



National Environmental
Research Program

TROPICAL ECOSYSTEMS *hub*

Building resilient communities for Torres Strait futures



National Research
FLAGSHIPS
Wealth from Oceans



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Australian Government



Project 11.1: Building resilient communities for Torres Strait futures
NERP Tropical Ecosystems Hub and Reef Rescue Conference • Cairns • 7-10 May 2013



RELEVANCE OF WORK - Uncertain Torres Strait futures

Rapid pace of change

- Climate change
- Peak oil
- Population growth
- Resources boom
- Disease and biosecurity
- Human migration

Implications for livelihoods

- Threats
- Opportunities

Need for pro-active and participatory planning



Scenario Planning in Milne Bay, Papua New Guinea



APPROACH & RESULTS: GOVERNMENT SCENARIO WORKSHOP OCTOBER 2012, 22 STAKEHOLDERS

2012

2030

2060

2090

Political environment
Global economics

Adaptive capacity

TS
LIVELIHOODS

DRIVERS OF
CHANGE

Torres Strait culture
Local institutions

No regrets adaptation strategies for communities



Doug World

Torres Strait Territory

Northern Exposure



RESULTS (Dauan 2030)

Livelihood importance (%)

Potential impact (-1 to 1)

2 4 6 8 10 12 14 16

-0.3 -0.25 -0.2 -0.15 -0.1 -0.05 0 0.05 0.1 0.15

Finfish coastal (trevally,..)

Reeffish

Turtles (green)

Water (fresh surface..)

Finfish pelagic (queenfish)

Mackerel

Dugong

Sharks and rays

Garden vegetables

Cassava

Rock lobster

Crabs (mud)

Barramundi

Non-timber building..

Crabs (blue)

Climate change

Temperature

Rainfall

Sea Level Rise

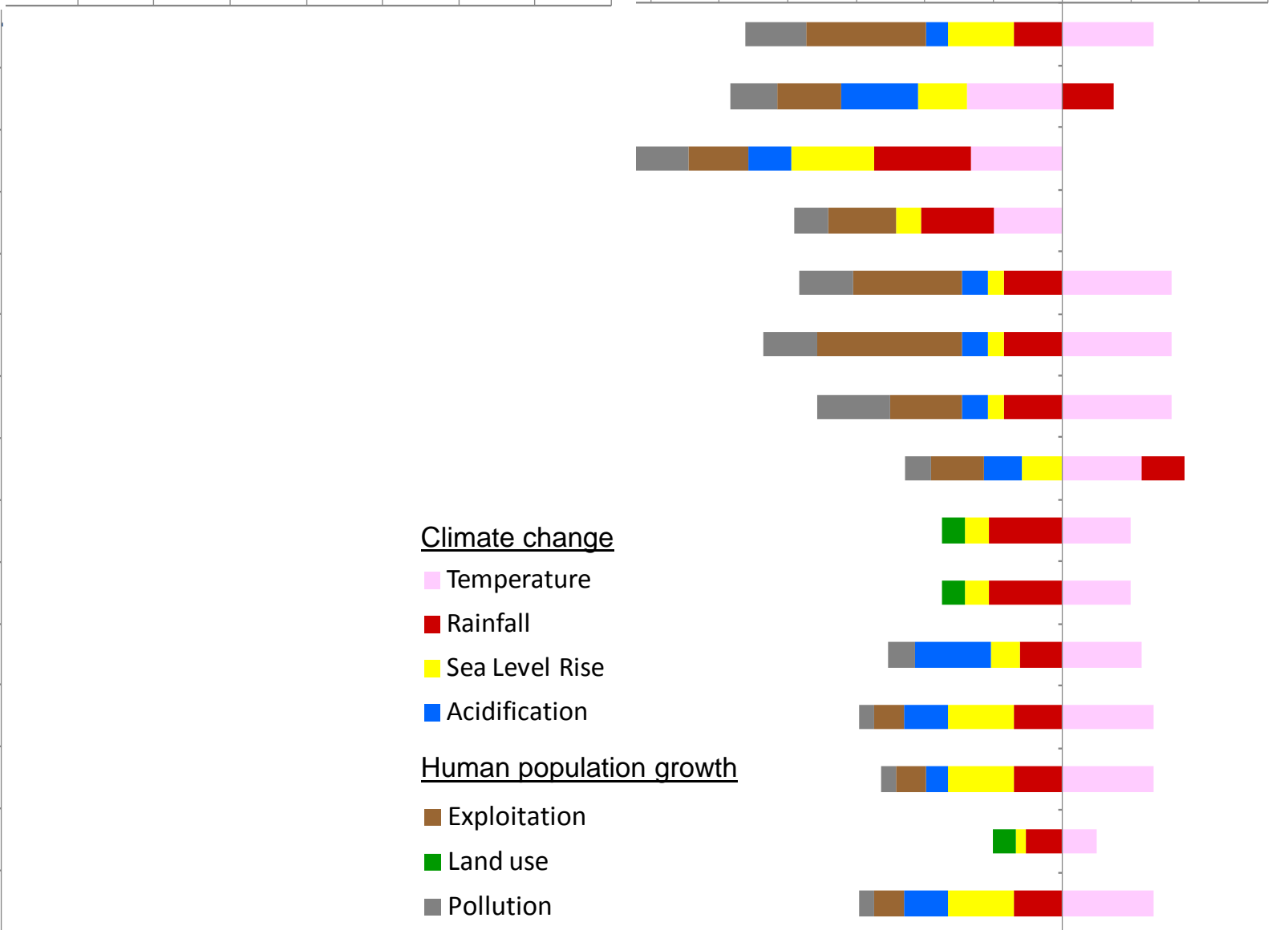
Acidification

Human population growth

Exploitation

Land use

Pollution





APPLICATION OF WORK

1. Provision of information to communities and regional stakeholders to advise decisions
2. Identification of alternative livelihoods and 'no regrets' strategies
3. Increased capacity for communities and stakeholders to avoid mal-adaptive strategies
4. Support the development of TSRA community adaptation planning





FUTURE DIRECTIONS

- Three Torres Strait community workshops linked to TSRA adaptation planning: Masig, Boigu, Erub
- Integration workshops between community, TSRA Board and government
- Validation of resilience model with stakeholders
- Evaluation of perceptions and learning over project lifetime

Greatest challenges that the Torres Strait Region will face in the future (pre-workshop survey, top 3 ranked)

change climate

community coordination

development disadvantage

economic employment

environment environmental fragile funding growth health home including increase

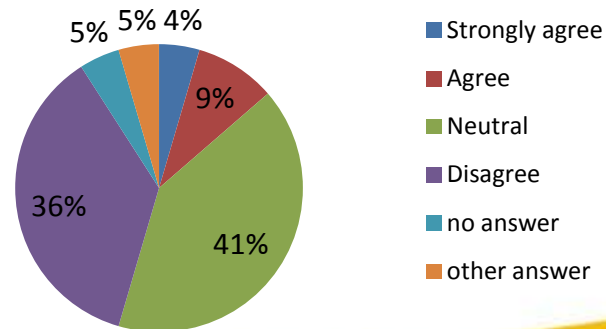
increasing independence induced infrastructure internal island issues keeping

level levels managing movements people population pressures regional

resilience resources rise rising sea social

sustainability welfare

How much do you agree with the following statement?: "The Torres Strait Region's policies are enabling it to be ready to cope with these challenges."





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THANK YOU

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