



Building resilient communities for Torres Strait futures

Uncertain futures - rapid pace of change

The Torres Strait is a region of rich natural and cultural values, with tight linkages between its environmental assets, ecosystem services and the livelihoods of communities that rely upon them. The Torres Strait Treaty explicitly aims to protect these communities' livelihoods, and improve them through sustainable economic development. As Australia's northern border with Papua New Guinea (PNG), however, the region is under increasing pressure from PNG population growth, mining development and exploitation and pollution of shared Torres Strait resources. Global pressures such as peak oil, shipping traffic and climate change will also have complex impacts on environmental assets.

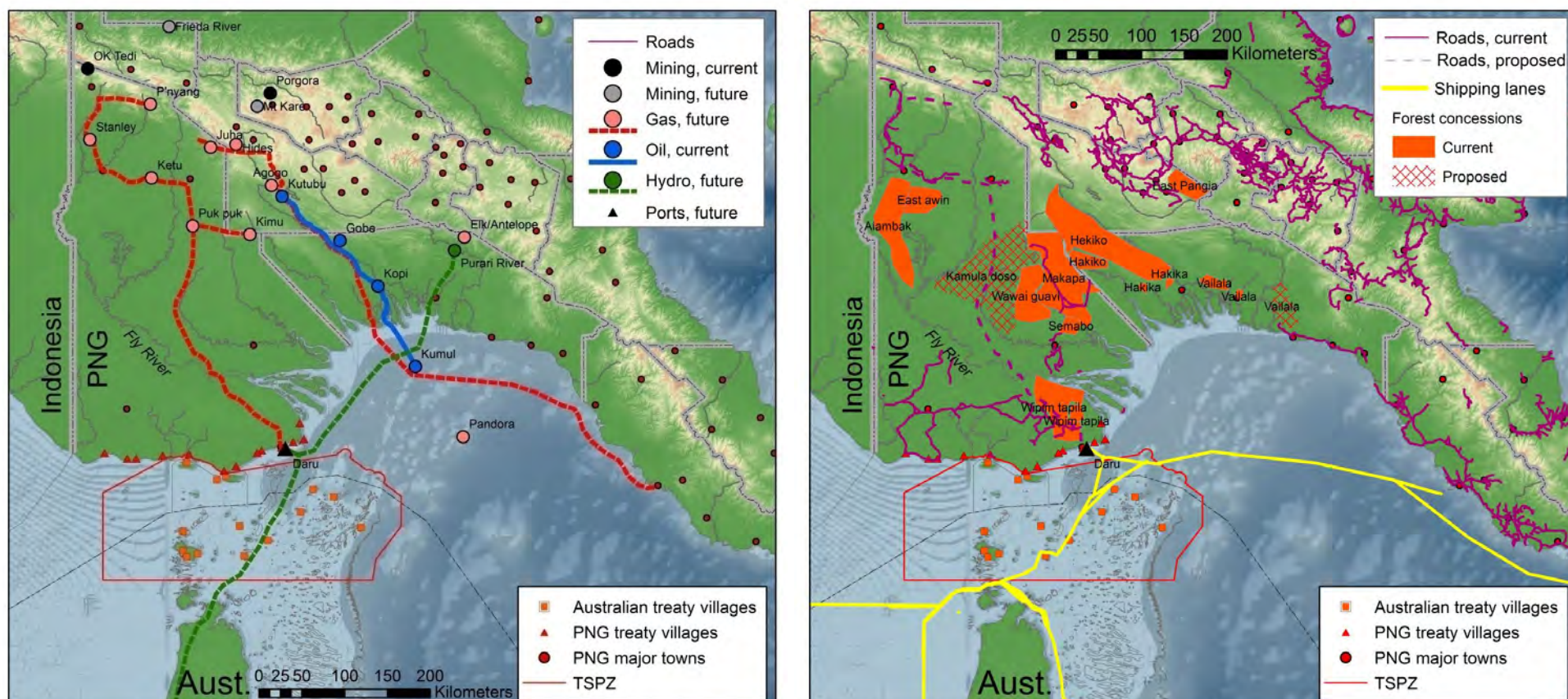
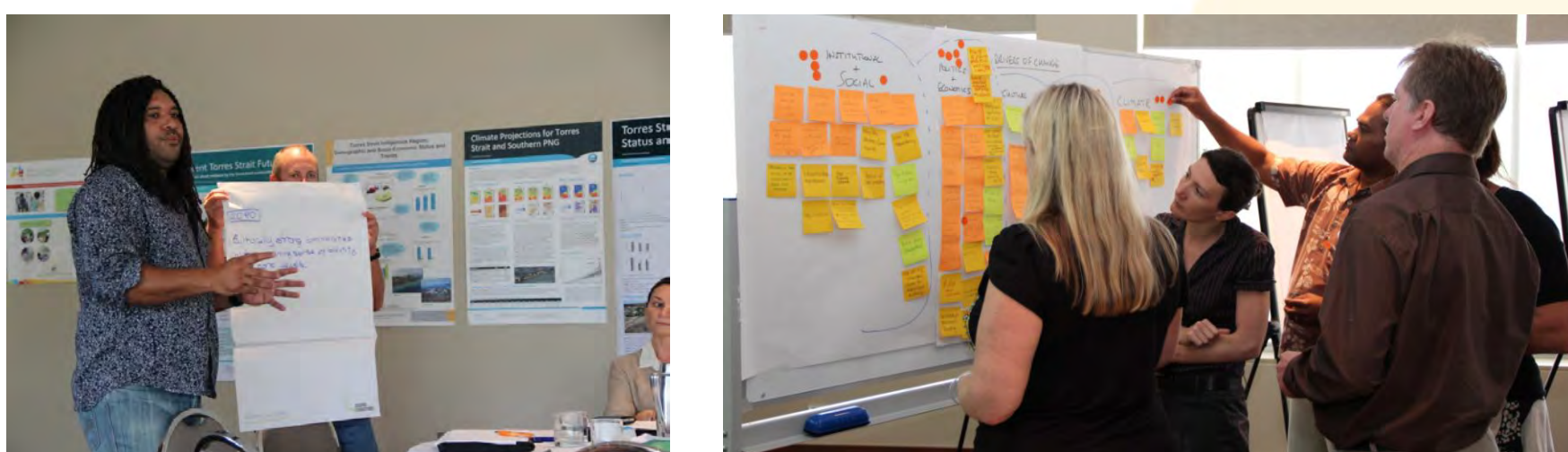


Fig. 1. Resource extraction in Papua New Guinea may impact the future of Torres Strait communities. (Left) Mineral, gas, oil, hydro, port development; (Right) Roads, shipping lanes, forest concessions.

Proactive participatory scenario planning

This uncertain future will present challenges for building resilience of Torres Strait communities, but may also provide opportunities for sustainable economic development (e.g. ecotourism, payments for ecosystem services, aquaculture, sustainable fisheries). In order to prepare for this future, participatory scenario planning enables communities to identify potential changes, and then proactively plan for them rather than await change and respond reactively.



Regional stakeholder workshop

In a workshop involving 22 representatives from stakeholder organisations four plausible futures were identified for the Torres Strait and their consequences for ecosystem assets, community livelihoods and adaptive capacity were explored (Fig. 2, 3).

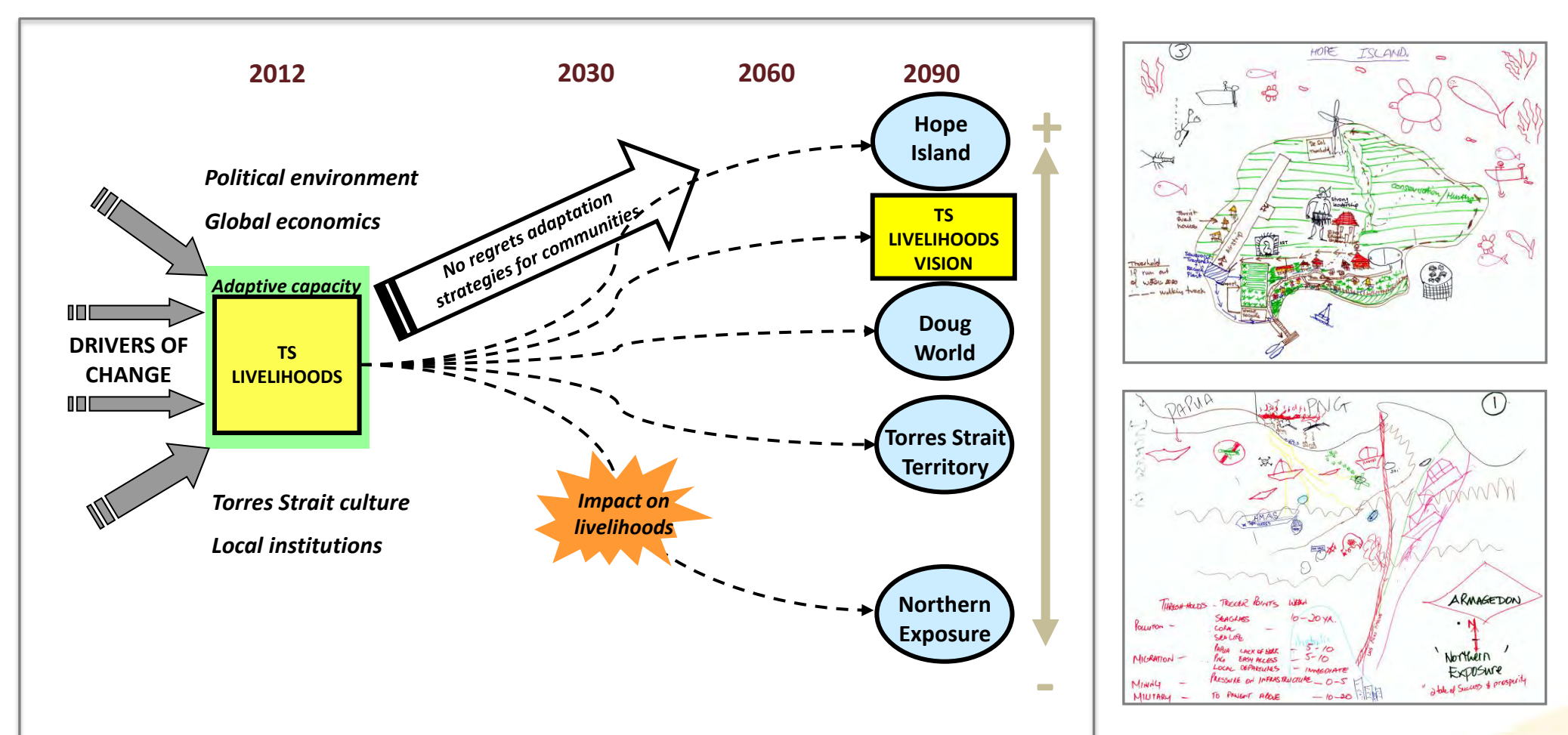


Fig. 2. (Left) Scenario planning approach to identify potential futures for the Torres Strait. (Right) "Hope Island" and "Northern Exposure" scenario illustrations representing different outcomes of global economic growth and maintenance of Torres Strait culture.

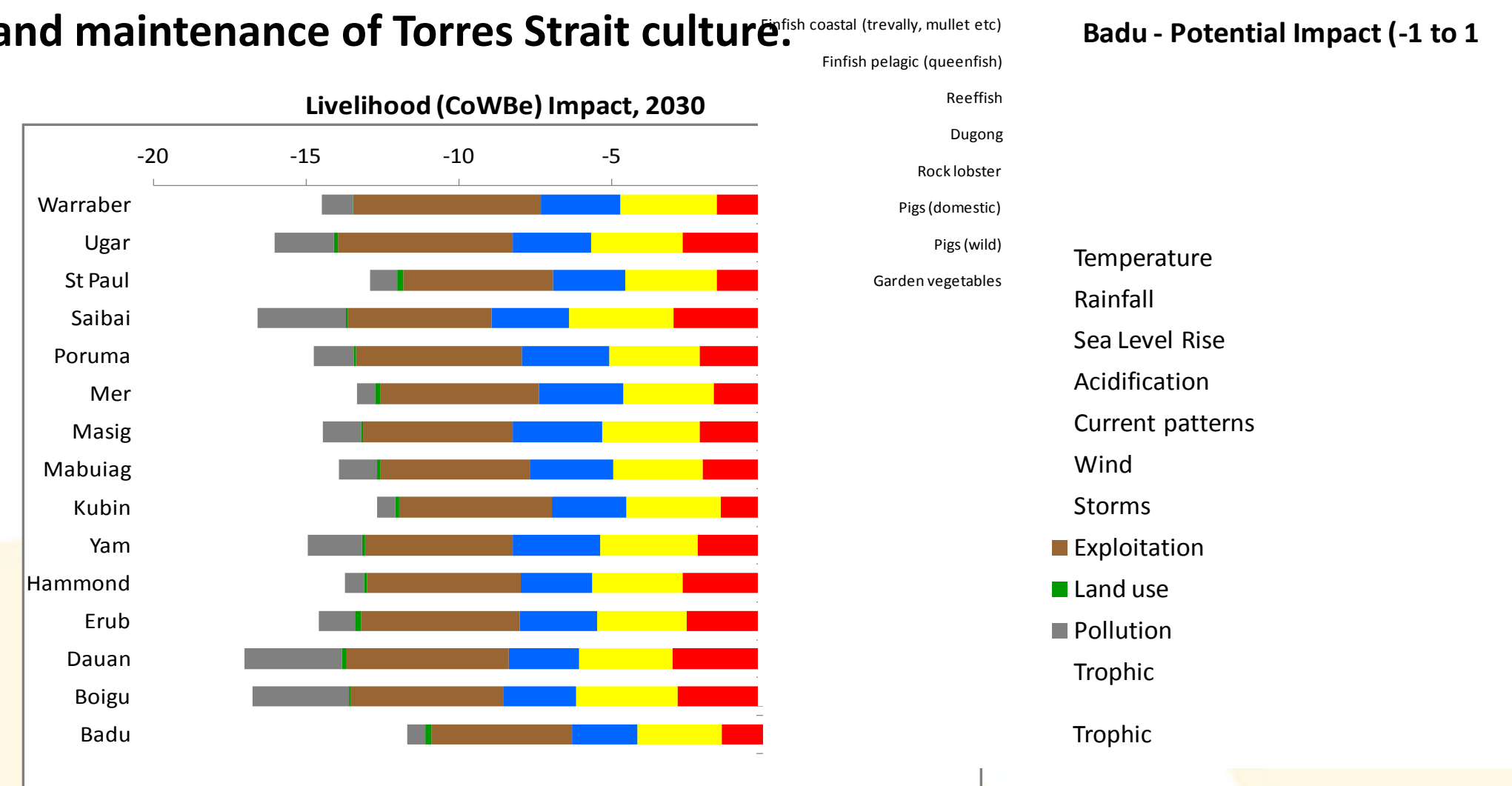


Fig. 3. Projected impacts to 2030 of multiple drivers of change on livelihoods across communities.

Next steps

The workshop outcomes are guiding upcoming activities:

- Three community workshops linked to Torres Strait Regional Authority (TSRA) adaptation planning: Masig, Boigu, Erub
- Integration workshops between community, TSRA Board and government
- Validation of resilience model with stakeholders
- Evaluation of stakeholder perceptions and learning

Project Team:

James Butler, Erin Bohensky, Yiheyis Maru, Tim Skewes, Sara Busilacchi, Jack Katzfey (CSIRO)
John Rainbird, Miya Isherwood, Vic McGrath, Damian Miley (TSRA)
Cass Hunter (JCU)