

Natural Solutions

Building resilience in the Pacific



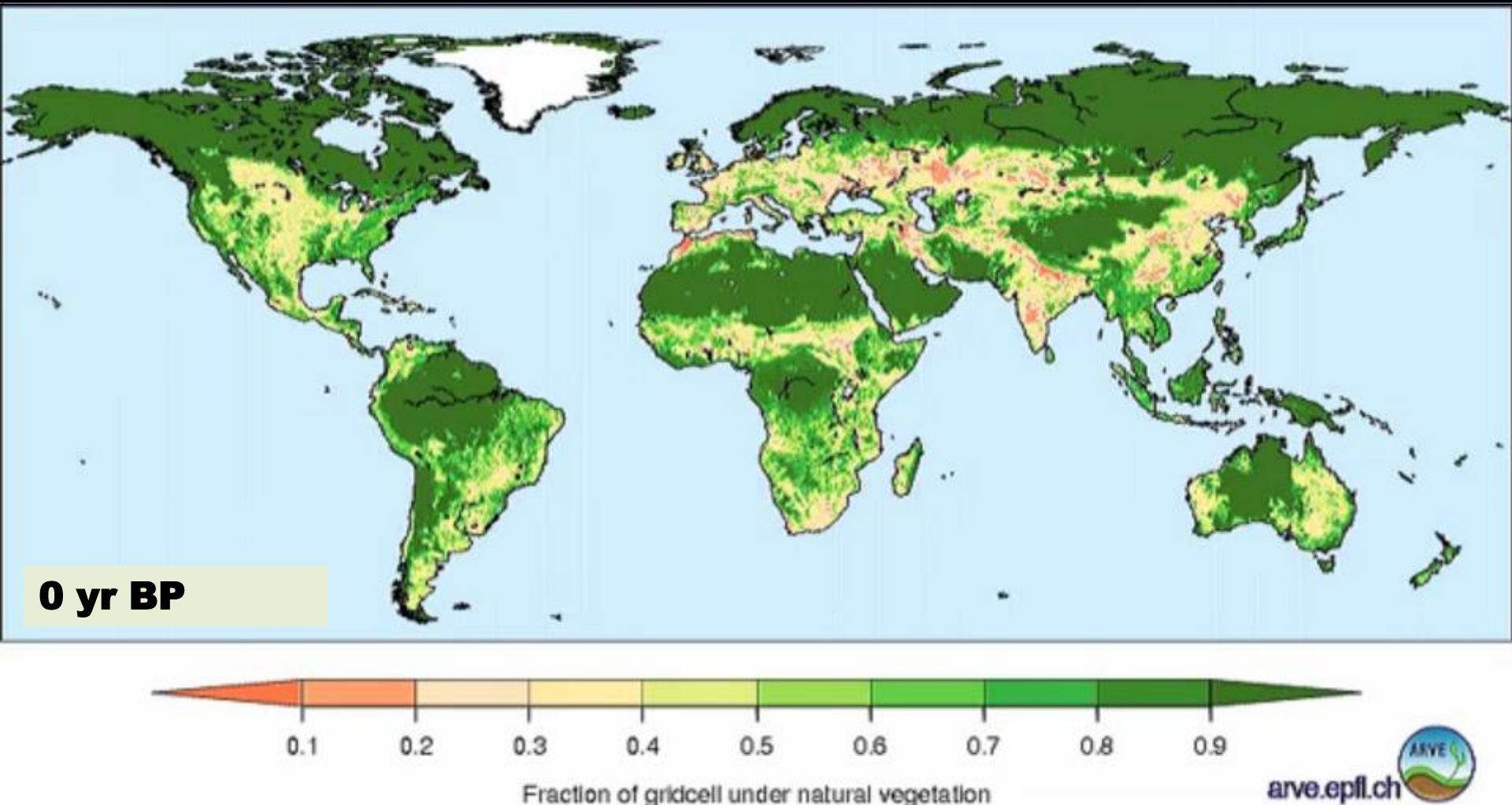
Nik Sekhran, Head: Ecosystems and Biodiversity, UNDP

*9th Pacific Conference on Nature Conservation and Protected Areas
Suva, Fiji, 2-6 December 2013*



Surviving and thriving in the Anthropocene...

43% global terrestrial area transformed



The Great Acceleration

1950 marked the beginning of a massive acceleration in human activity and large-scale changes in the Earth system.

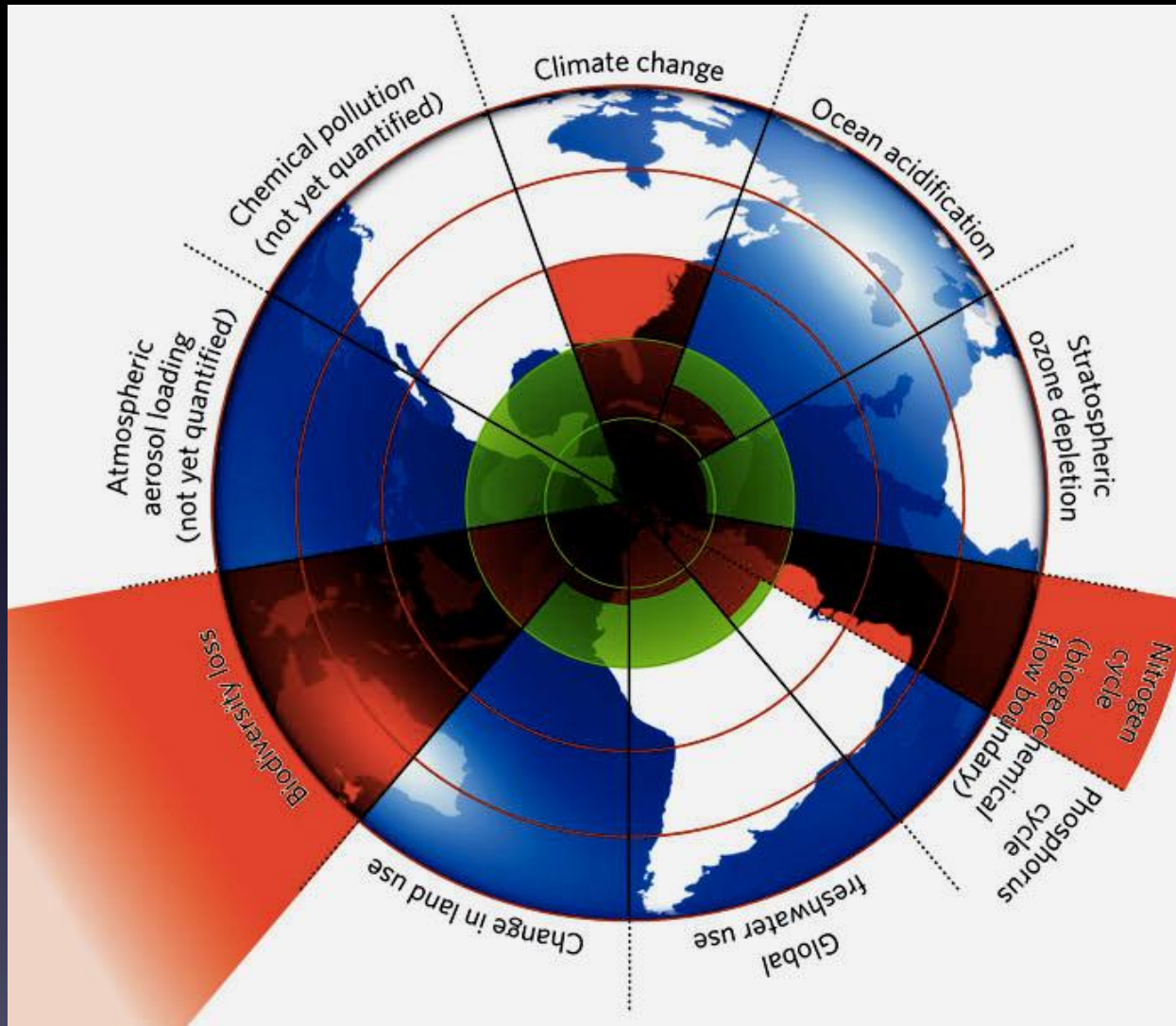


SOURCE: igbp.net | Steffen et al., 2005, Global Change and the Earth System, Springer, pp. 132-133
DESIGN: Globeis.org

...into the Anthropocene

www.igbp.net

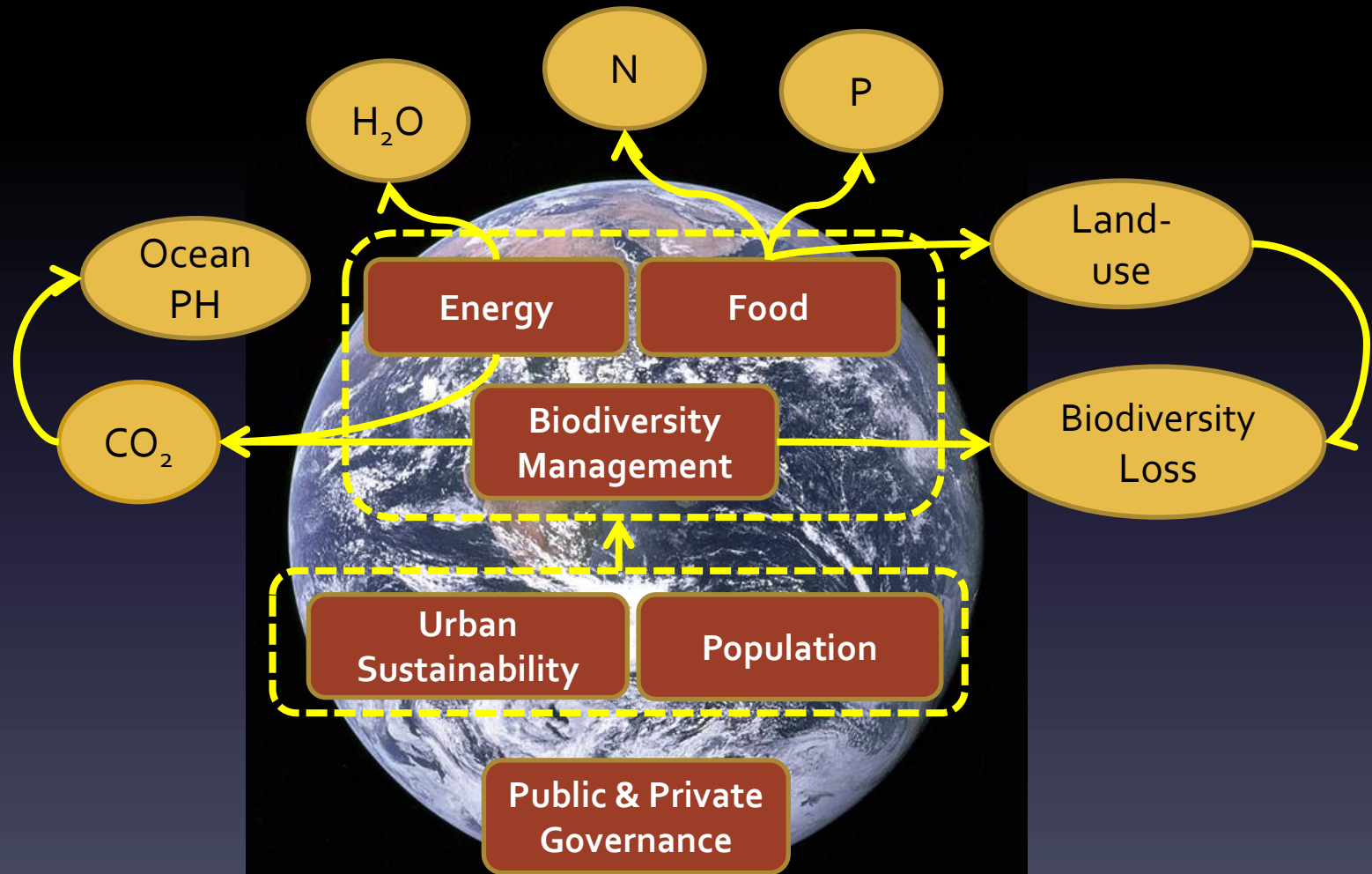
Planetary boundaries



Rockström *et al.* (2009)



Planetary Boundaries: Rockström *et al.* (2009)



Structural Transformations: Rockström & Sachs (2012)



Telegraph



Fairfax



Fairfax



Villagers on the island of Abaiang stand in the sea where their homes used to be.

Photo: Justin McManus

Occupy 2012



Weary Traveller



Cuisinivity



Greenpeace

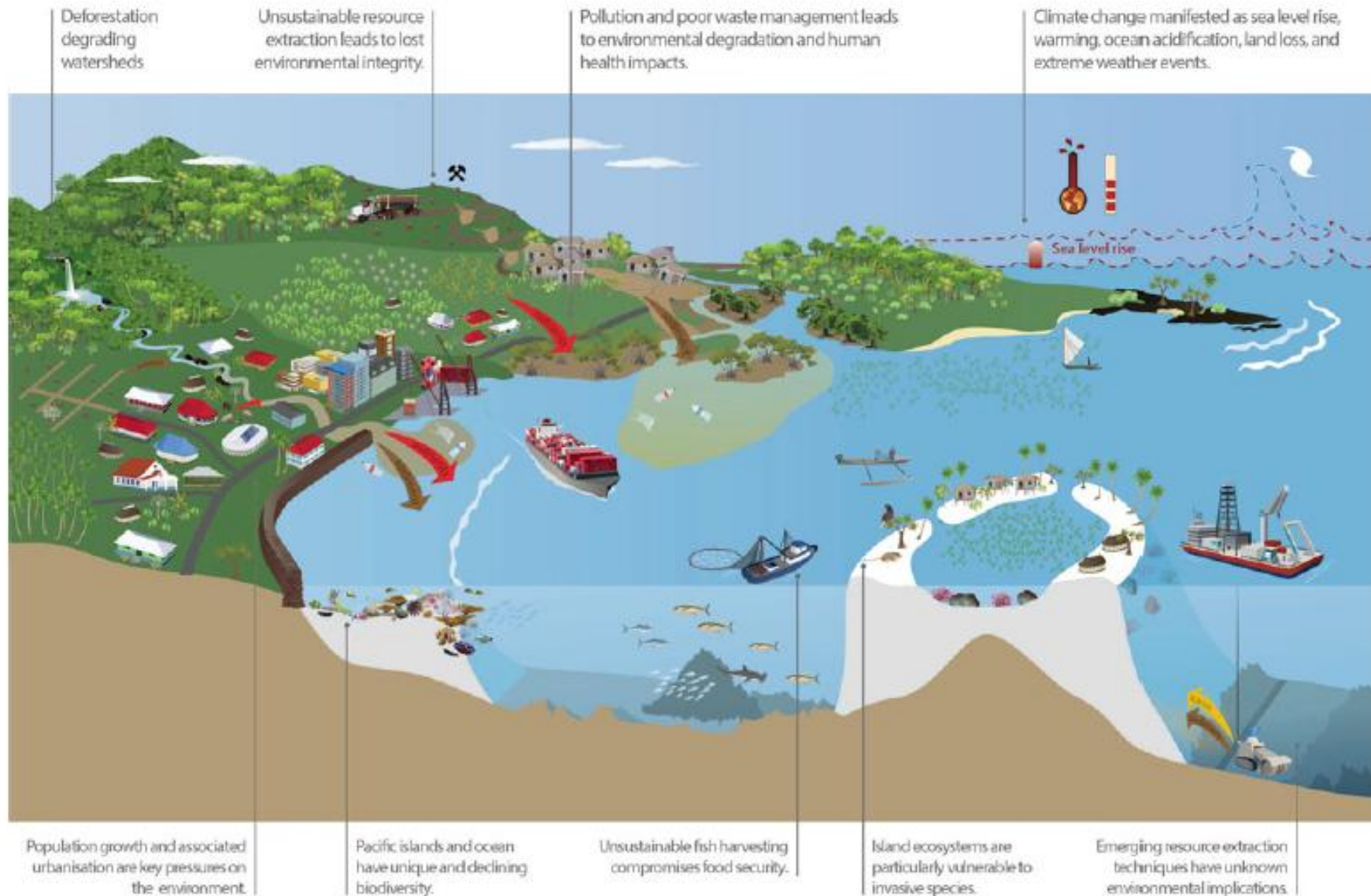


Encyclopaedia Britannica



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Key threats to ecosystem services in the Pacific

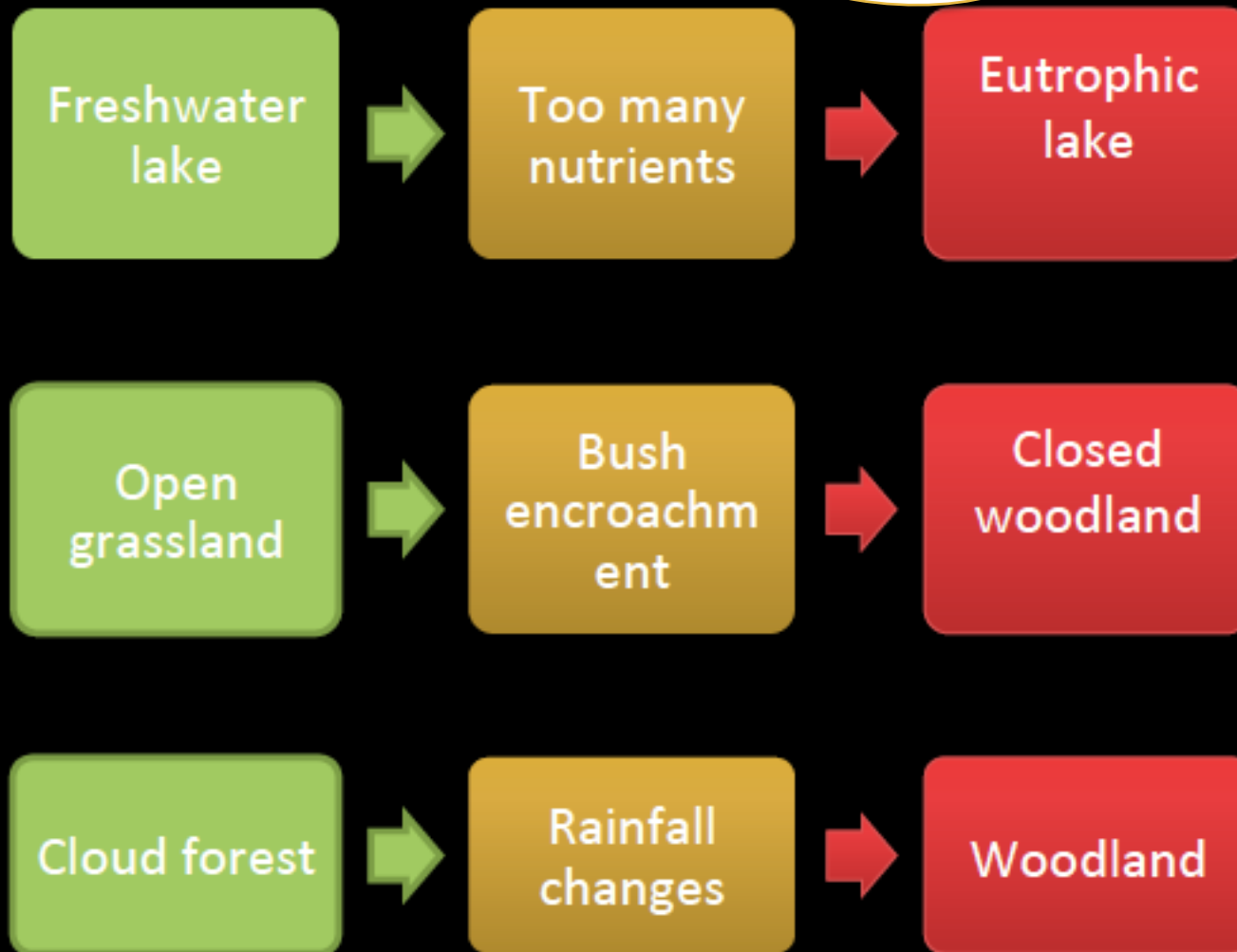




The capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity and feedbacks

Regime shift from more to less productive stable state

Tipping Point



Regime Shifts DataBase

Large persistent changes in ecosystem services

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Cape Rodney, New Zealand

Main Contributors: Johanna Yletyinen

Other Contributors:



Cape Rodney- Okakari
Point Marine Reserve

Summary

Episodic hypoxia and anoxia near Cape Rodney covers 8000 square kilometers. It is related to harmful algal blooms and has resulted in fish mortalities. Hypoxia in Cape Rodney has been observed since the 1980s.

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Regime Shift

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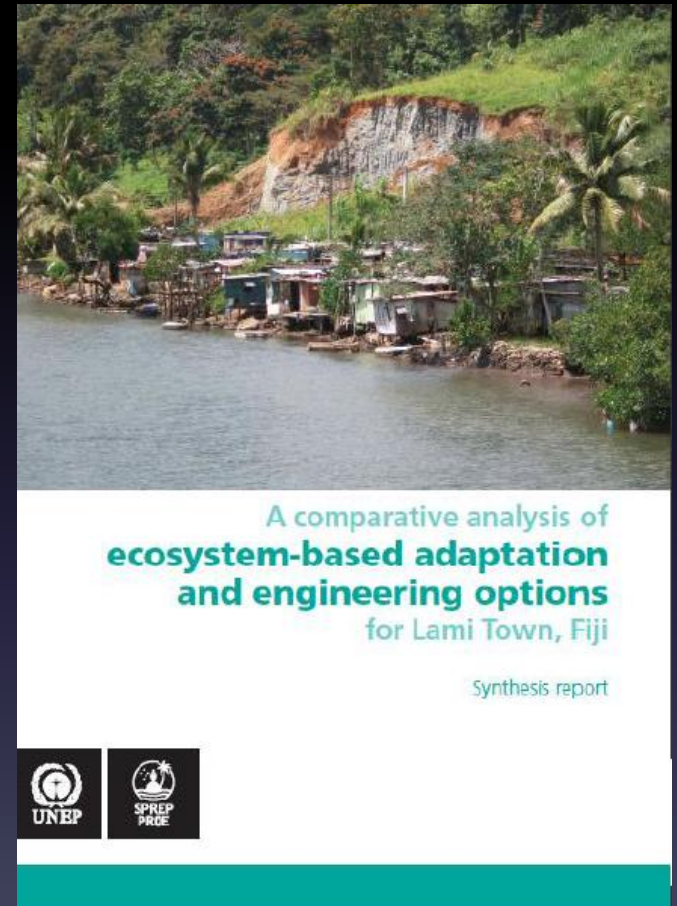
Ecosystem Based Adaptation

Convention on Biological Diversity:

“the use of biodiversity and ecosystem services to help people adapt to the adverse effects of climate change”

Decision X/33 on Climate Change and Biodiversity:

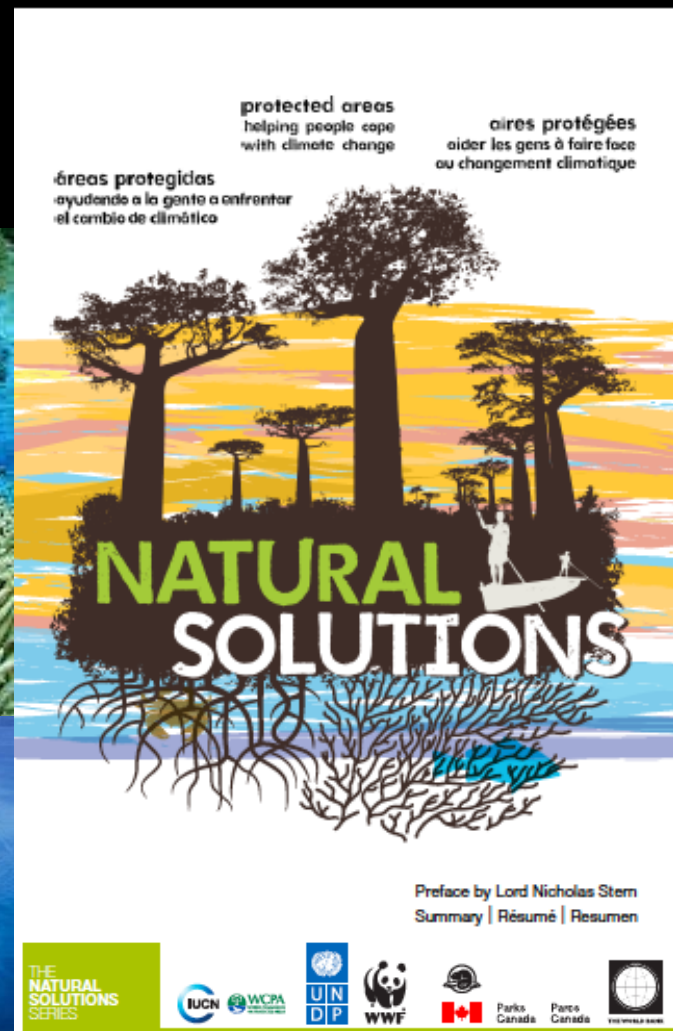
includes the “sustainable management, conservation and restoration of ecosystems, as part of an overall adaptation strategy that takes into account the multiple social, economic and cultural co-benefits for local communities”



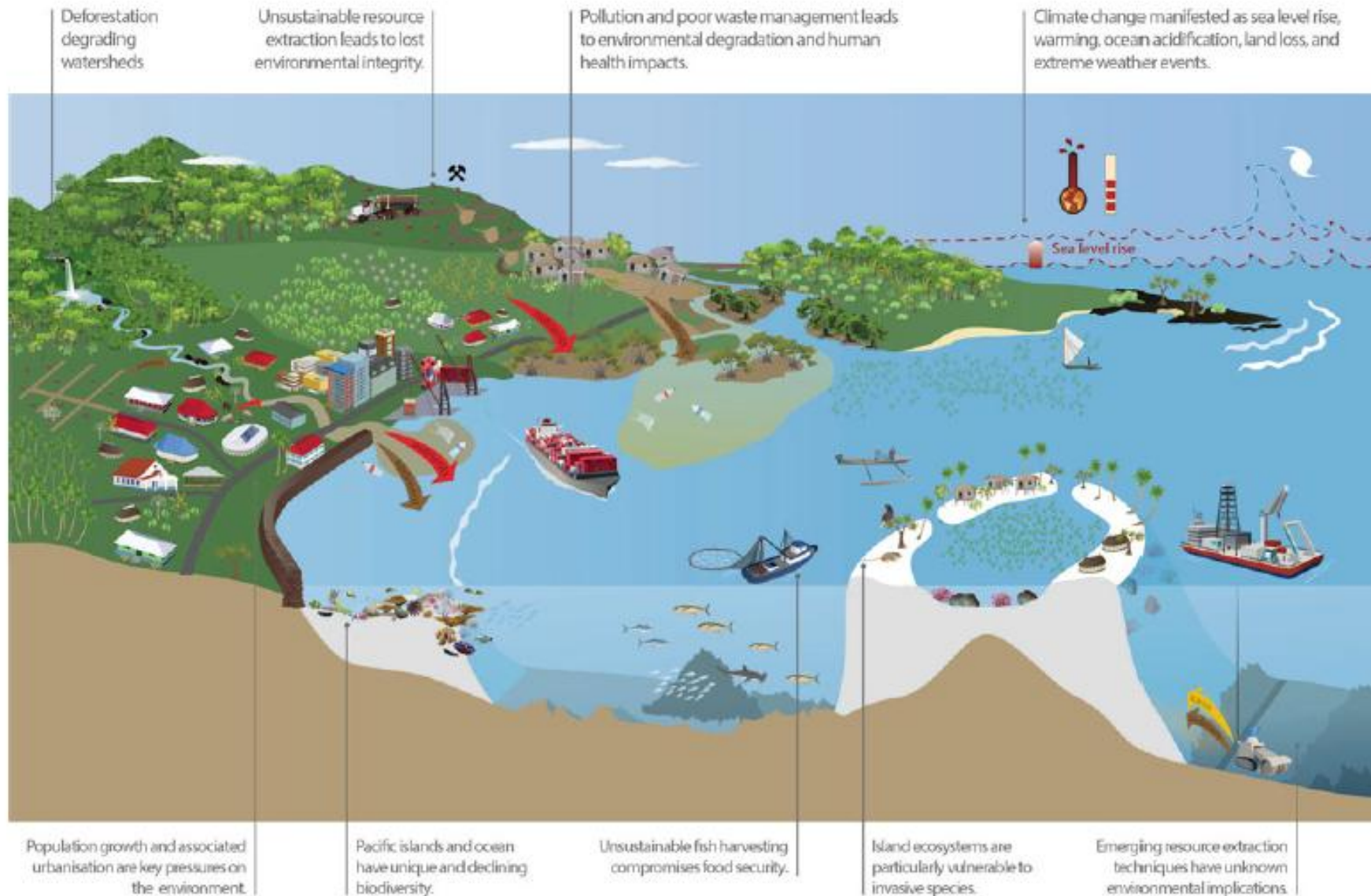
EBA measures in Pacific islands

Adaptive measure	Adaptive function
Management of tidal wetland system for coastal protection	<ul style="list-style-type: none">• Protection against storm surges, coastal flooding• Mangrove migration helping protect against sea level rise• Protection of beaches and islands from wave erosion
Management of slope vegetation for landslide risk	<ul style="list-style-type: none">• Reduction of landslide risk
Use of agroforestry and shelter belts for production stability	<ul style="list-style-type: none">• Yield stability in more variable climates• Maintenance of soil fertility• Protective barrier for crops
Management of floodplain and riverine vegetation for flood management	<ul style="list-style-type: none">• Decreasing the speed and size of the peak of floodwaters• Allowing floodwaters to disperse across a floodplain

Hills, Carruthers, Chape and Donohoe, 2012



Key threats to ecosystem services in the Pacific



Biodiversity and Ecosystem Services-Network



Connecting policy makers, scientists and implementers



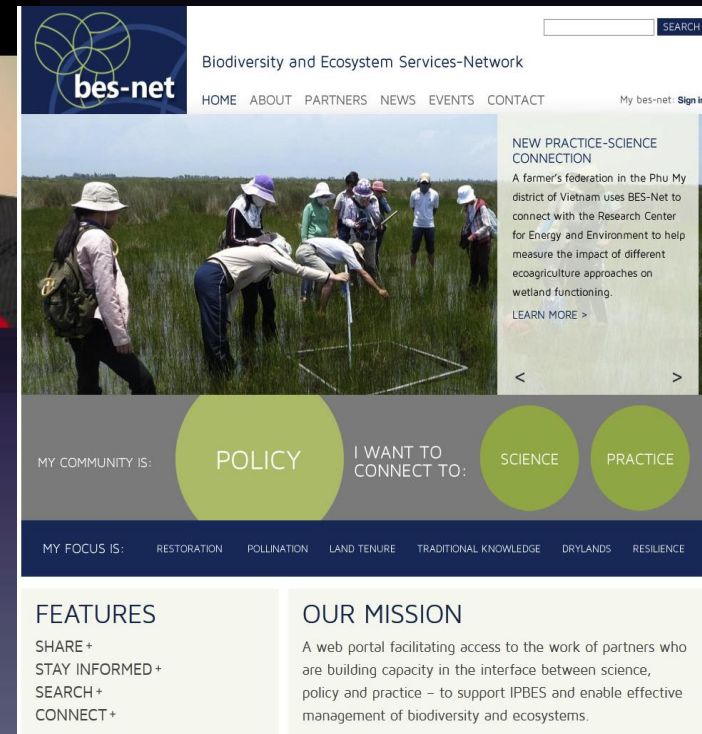
Scientists



Policy makers



Practitioners





World's largest marine park

Cook Islands designates more than one million square kilometres of ocean for conservation and sustainable development



Source: Conservation International

AAP

Solwara 1 – The Future for the minerals industry

By NICKY ROBERTS
DSEI Technical Director

DSEI has been working with the Ministry of Natural Resources to develop a plan for the future of the minerals industry in the Pacific. The plan is to develop a sustainable minerals industry that can provide a source of income for the people of the Pacific and also provide a source of income for the people of the Pacific.

Technology matters

Before entering into a project, DSEI always considers the technology that will be used. This is because the technology that is used can make a big difference to the success of a project. For example, if a project is using a technology that is not suitable for the environment, then the project is likely to fail.

The Pacific Petroleum Trust (PPT) is a trust that has been set up to manage the Solwara 1 project. The PPT is a trust that has been set up to manage the Solwara 1 project. The PPT is a trust that has been set up to manage the Solwara 1 project.

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DEEP SEA MINING

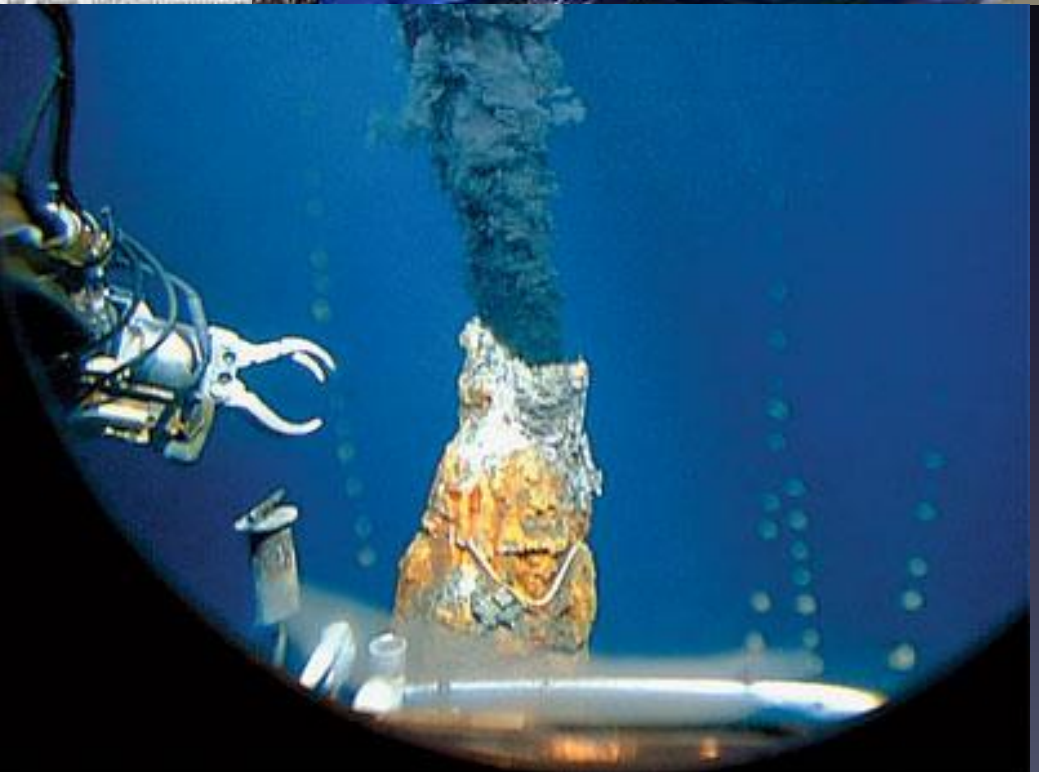
"WE RECOMMEND ... IN THE ABSENCE OF CLEAR SCIENTIFIC EVIDENCE, THAT OUR RESPECTIVE NATIONAL GOVERNMENTS ERR ON THE SIDE OF CAUTION AND CALL FOR A STOP TO THE ISSUANCE OF FURTHER SEABED MINING LICENSES."

(PACIFIC CONFERENCE OF CHURCHES 2012)

REPRESENTING OVER 10 MILLION PEOPLE ACROSS THE PACIFIC, THE PACIFIC CHURCHES HAVE ISSUED THIS STATEMENT TO THE PACIFIC CONFERENCE OF CHURCHES 2012.



PROTECT OCEANS | PROTECT MARINE LIFE | PROTECT COMMUNITIES
NO EXPERIMENTAL SEA BED MINING
SEEK SEA MINING CANCELLATION | WWW.PACIFICCHURCHESCONFERENCE2012.COM
CONTACT: PACIFIC CHURCHES | WWW.LEADERSHIPINACTIVISM.COM

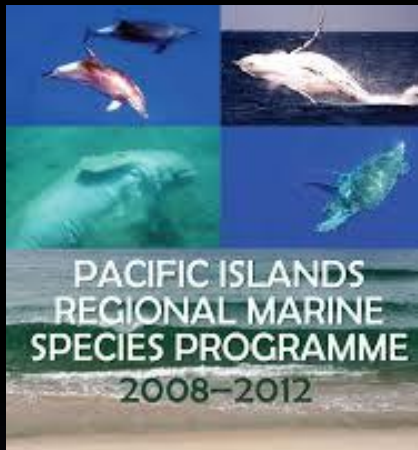


DRAFT



Climate Public Expenditure and Institutional Reviews (CPEIRs) in the Asia-Pacific Region

What have We Learnt?



HOW RESILIENT IS YOUR COASTAL COMMUNITY?

A GUIDE FOR EVALUATING COASTAL COMMUNITY RESILIENCE
TO TSUNAMIS AND OTHER HAZARDS



ASIA



The Nature
Conservancy

adpc



Thank you!