Coastal Assessments - information to guide development

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Global Programme of Action for the Protection of the Marine Environment from Land-based Activities

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1995 Washington Declaration – GPA programme

1998 GPA Coordination Office, The Hague

2001 1st Inter Governmental Review meeting

2006 IGR-2

State of Environment on GPA issues

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When adopting the GPA the representatives expressed their ***commitment*** by:

(a) according priority to the implementation of the GPA ....., taking into account regular ***assessments of the state of the marine environment***; and

(b) setting as their common goal sustained and effective action to deal with all land-based impacts, specifically from ***sewage, persistent organic pollutants, radioactive substances, heavy metals, oils (hydrocarbons), nutrients, sediment mobilization, litter, and the physical alteration and destruction of habitats.***

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..... Coastal assessments

- Global International Waters Assessment
- GEF/Large Marine Ecosystems (LME's)
- Millennium Ecosystem Assessment (MA)
- Global Environment Outlook (GEO)
- LOICZ Synhesis

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Questions

Where are we?

Where do we go?

Where do we want to go?

What progress do we make?

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1. Where are we ?

State of environment

Trends

Prospects

2. Where do we go ?

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Priority issues

- Inadequate collection, treatment and disposal of sewage, and its health effects
- Excessive nutrient loads, mainly from agriculture and its effects on eutrophication and algal blooms
- Destruction of coastal habitats by overexploitation and inadequate management of coastal zones
- Reduced sediment loads and freshwater flow as a result of damming
- Indequate management of solid waste, including marine litter.

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GEF/LME's

- Depleted fish stocks by overfishing,
- Degraded coastal habitats
- Nitrogen over-enrichment and eutrophication of coastal waters

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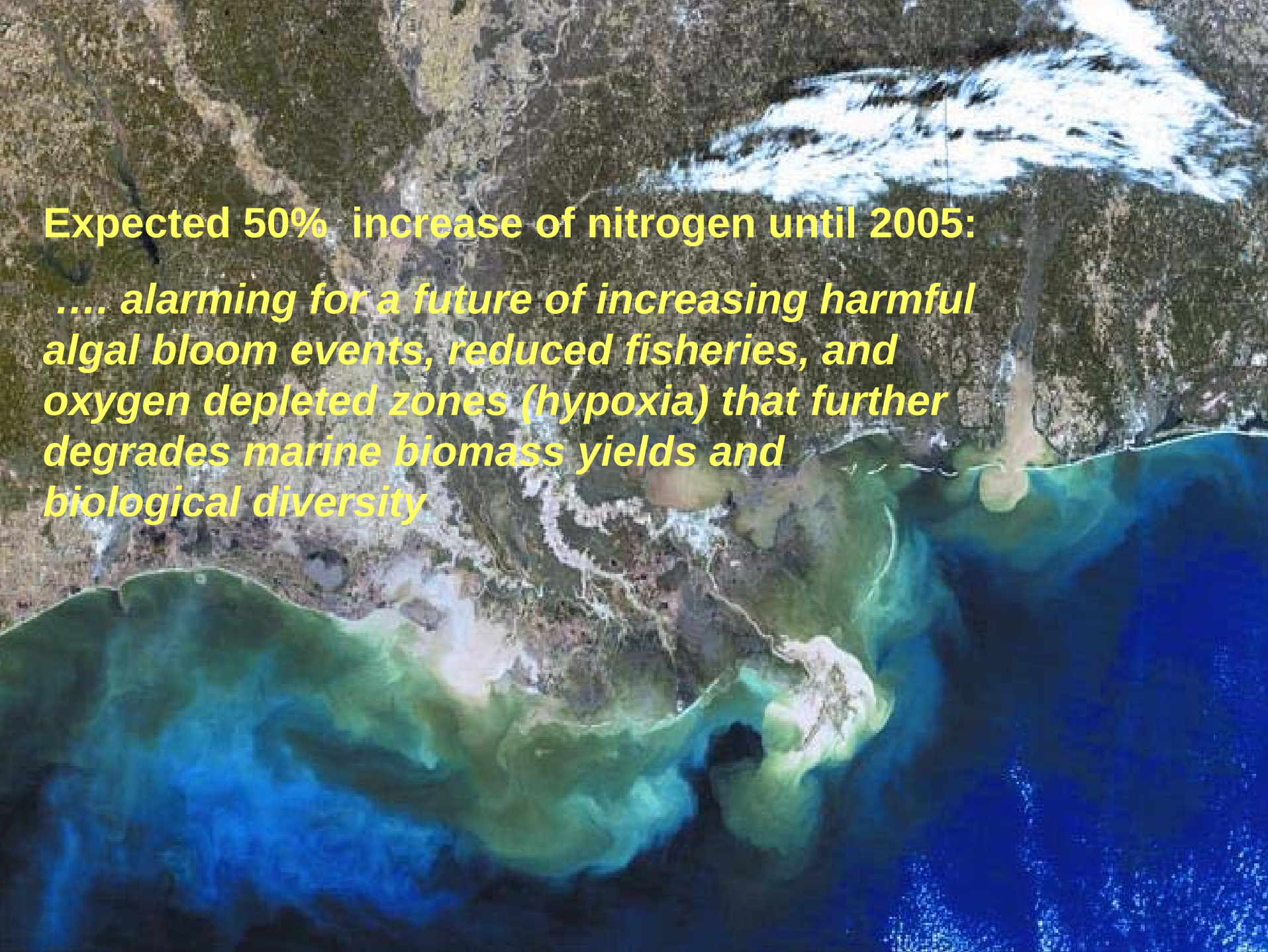

Expected 50% increase of nitrogen until 2005:

…. alarming for a future of increasing harmful algal bloom events, reduced fisheries, and oxygen depleted zones (hypoxia) that further degrades marine biomass yields and biological diversity

Millennium Ecosystem Assessment

- Conversion of forest and natural land to cropland
- In last decades 20% of coral reefs were lost and 20% degraded and 35% of mangrove area was lost
- Since 1960 4x amount of water behind dams, 2x water withdrawals from rivers and lakes - 70% of water use worldwide is for agriculture
- Since 1960, 2x flows of biological available nitrogen in terrestrial ecosystems and 3x flows of phosphorus
- Since 1750 the atmospheric concentration of CO2 has increased by about 32%

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3. Where do we want to go ?

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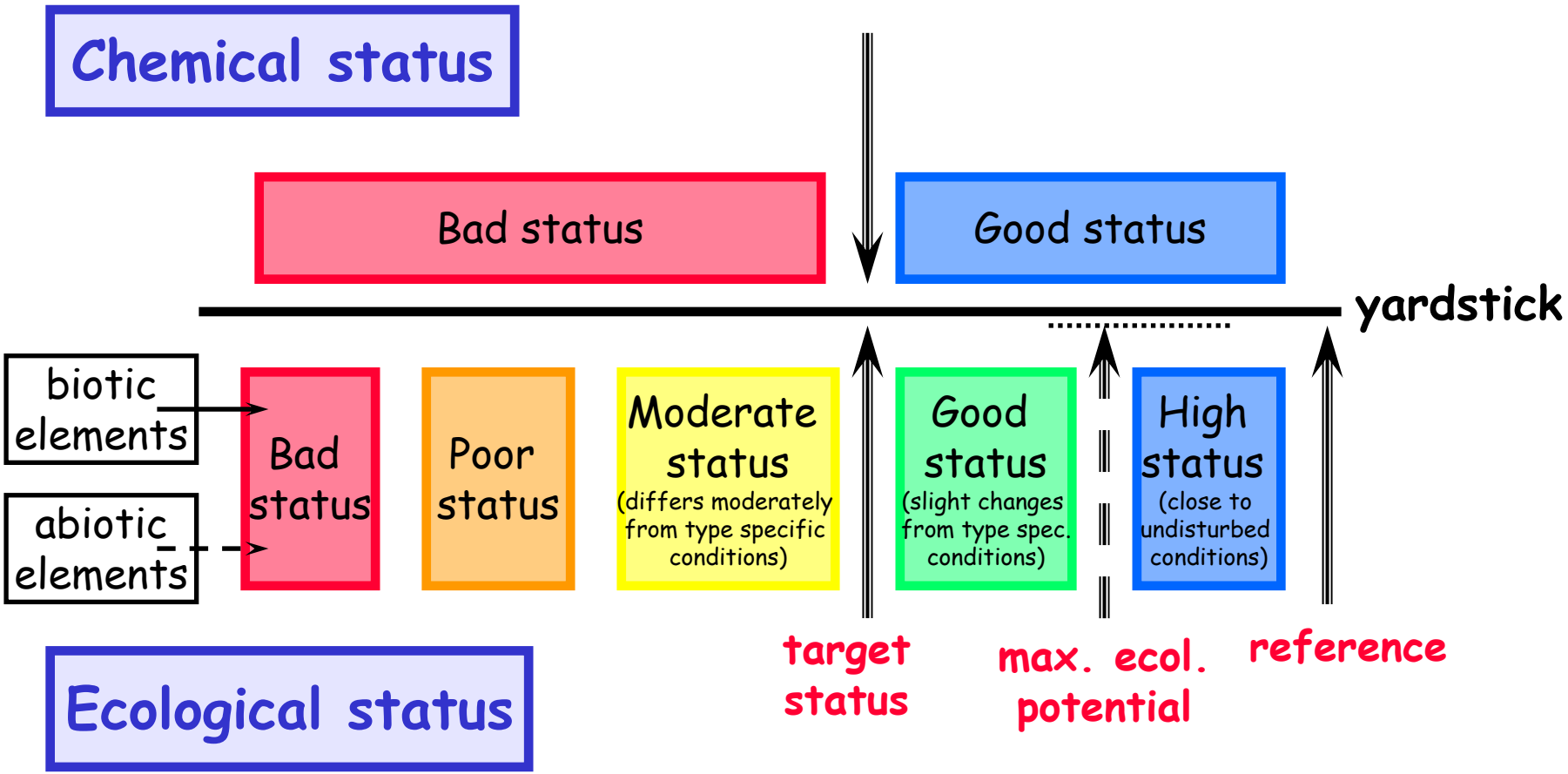
Ecological assessment (EU Water Framework Directive) classification & presentation



Millennium Development Goals

MDG 1 – Eradicate extreme poverty and hunger:
***Target 2**: Halve, between 1990 and 2015, the proportion of people who suffer from hunger*

MDG 7 – Ensure environmental sustainability:
***Target 9**: Integrate the principles of sustainable development into country policies and reverse the losses of environmental resources.*

***Target 10:** Halve, by 2015 , the proportion of people without sustainable access to safe drinking water and basic sanitation.*

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Realisation of MDG 1 will have immense environmental consequences.
.... and this is apart from the actual worldwide emerging issue of nitrogen over-enrichment and its expected increase by 50 % within the next 50 years

!! Urgent need to examine …..

- the **environmental footprints of agricultural development** in the next decades for river catchments and their coastal and marine environments
- investigate different **development scenario's** in a catchment-coast IWRM context in close cooperation with the agricultural sectors.
- Goal: to explore **sustainable policy options** for the agricultural sector in cooperation with water and environment sectors.

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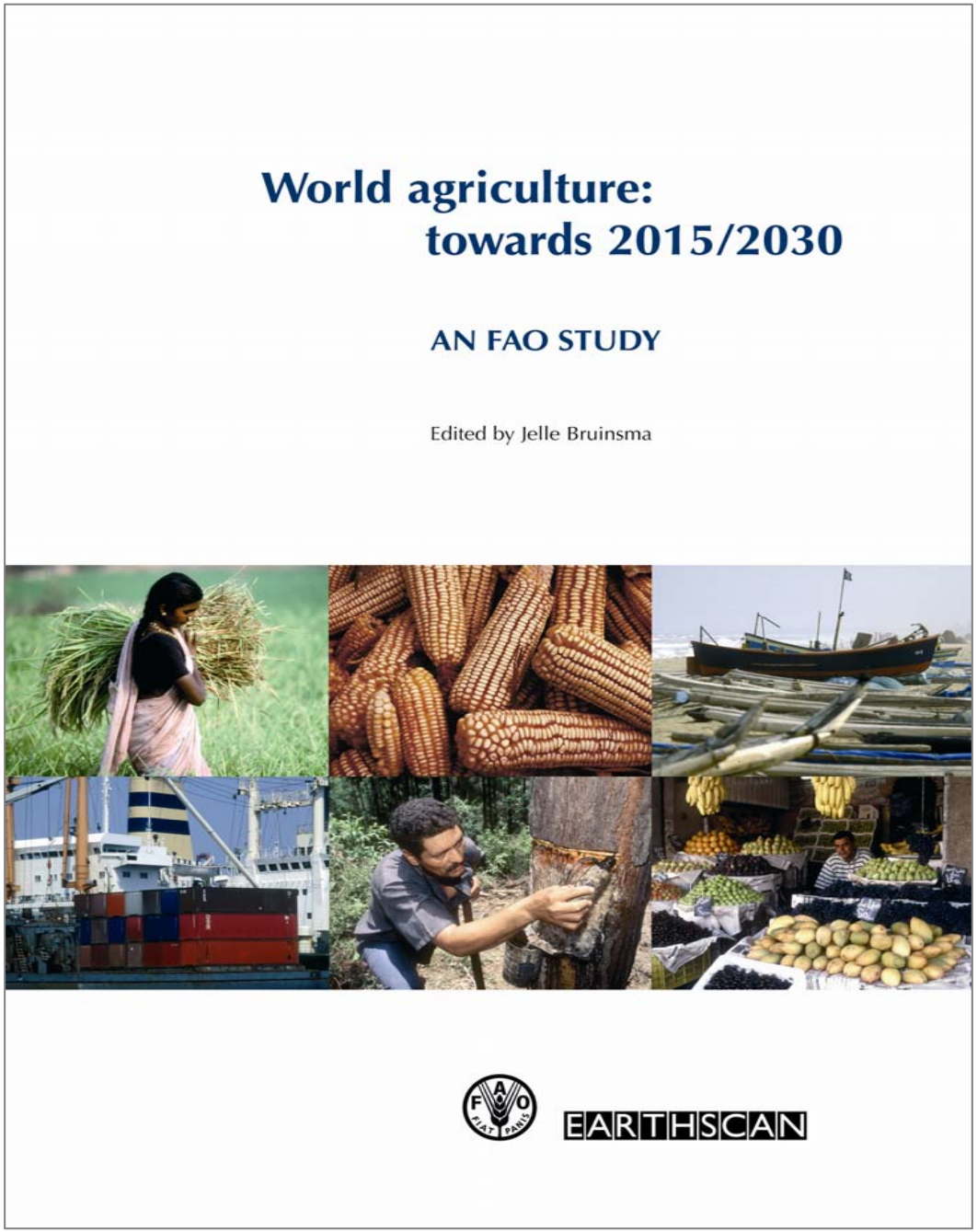

WAVE 30

Water and Agriculture: 30 year Visions for the Environment

FAO

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What progress do we make ?

Yardstick

Progress indicators

Progress markers

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Questions	*Strategies*
Where are we?	Priority issues
Where do we go?	Prospective studies
Where do we want to go?	Multi-sector policies
What progress do we make?	Mark progress

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Session 13 Coastal Assessments (1)

A. Kannen

Changing human demands in marine areas: Implications for governance and use of integrated management concepts

J. Rullkoetter

Interdisciplinary assessment of fundamental driving forces and transformation processes in a tidal basin, southern North Sea

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Session 13 Coastal Assessments (2)

V. Fernandoz-Ramos

GIS techniques for coastal habitats conservation in the Rio de la Plata

N.Pirrone

Assessment of chemical pollution in the Mediterranean: preliminary driver-presue analysis

S.Taljaard

A proposed framework for managing (land-based) marine pollution sources in the BCLME region

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