Introduction to Sustainable Development

In the Namibian planning context

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Session overview

1. Global and African context
2. Constitution, Vision 2030, NDPs and SDGs
3. Sustainability and resilience in the context of a nature-based economy
4. Introduction to sustainability thinking

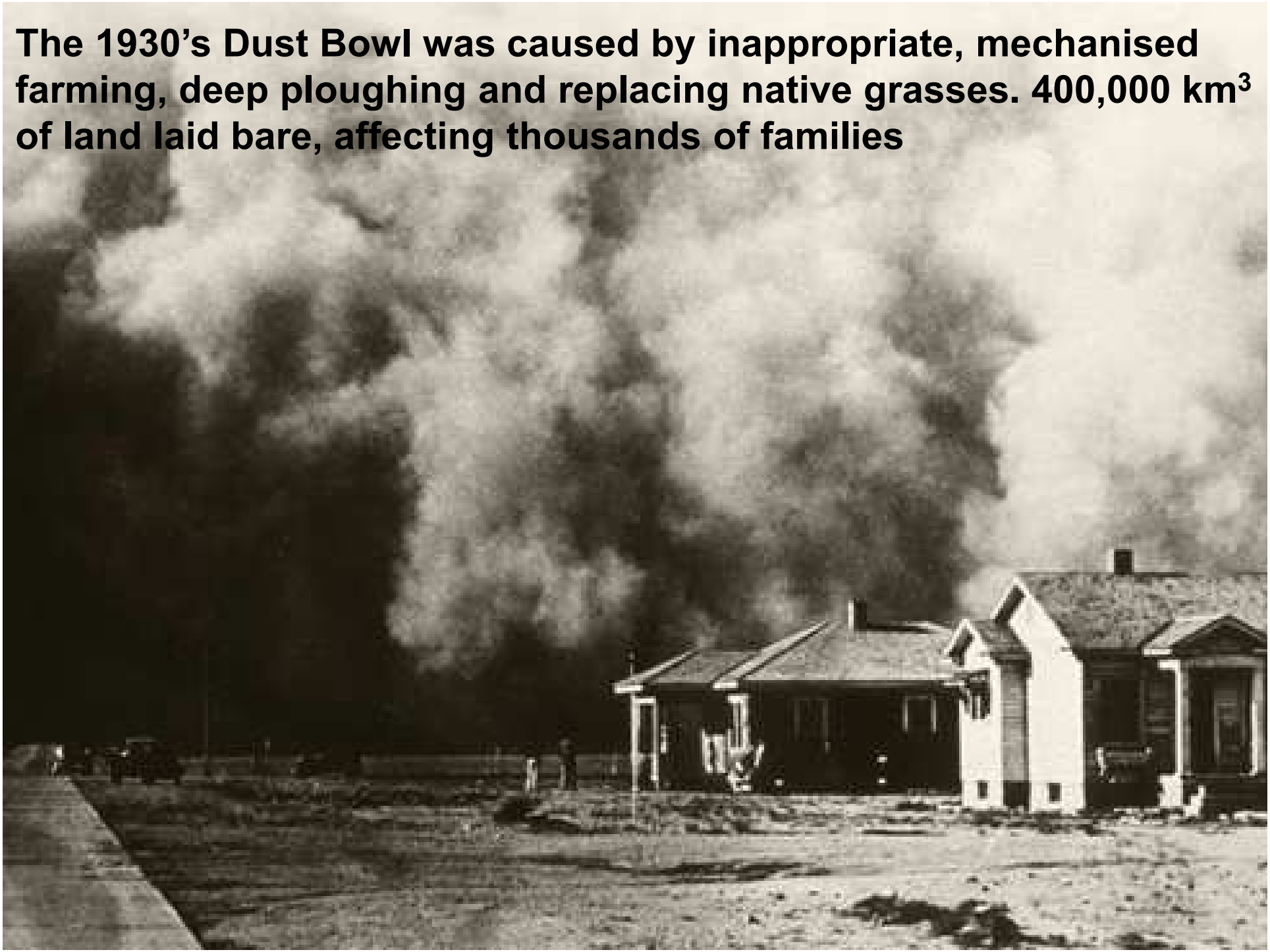
PART 1

Global and African context

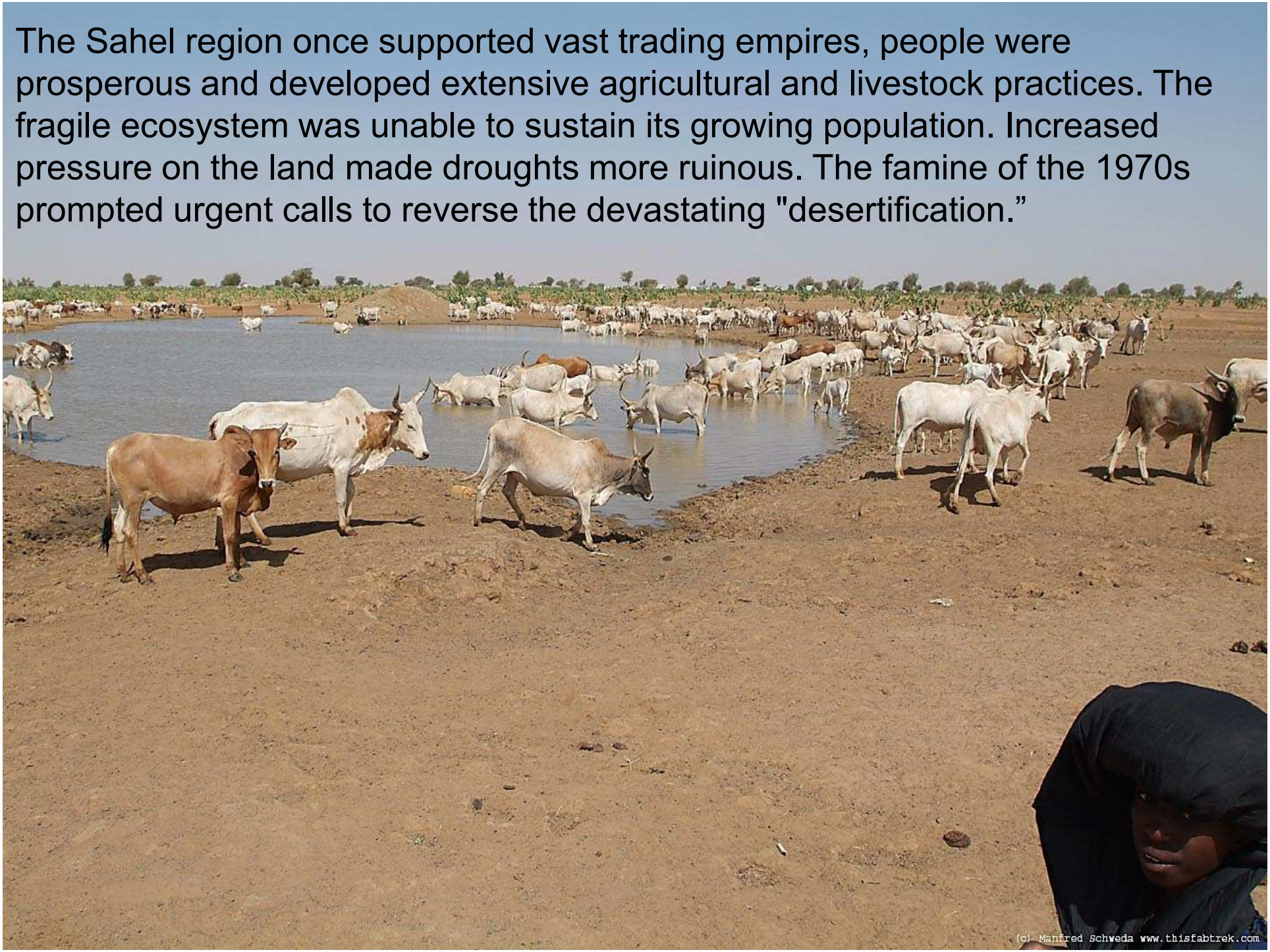
Environmentalism: Global perspective

1966: New York City buried under a sea of smog.

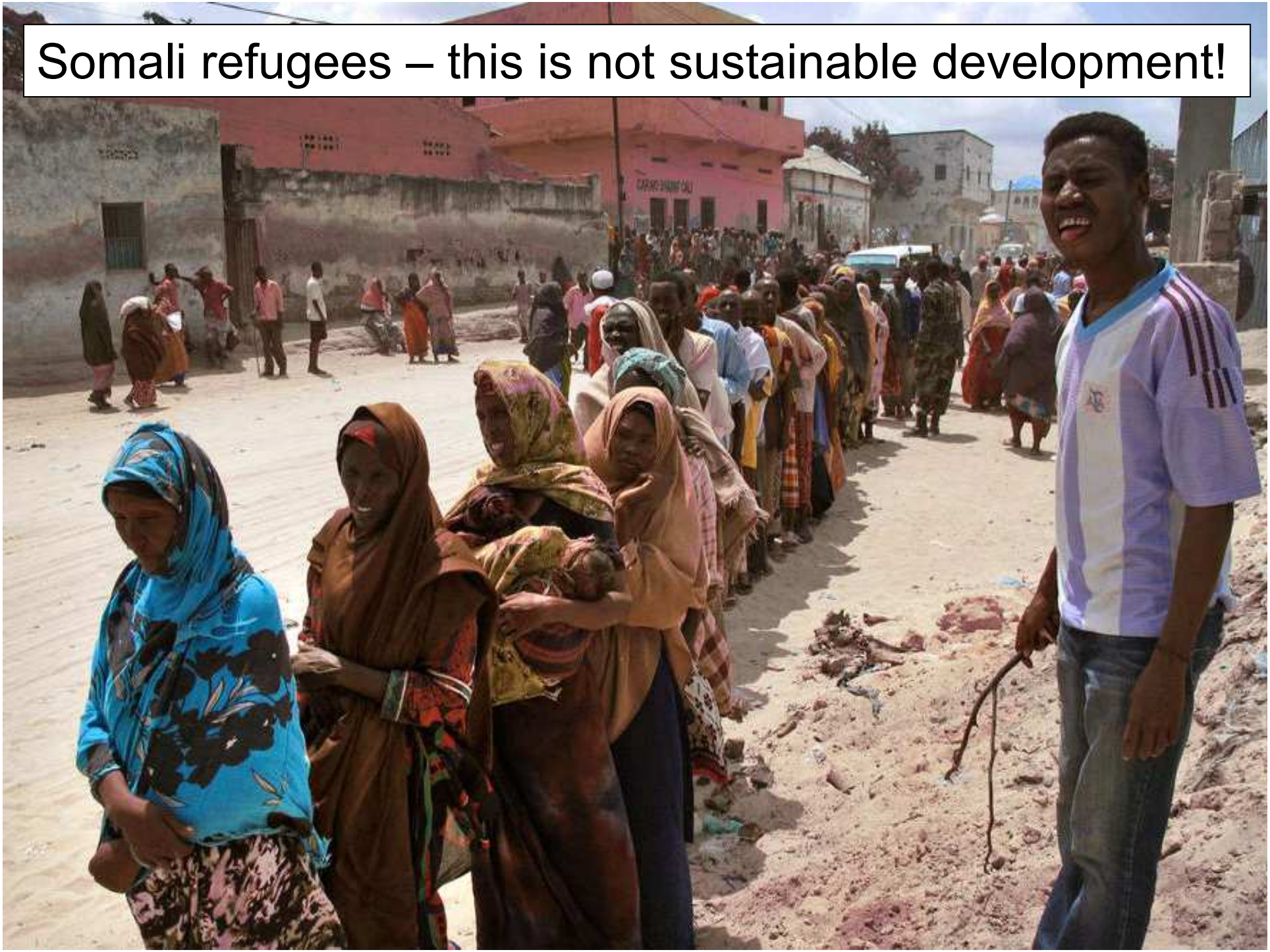
The 1930's Dust Bowl was caused by inappropriate, mechanised farming, deep ploughing and replacing native grasses. 400,000 km^3 of land laid bare, affecting thousands of families

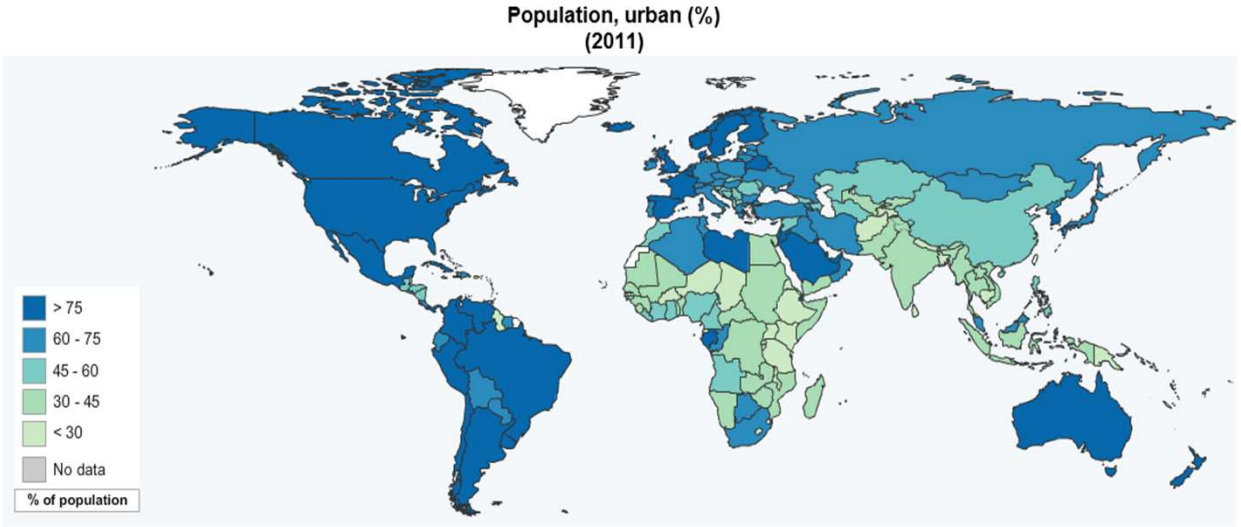


The Sahel region once supported vast trading empires, people were prosperous and developed extensive agricultural and livestock practices. The fragile ecosystem was unable to sustain its growing population. Increased pressure on the land made droughts more ruinous. The famine of the 1970s prompted urgent calls to reverse the devastating "desertification."

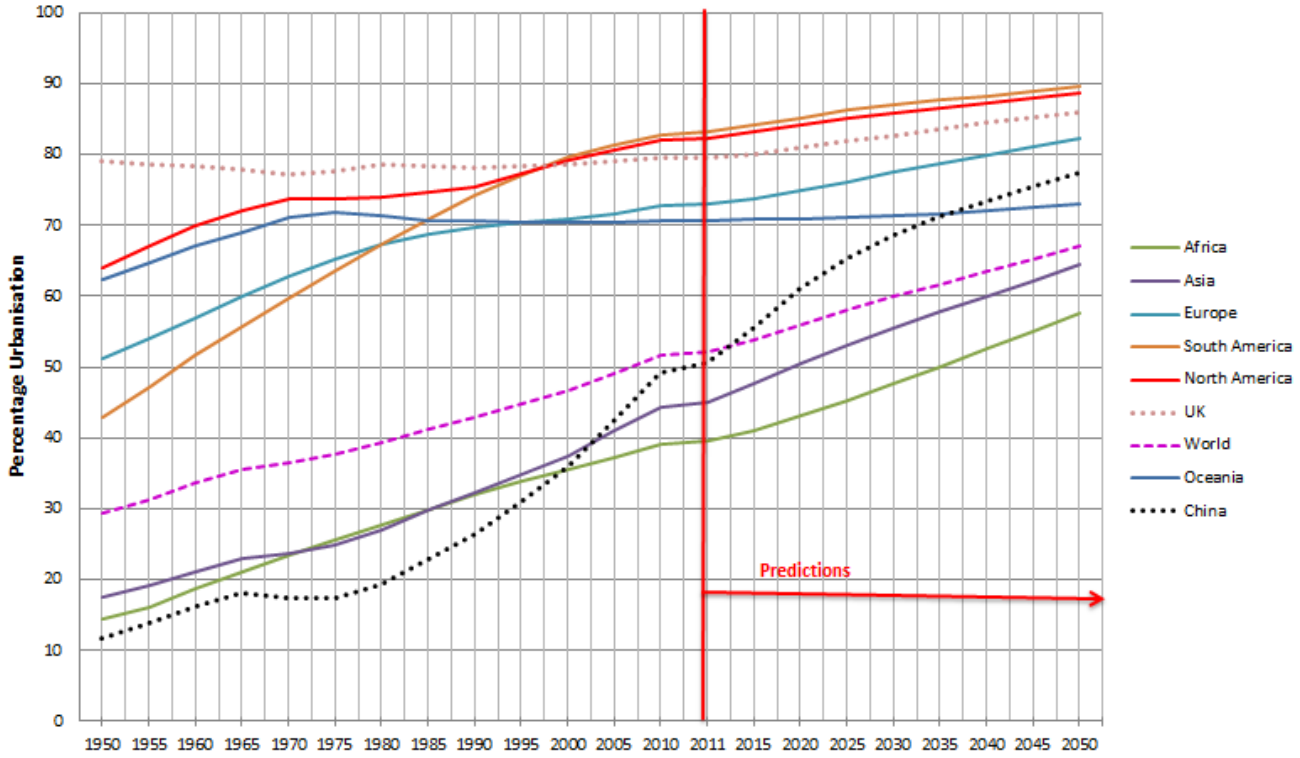


1967: First view of earth from space

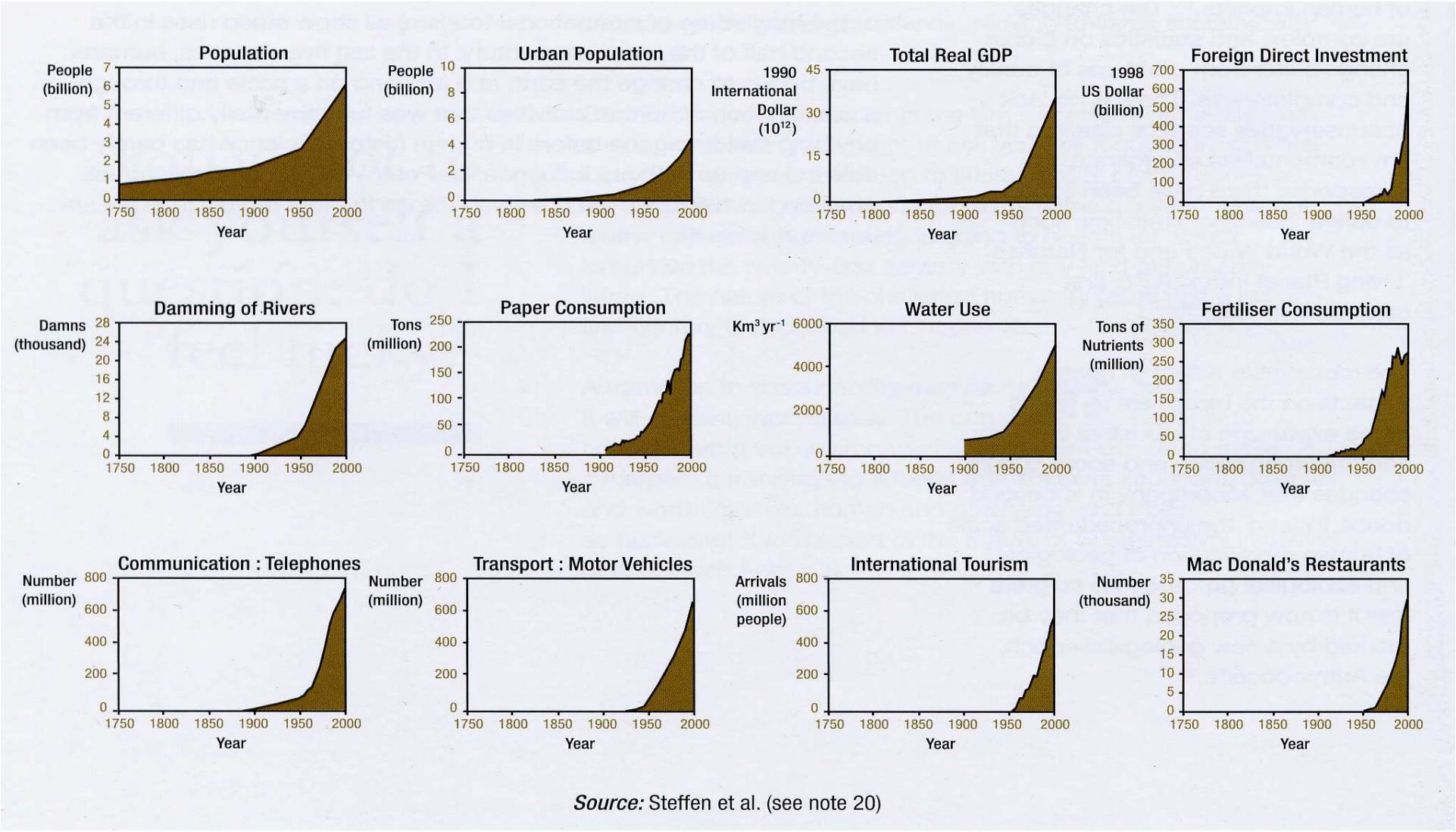

Somali refugees – this is not sustainable development!



A graph to show World Urbanisation for different world areas from 1950 to 2050



Development is pushing environmental limits

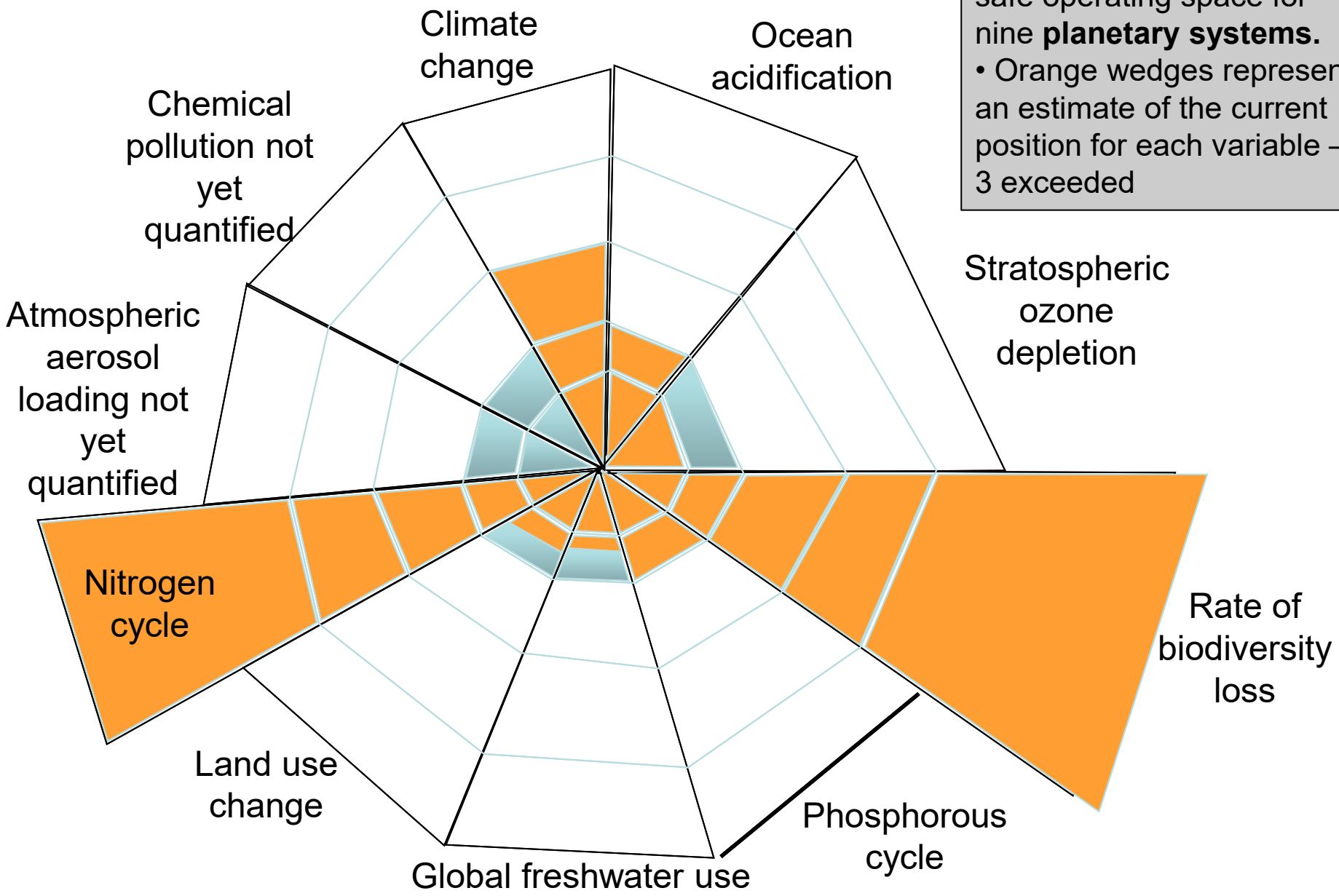


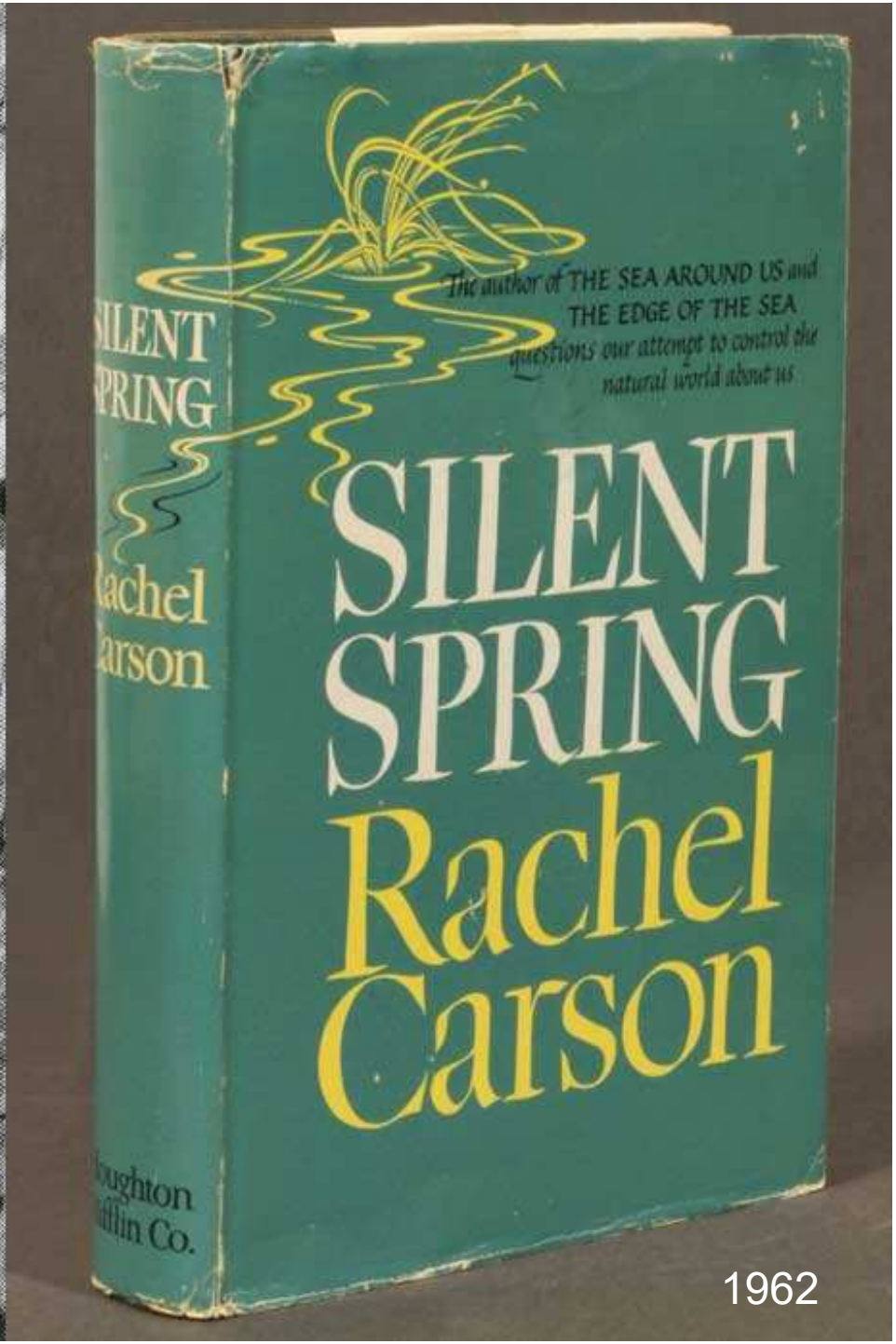
Source: Steffen et al. (see note 20)

Breaching planetary boundaries

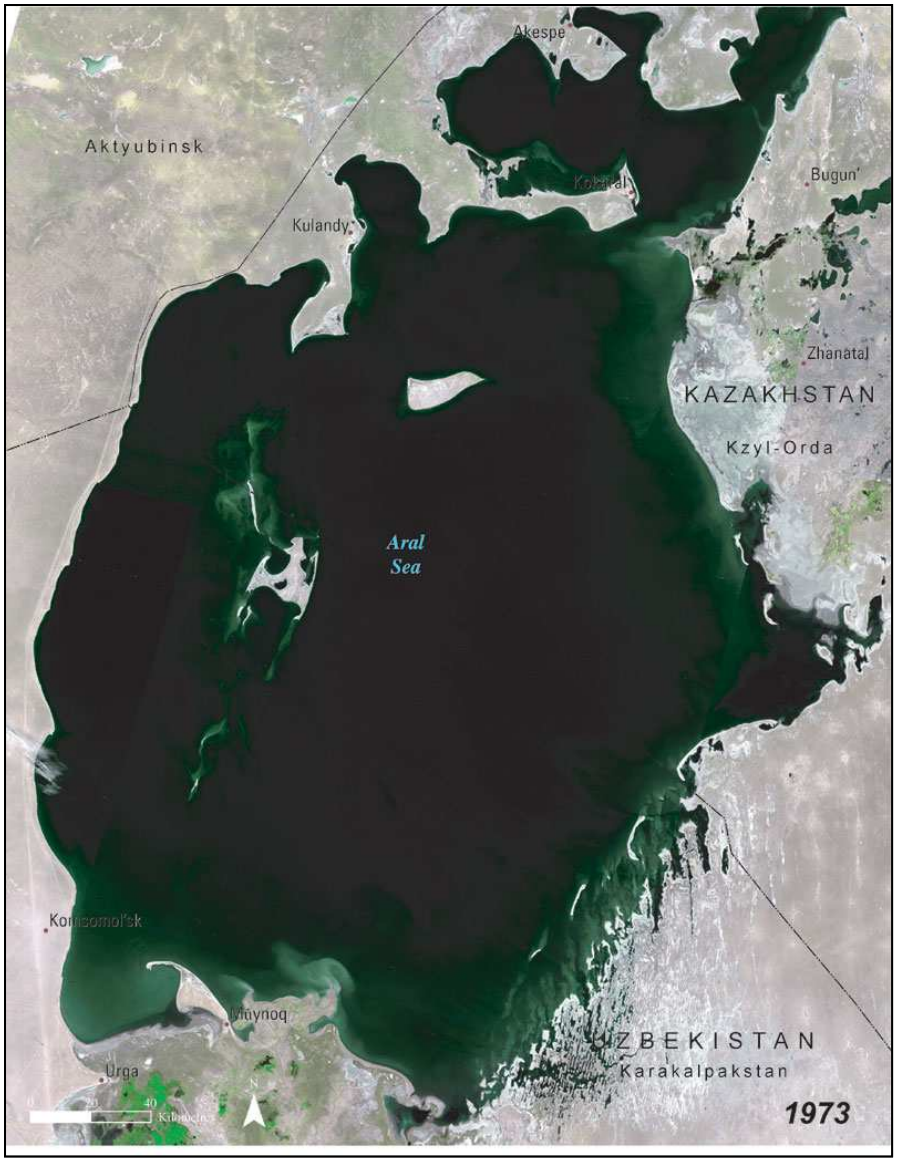
From article in "Nature", 2009

- Inner blue shading represents the proposed safe operating space for nine **planetary systems.**
- Orange wedges represent an estimate of the current position for each variable – 3 exceeded



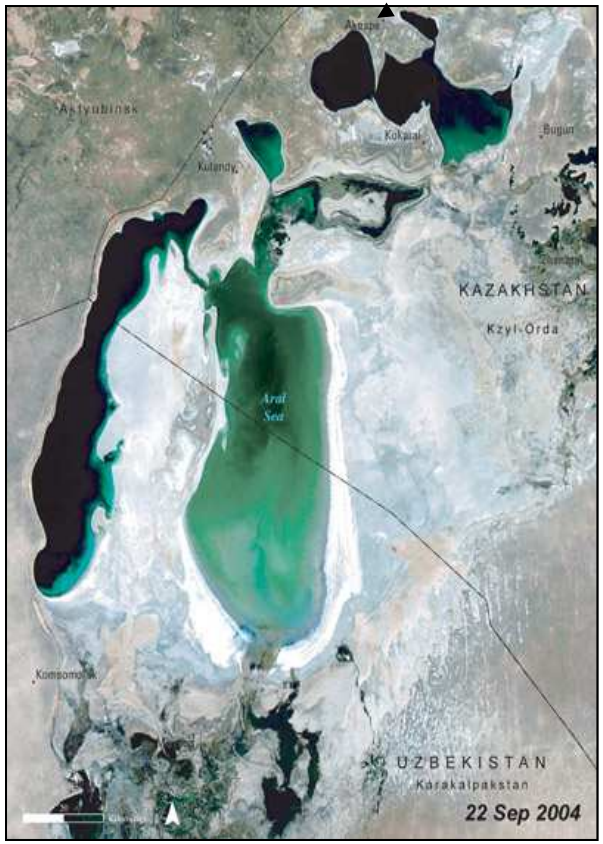

SILENT
SPRING
Rachel
Carson
The author of THE SEA AROUND US and
THE EDGE OF THE SEA
questions our attempt to control the
natural world about us
SILENT
SPRING
Rachel
Carson
Houghton
Mifflin Co.
1962

DISASTER PROJECTS



Until the early 1970s, the Aral Sea was the worlds 4th largest inland water body.

Because of the agriculture project, it is now 10% of it's original size



So what…?

- Salinity in remaining water 300% higher
- Fishing industry entirely disappeared by 1982
- Changes to local climate – sea no l… acts as a barrier to … con… …tion and other
- Most birds and mammals gone
- Entire villages and towns abandoned
- Locals have 9x more throat cancer than world average

Est. US$300 billion needed to restore ecological functioning

Oops – big mistake!

PART 2

Namibian Constitution, Vision 2030, NDPs and SDGs

Constitution

The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future.

Vision 2030

- Industrialised by 2030
- Food secure, diseases under control, high living standard, quality education and health services
- Diversified open market economy
- Peace and stability
- Reduced inequality
- partnerships

V-2030 and NDPs

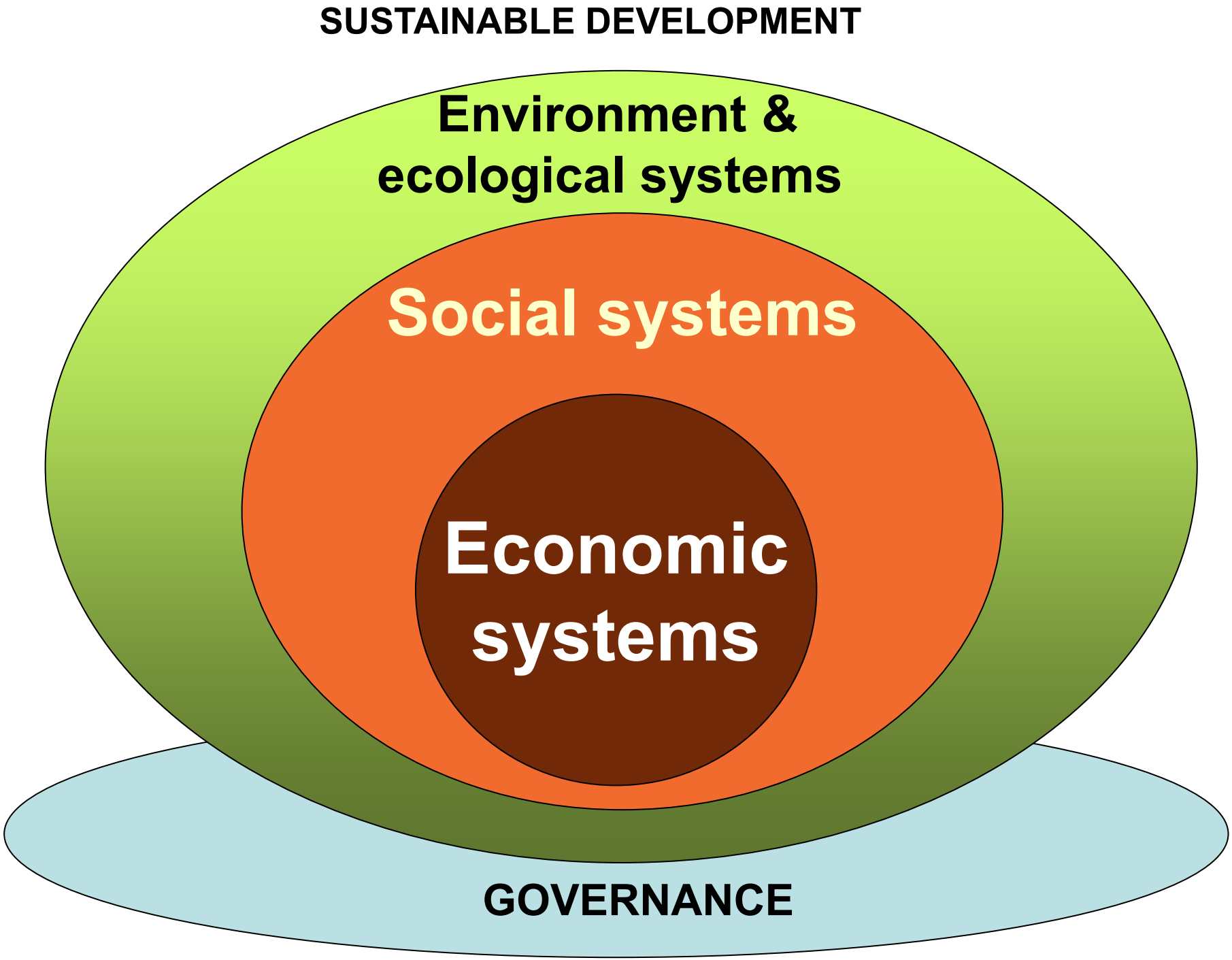
- Vision 2030 represents government's long-term planning framework
- Based on the concept of total and balanced development
- Guides all planning mechanisms, e.g. national development plans, medium-term reviews and the national budget.

What is sustainable development?

- *Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs and aspirations* [World Commission on Environment and Development 1987]

- *Improving the quality of human life while living within the carrying capacity of supporting ecosystems* [IUCN, UNEP and WWF 1991]

Planning and decision making must take a long term view of how we use our natural capital and living natural resources.


SUSTAINABLE DEVELOPMENT
Environment & ecological systems
Social systems
Economic systems
GOVERNANCE

The 17 SDGs

169 targets and 247 indicators

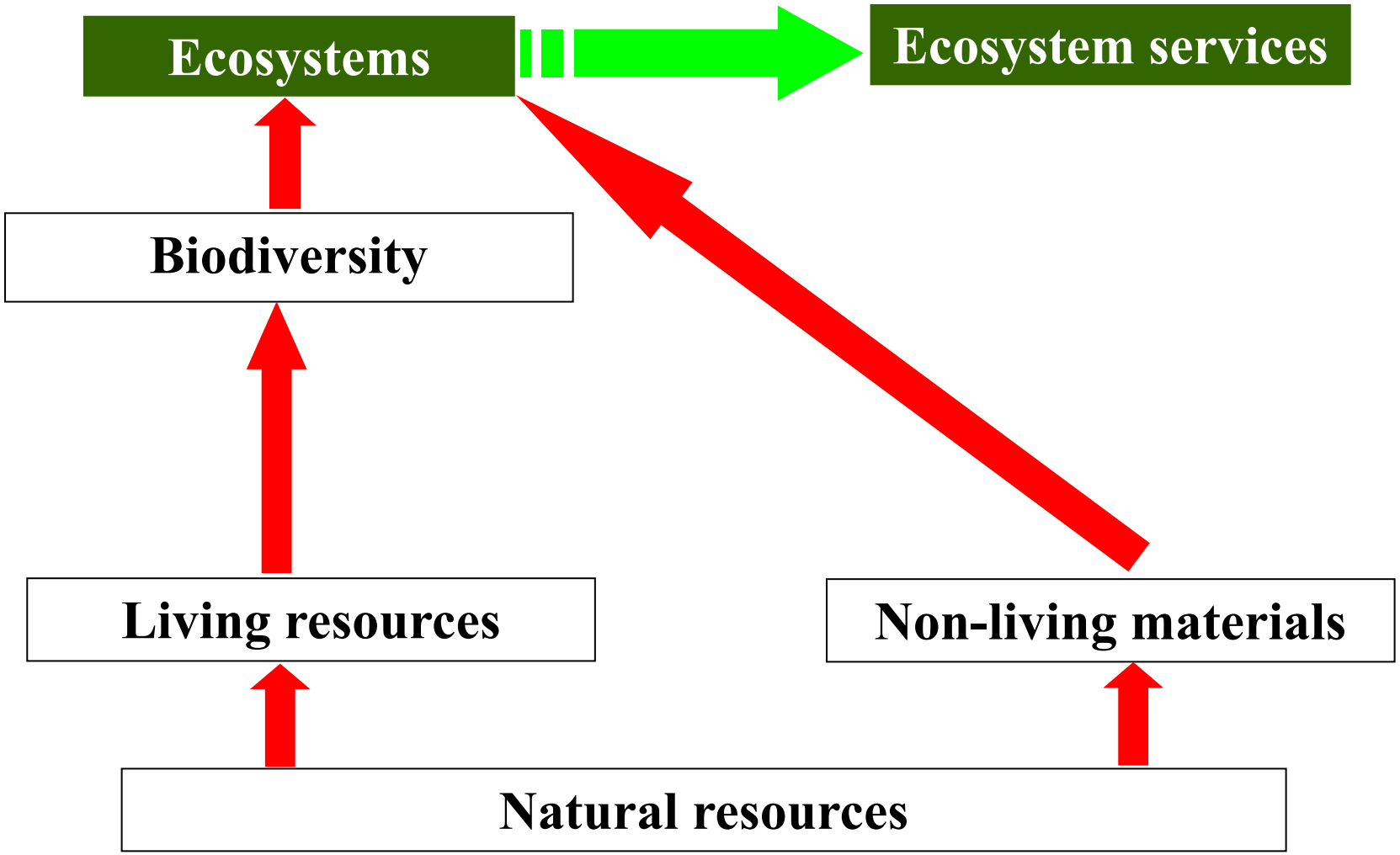
PART 3

Sustainability and resilience in the context of a nature-based economy

Never forget……..

"notwithstanding our technological discoveries, our existence depends on 20 cm of soil and the fact that it rains"……

Natural Resources and Ecosystem Services



Valuing natural resources

Total Economic Value

Use values

Direct value

Value of resource as it is used directly for economic activities

Consumptive use

The resource is used in such a way that it is changed or removed from use by other economic agents

Examples: Mining, fishing, property development, firewood

Non-consumptive use

Resource used but still available for use by other economic activities

Examples: Tourism.

Indirect value

Value of a resource in that it supports other resources and economic activities

Examples: Catchments, Wetlands, mangroves,

Option value

Willingness to Pay for the option of Maintaining resources for future use

Examples: Conserving areas for future tourism, forests for future medicines, etc.

Non-use values

Existence value

Value placed on a resource without reference to an economic use

Examples: Landscapes, whales,

Bequest value

Bequest resources to Future Generations

Examples: spiritual sites, world

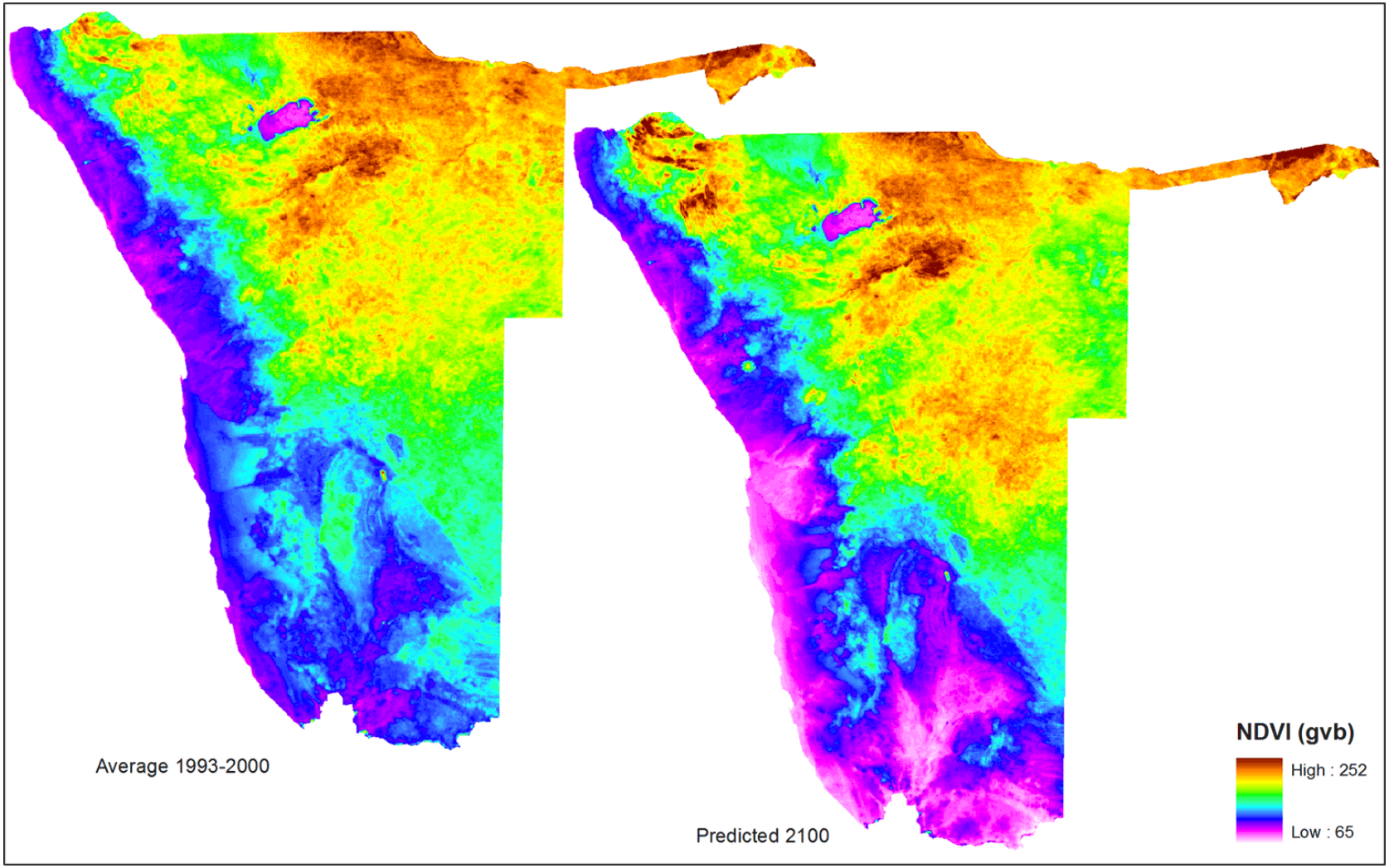
By destroying the environment, we destroy ourselves.
This is not our “African Dream”

PART 4

Introduction to sustainability thinking

Planning for change:

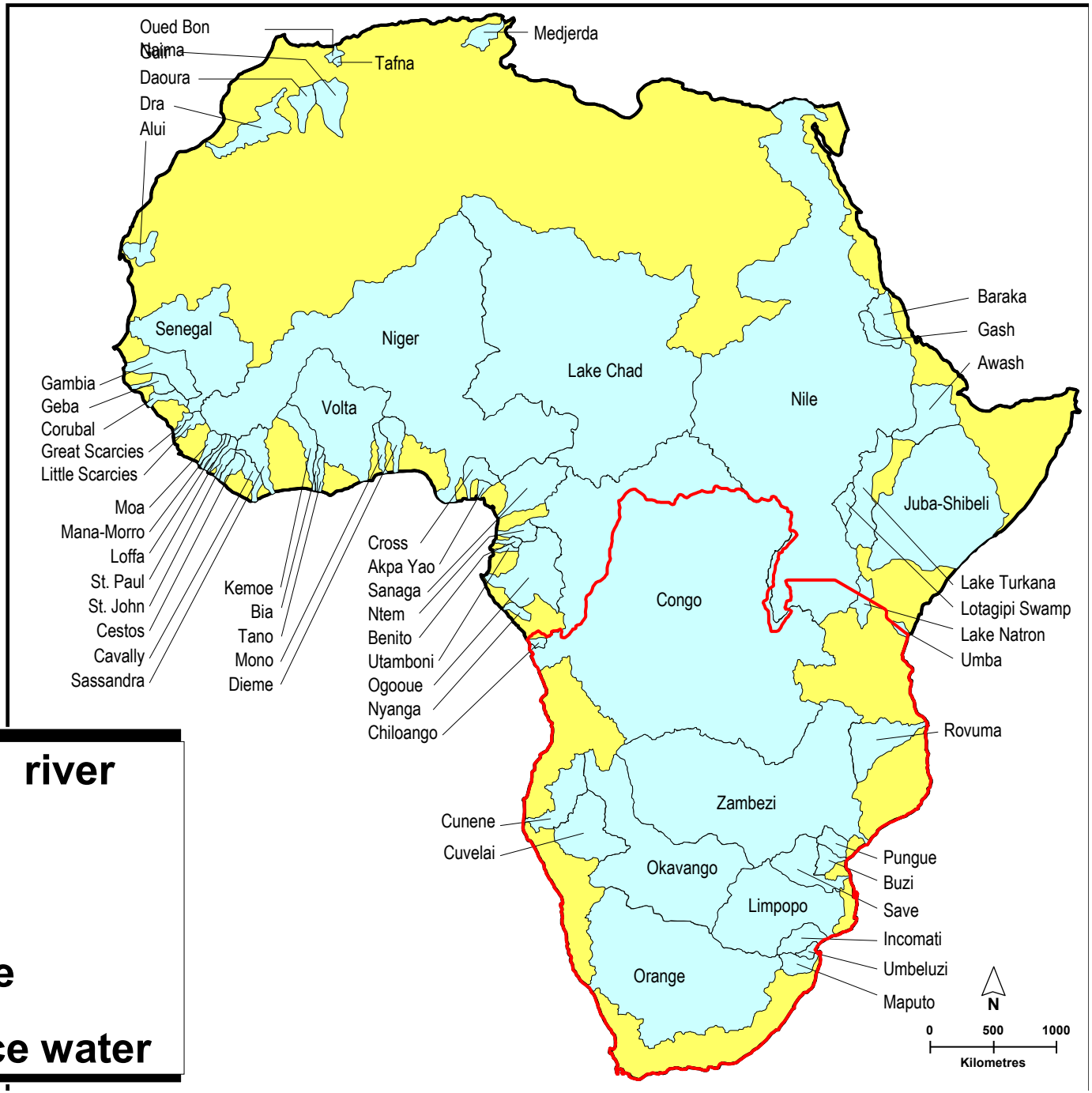
Climate Change effects -
predicted decline in plant primary production



Taking account of shared systems

- Africa's ecological systems are to a greater or lesser extent, interrelated and shared
- social systems are somewhat fragmented (colonial design?)
- economic systems are poorly integrated
- Hardly any countries require transboundary Social and Environmental Assessments.

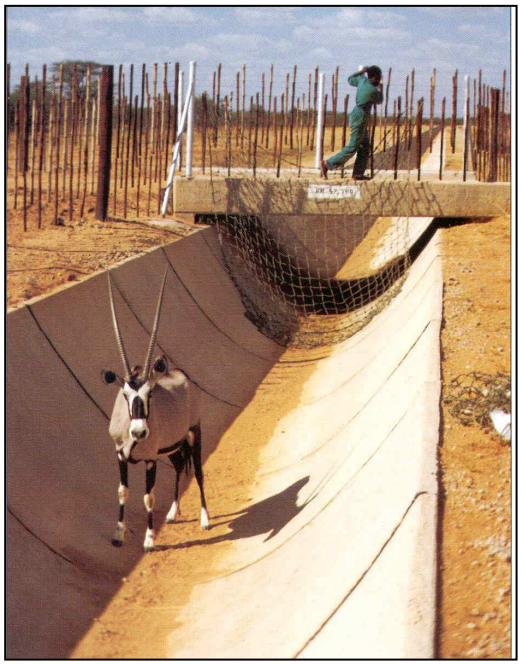
Shared River Systems

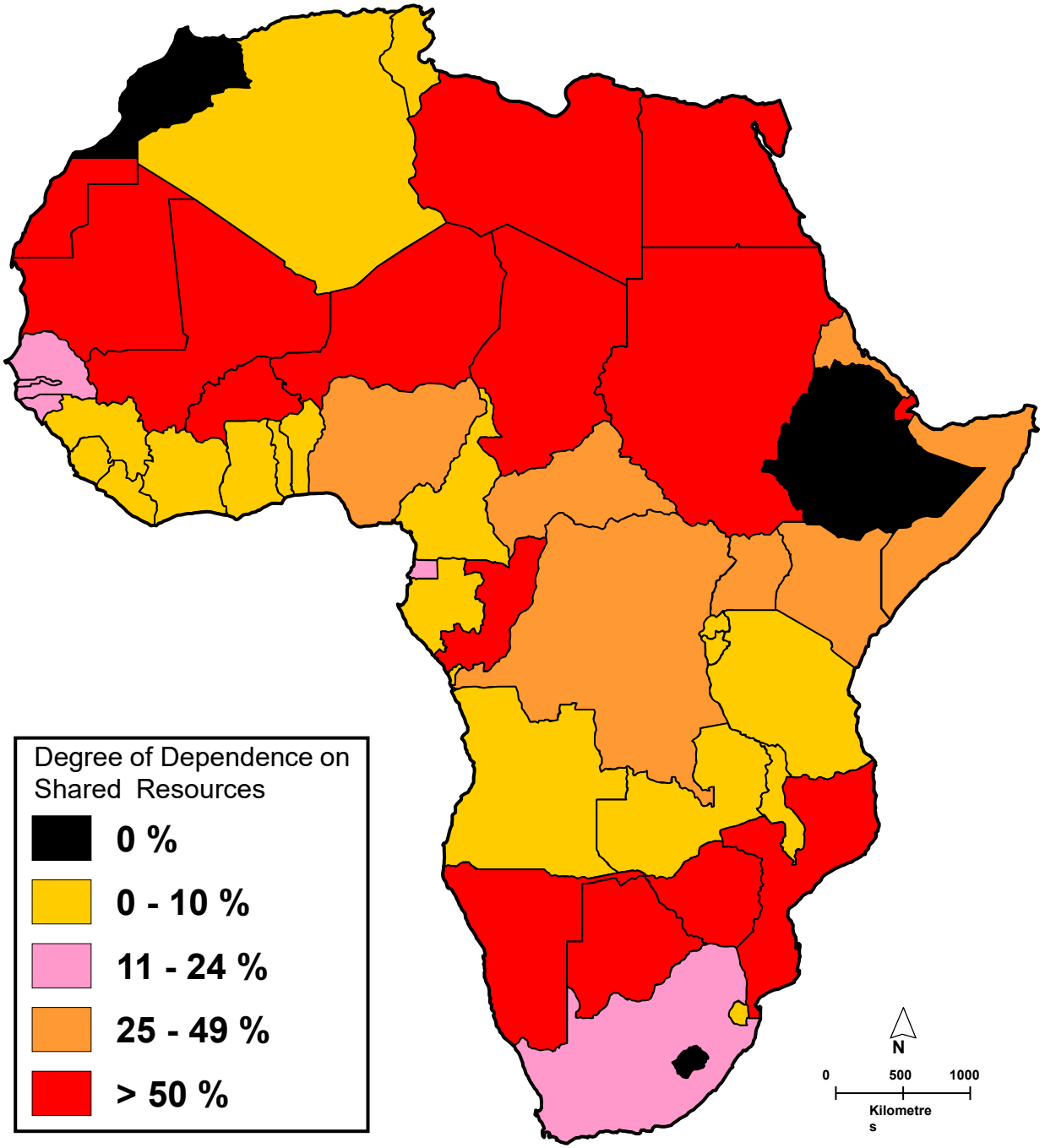


Africa's 61 shared river basins contain:

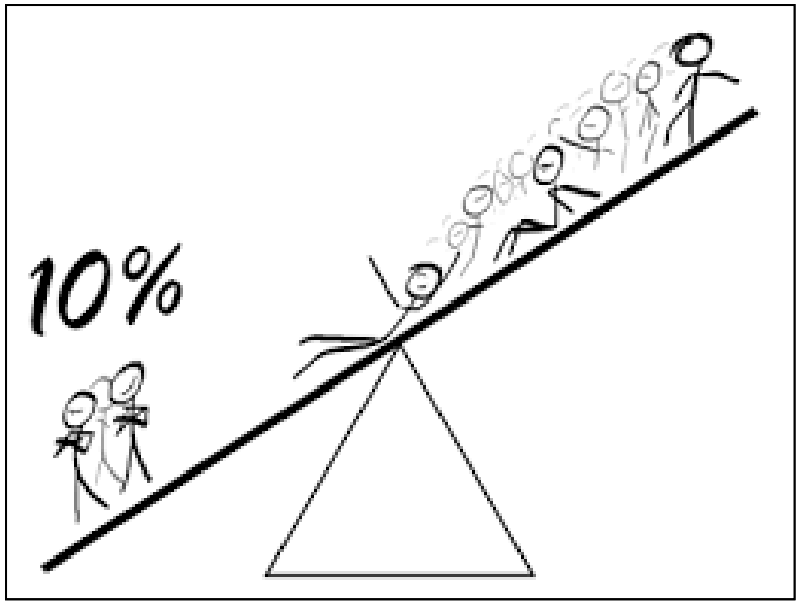
- **65 % of the area**
- **75 % of the people**
- **93 % of the surface water**

Degree of Dependence on Shared Resources for Water Inflows or Transfers

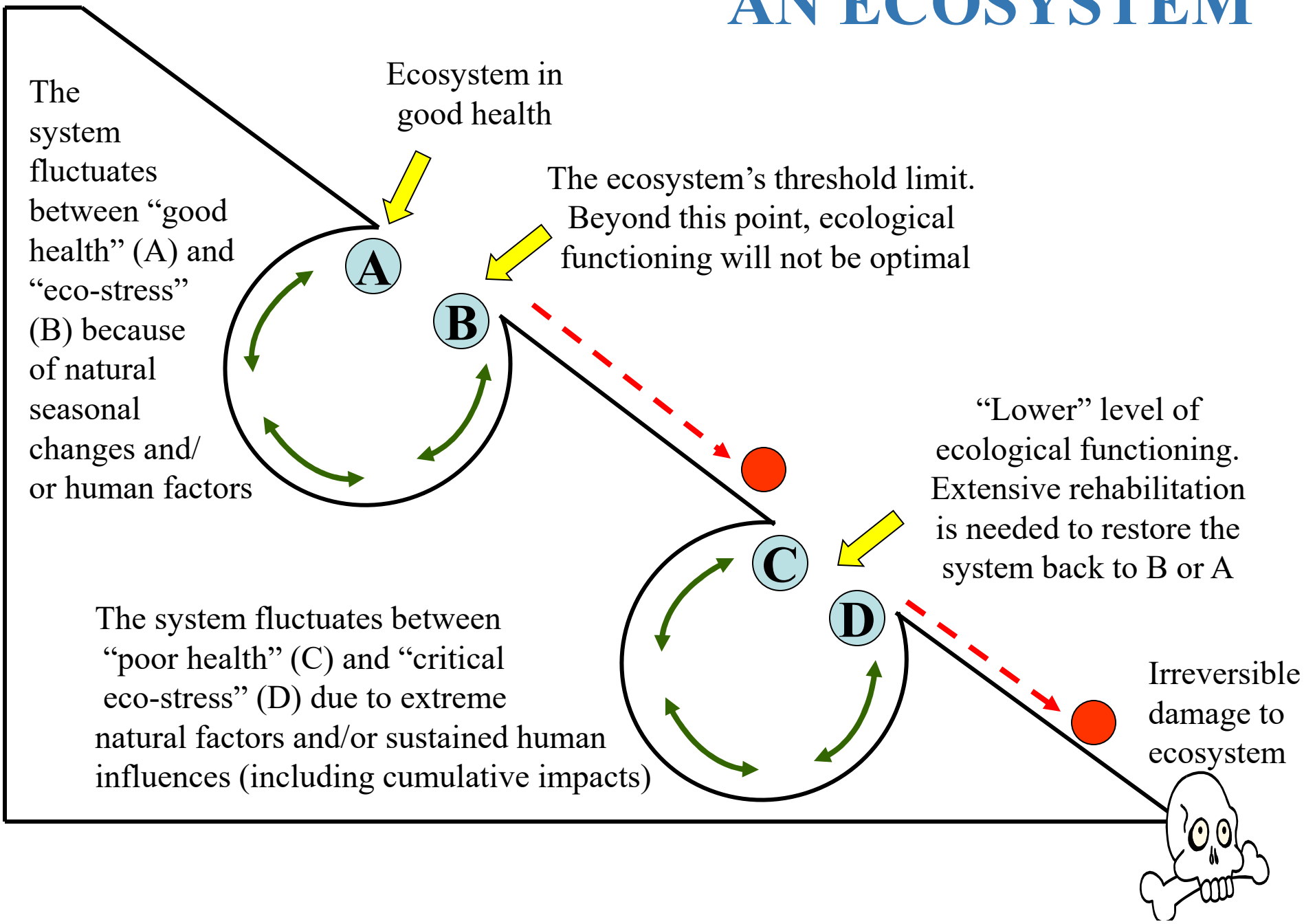




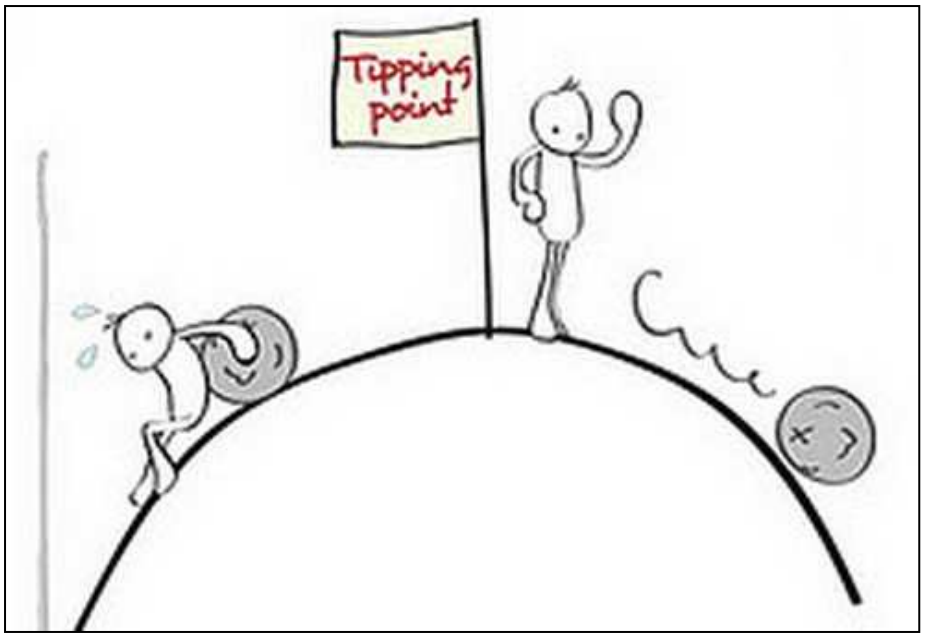
UNDERSTANDING TIPPING POINTS



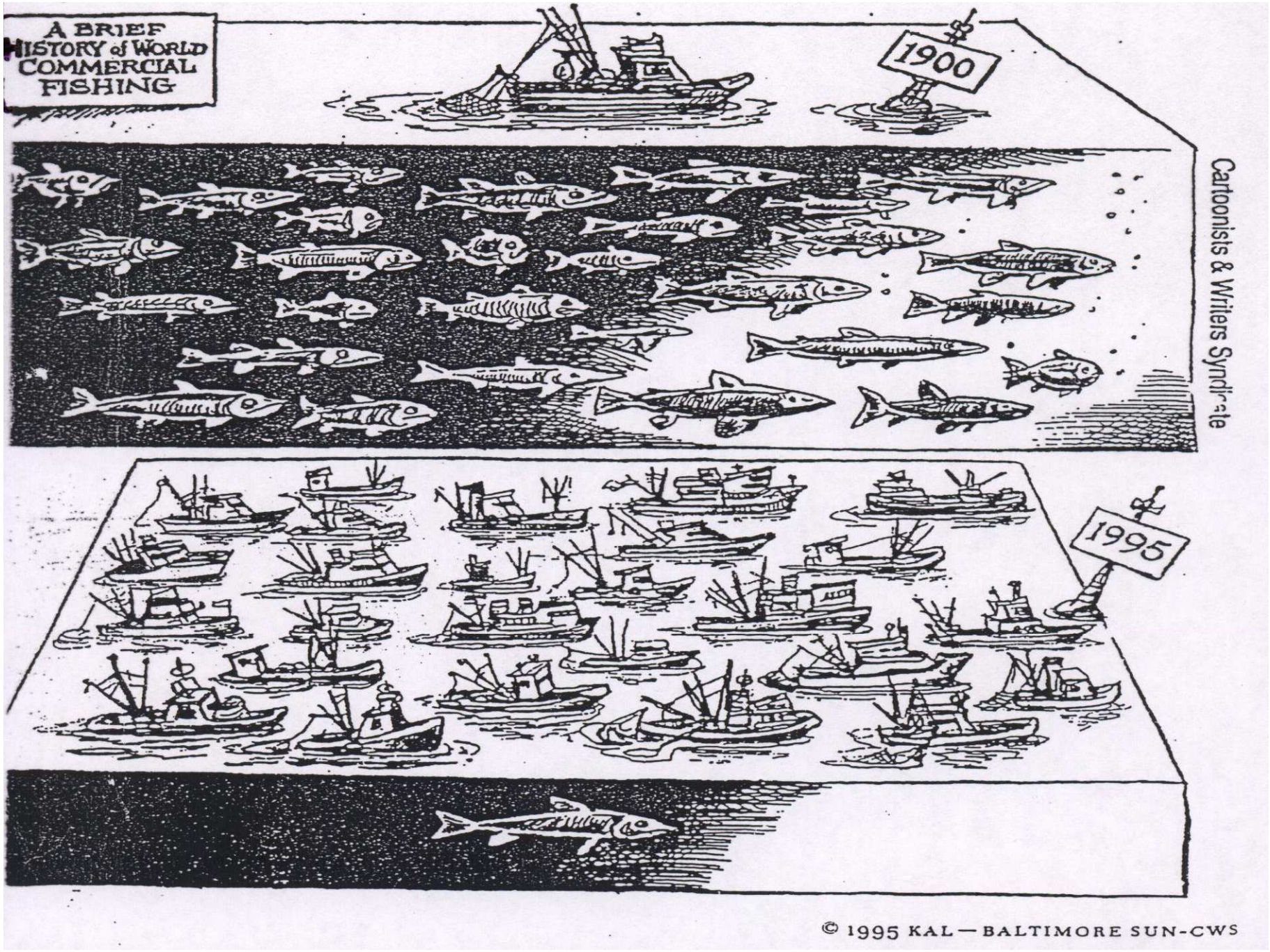
AN ECOSYSTEM



By understanding cumulative impacts



……we can avoid degrading social- ecological systems


A BRIEF HISTORY of WORLD COMMERCIAL FISHING
1900
1995
Cartoonists & Writers Syndicate
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CHAMPIONING A COMMON UNDERSTANDING

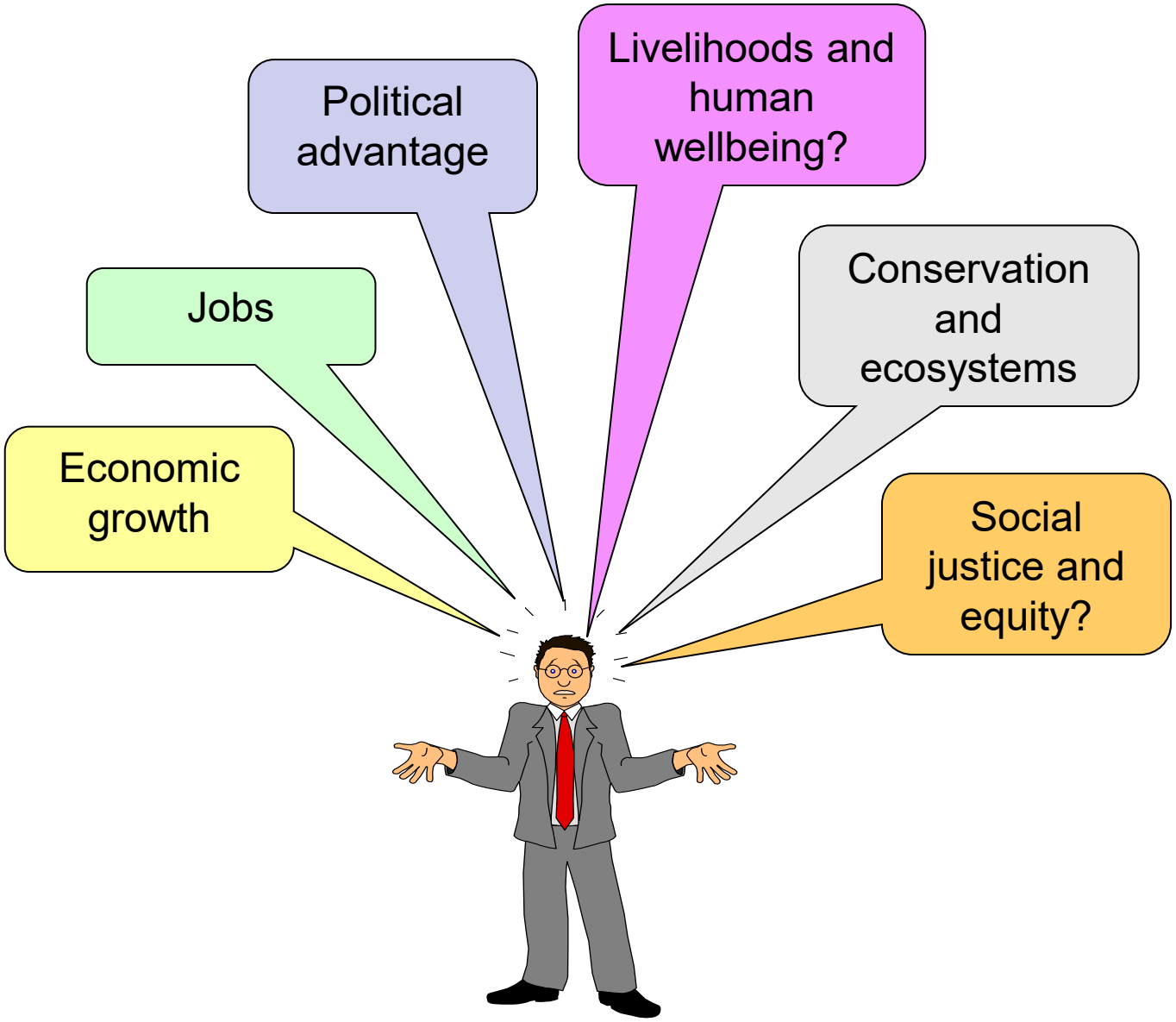
Wangari Muta Maathai (1940 – 2011) RIP

OVERCOMING INSTITUTIONAL CHALLENGES

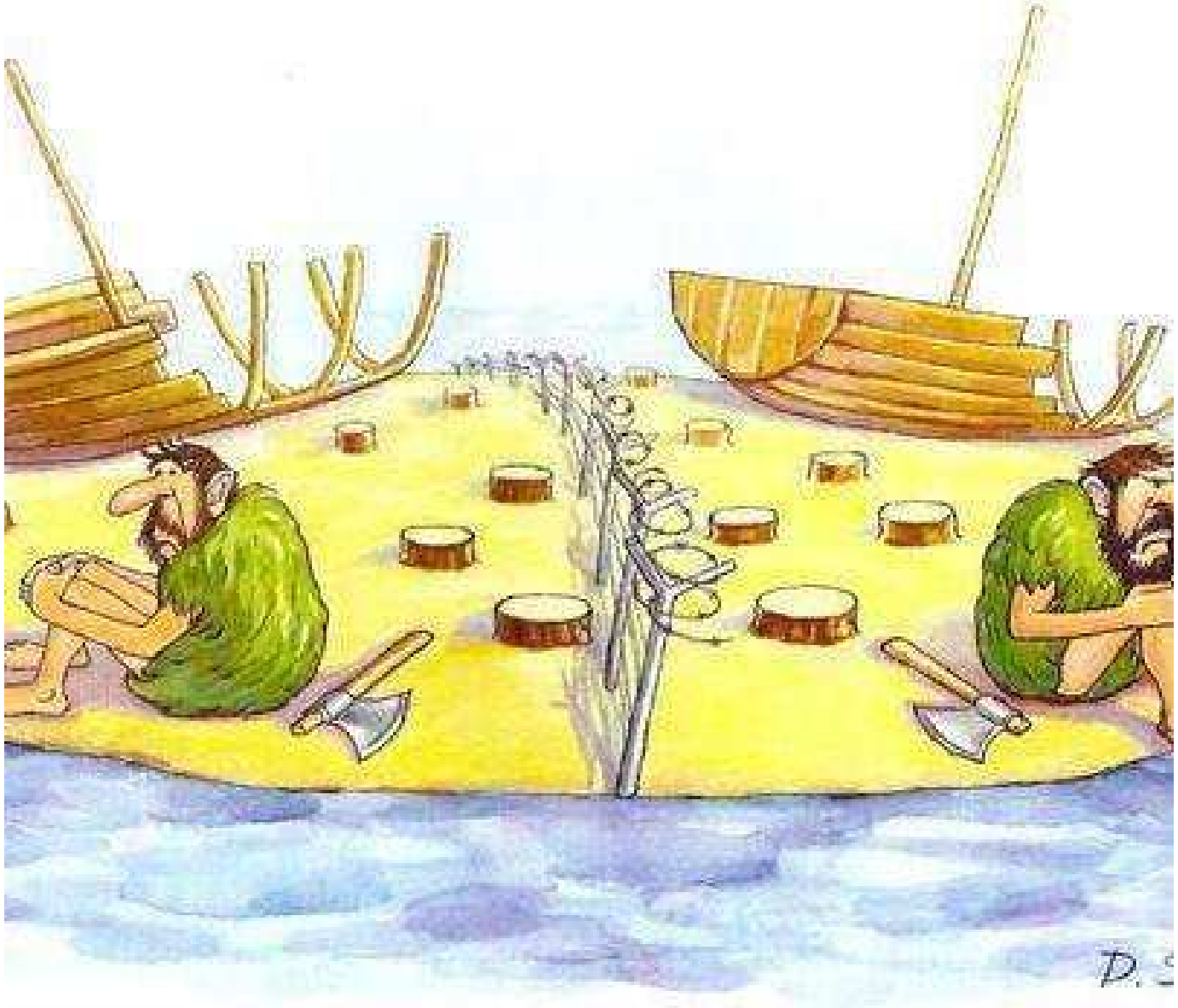
- Inadequate appreciation of the links between a healthy environment and a healthy Nation and economy
- The myth of “Namibia’s abundant natural resources”
- Clarity on mandate to ‘drive’ implementation of the SDGs?
  - MEFT?, other line ministries? NPC, Regional/local government?
- Commitment to a co-ordinated process (shared vision, common objectives, sharing information and responsibility, etc.)
- Funding – are our priorities right? (politicisation of development)
- Inadequate research and monitoring
- Circumvention of Social and Environmental Safeguard laws

Improving institutional capacity

The decision maker's dilemma



How rational is this?….



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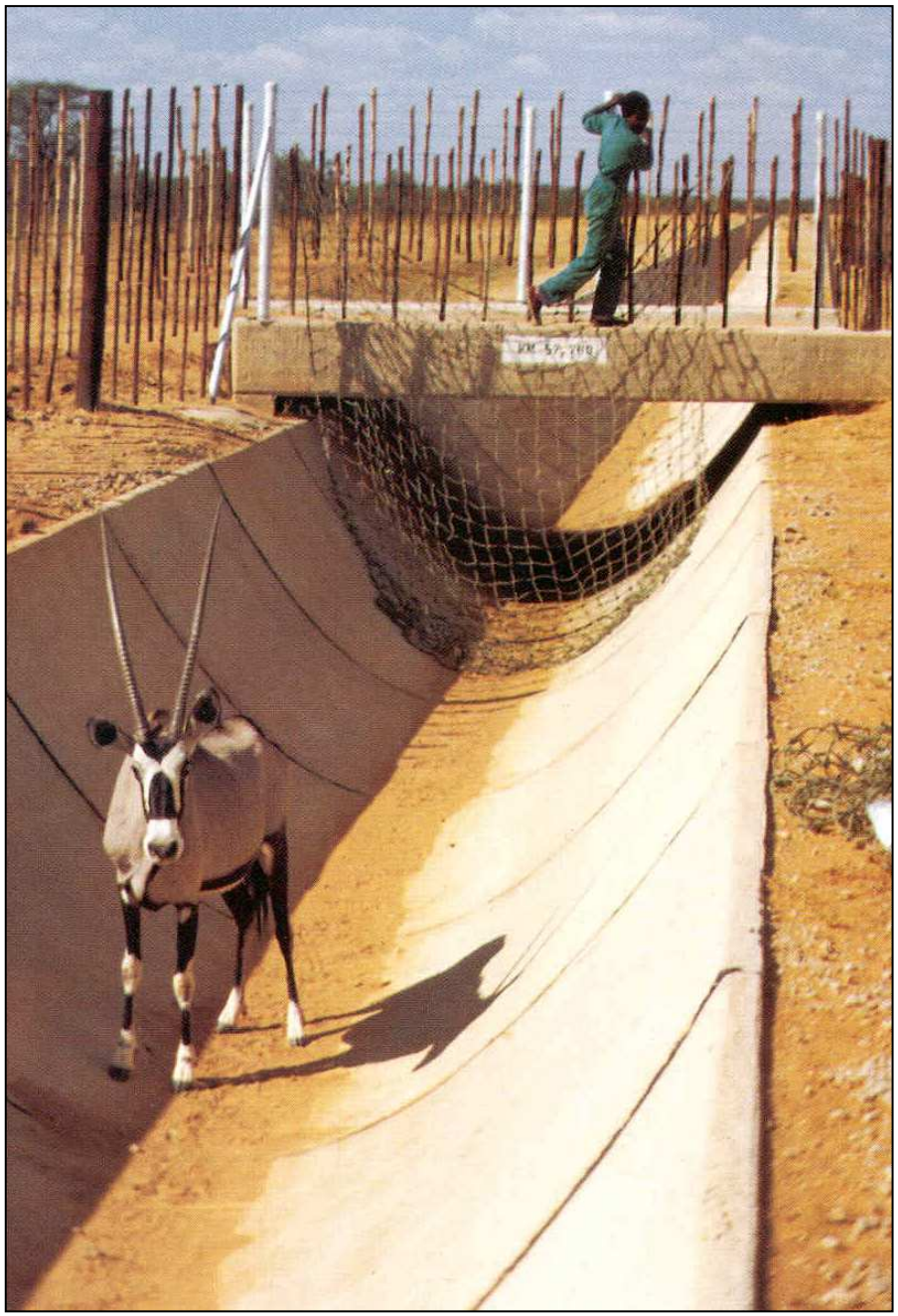
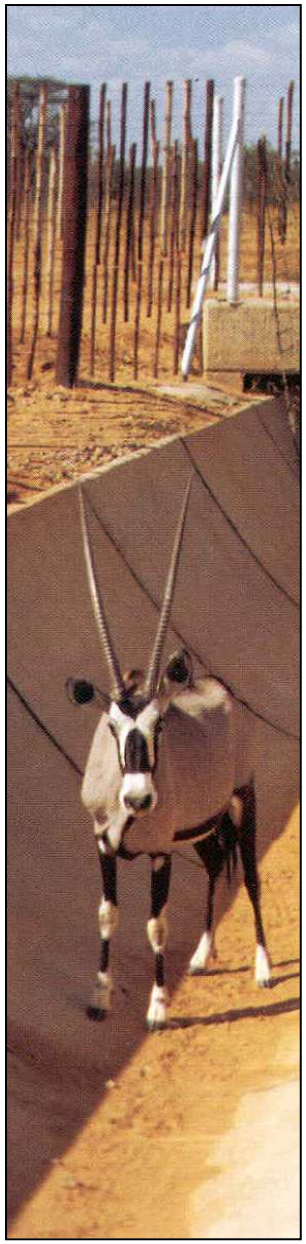


How rational is this?….

Take home message:

- ***ENVIRONMENTAL IGNORANCE*** **is no longer an excuse.**
- **Nowadays, we can learn from, and prevent the mistakes of the past.**

As we develop more policies, plans, programmes and projects to increase growth, employment, and prosperity, a clear understanding of cumulative impacts, linkages and unintended consequences is needed to avoid unnecessary negative economic, social and environmental impacts.



Thank you

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