

# 2. Fisheries management and the **Ecosystem** approach

Essential **EAFM**

Date • Place

Version 1



**CORAL TRIANGLE INITIATIVE**  
ON CORAL REEFS, FISHERIES AND FOOD SECURITY



**Norad**



**USAID**  
FROM THE AMERICAN PEOPLE

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# Session objectives

*After this session you will be able to:*

- Realize a new management approach is required to address the many threats and issues facing capture fisheries
- Recognize how ecosystems benefit human societies
- Understand the concept of the ecosystem approach (EA)
- Describe some of the benefits of using an EA



# Management

The many threats and issues identified in Session 1 require management to:

- minimize their impact and
- improve the benefits to society

Fisheries management: “An integrated process that aims to improve the benefits that society receives from harvesting fish”.

Adapted from FAO



# Existing fisheries management

## *Possible characteristics:*

- Mainly focused on target species & stock assessment
- Single sector specific (fisheries)
- Mainly control of fishing (e.g. gear restrictions and zones)
- Based on biological objective e.g. maximizing production



# Activity

1. Discuss what you know about existing fisheries management in your country
2. Sort the threats and issues identified earlier into:
  - Those that can be addressed by existing fisheries management; and
  - Others.

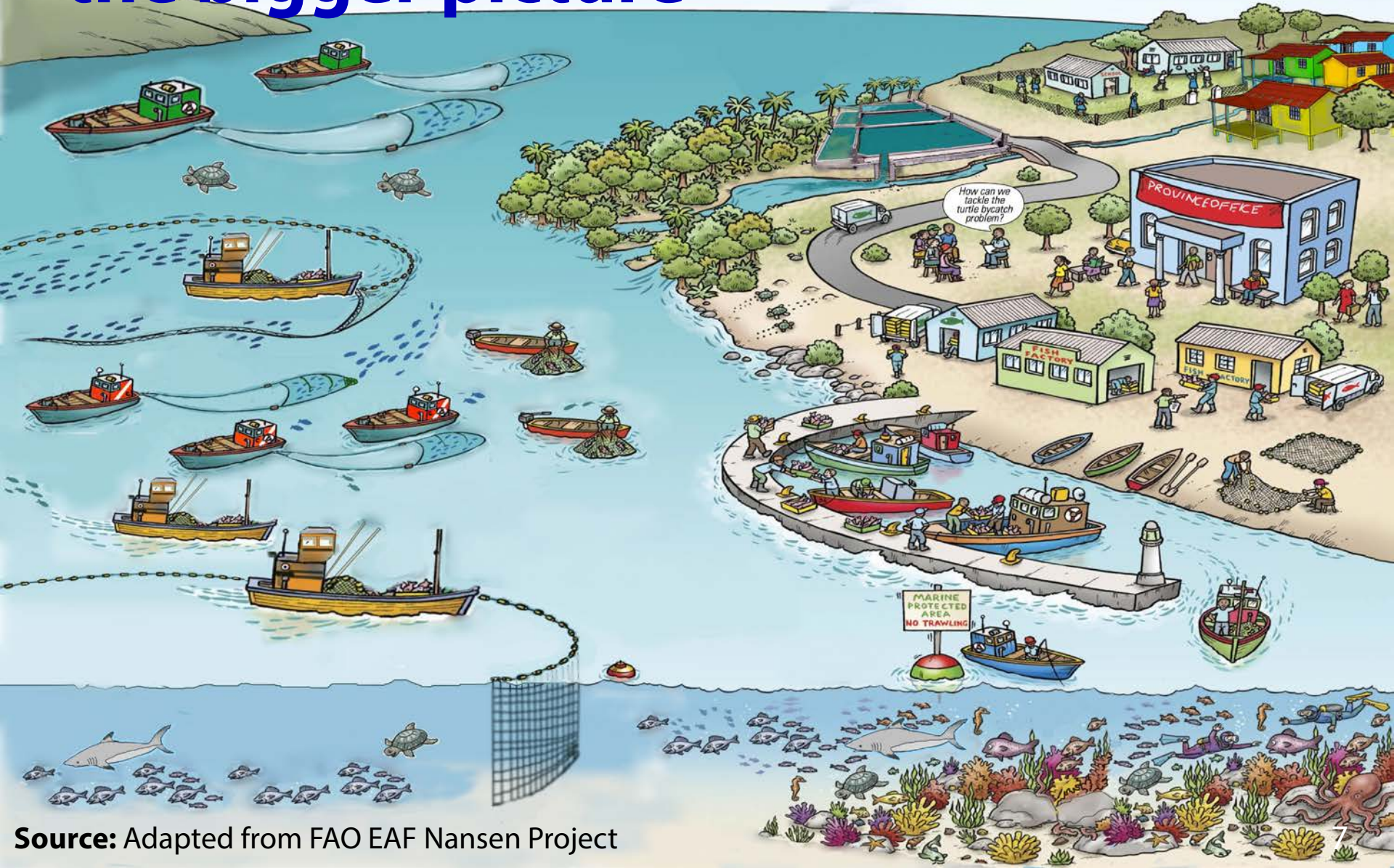


# Conclusions: existing fisheries management

- Fishery resources are seriously degraded in the region with many issues
- Existing fisheries management does not cover all threats and issues and can often fail
- A broader and more inclusive approach is needed that expands on existing management



# Fisheries ⇨ Ecosystems... the bigger picture



Source: Adapted from FAO EAF Nansen Project



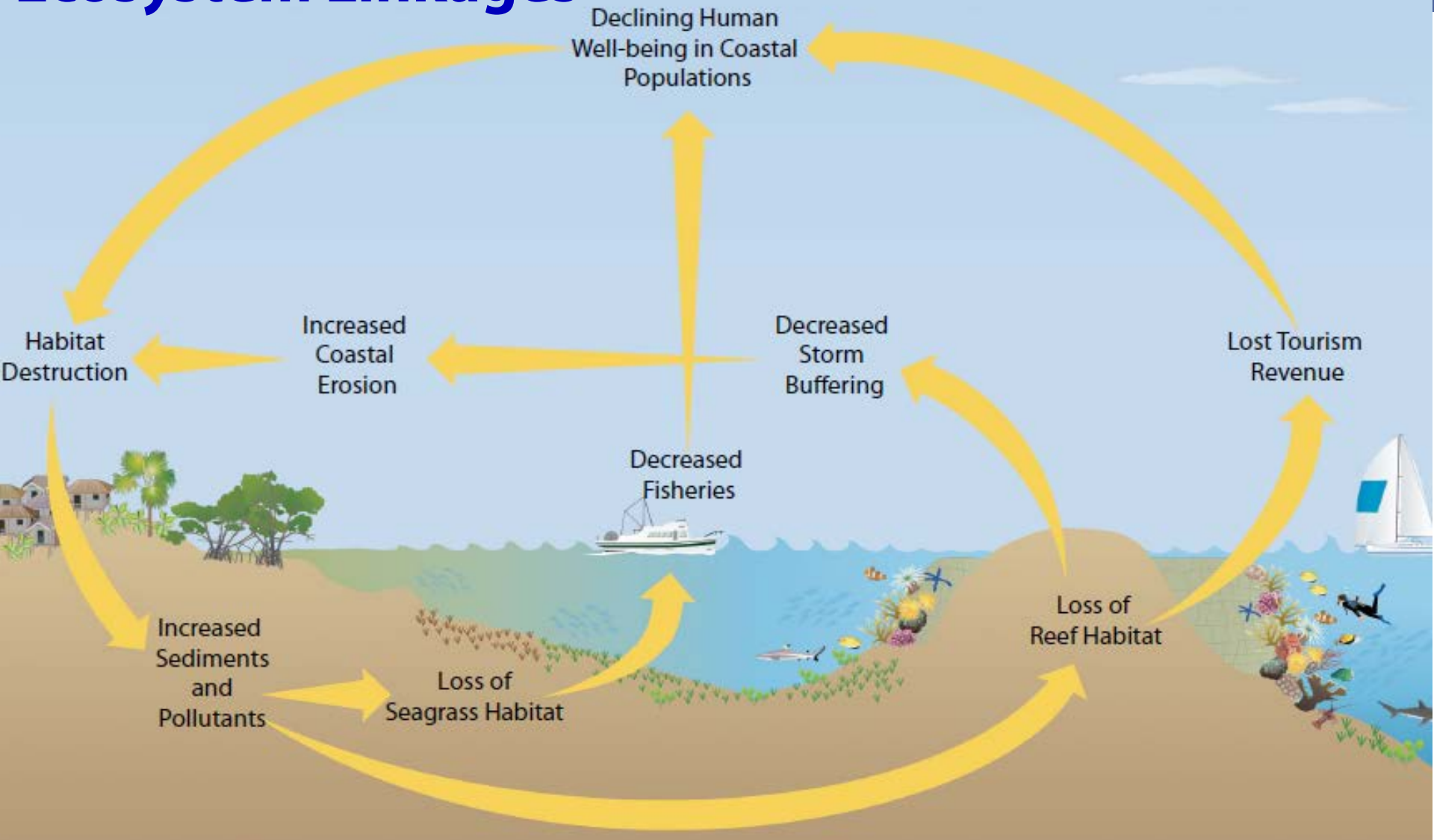
# What is an ecosystem?

“An ecosystem can be defined as a relatively self-contained system that contains plants, animals (**including humans**), micro-organisms and non-living components of the environment as well as the interactions between them.”

SPC (2010)



# Ecosystem Linkages



Source: UNEP (2011)



# Ecosystem services & benefits

- **Supporting** – e.g. food webs of plants and animals
- **Provisioning** – e.g. supply of fish for animal and human food
- **Regulating** – e.g. coastal protection and resilience against variability and change, as well as natural disasters
- **Cultural** – e.g. recreation, cultural and traditional heritage values



# Ecosystems in a fishery context

- Fish depend upon their surrounding supporting ecosystem (water, habitats) to survive and thrive
- Managing fisheries in isolation from what they affect and are affected by has proven to be relatively ineffective and unsustainable



# Ecosystem approach

- It is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way (CBD 2000)
- EA is often used interchangeably with ecosystem-based management (EBM)

The ecosystem approach is the way to implement **sustainable development.**





# Sustainable development

“Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.”

*Sustainable development is about maximizing the ecosystem benefits but at the same time not degrading the systems to the extent that the benefits cannot be sustained.*

# Sustainable development





# Ecological well-being

- Healthy ecosystems that maximize ecosystem services
- Biodiversity that leads to ecosystem resilience
- Supportive ecosystem structure and habitats
- Healthy oceans, coastal areas and watersheds
- Food webs based on diverse sources of primary production



# Human well-being

- Material living standards (income, food and wealth)
- Health
- Education
- Food security
- Basic human rights e.g. political voice and influence
- Social connections and relationships
- Living environment (present and future conditions)
- Economic security and human safety





# Good governance

The way rules and regulations are set and implemented (both formal and informal).

It includes:

- planning and implementation mechanisms
- processes and institutions through which citizens and governing groups voice interests, mediate differences, exercise legal rights and meet obligations
- compliance and enforcement



# Activity

Plenary brainstorm:

What are the benefits of taking an ecosystem approach?

*Tip: keep in mind that we are trying to promote sustainable development*



# Why an Ecosystem Approach?

## What are the benefits?

- Integrated approach that allows trade-offs when balancing human and ecological well-being
- Allows adaptive management – leading to more effective planning
- Increased stakeholder participation



# Why EA?

## What are the benefits? Contd.

- Provides a way to consider large-scale, long-term issues (e.g. climate change)
- Increased political support
- Can help unlock financial resources





# Key messages

- Threats and issues to sustainable fisheries are broad in scope
  - a number fall outside existing fisheries management
  - a new approach is needed
- EA is about integrative management across land, water and living resources
- EA is a way of implementing sustainable development that promotes:
  - balancing ecological well-being with human well-being through good governance