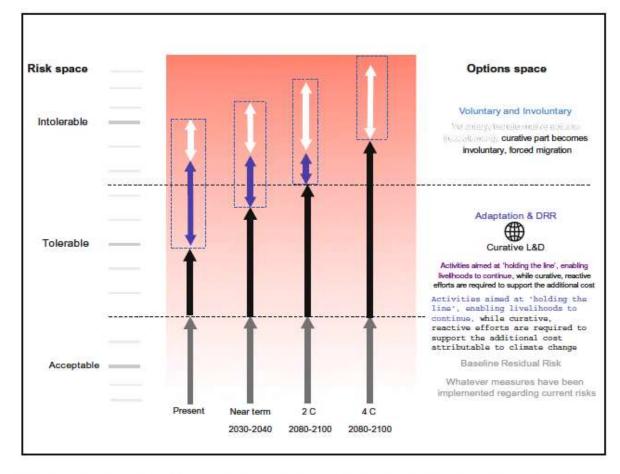


Fig. 15.2 Visualisation of risk and options spaces for the SW Pacific. Drawing on Mechler and Schinko (2016)

