Developing capacity in the Ecosystem Approach to Aquaculture Management (EAAM)



Module objectives



After this session you will be able to:

- Grow an understanding of ecosystems
- Share the main drivers of sustainable development and climate change
- Understand the concept of the ecosystem approach (EA)
- Describe the benefits of using an EA

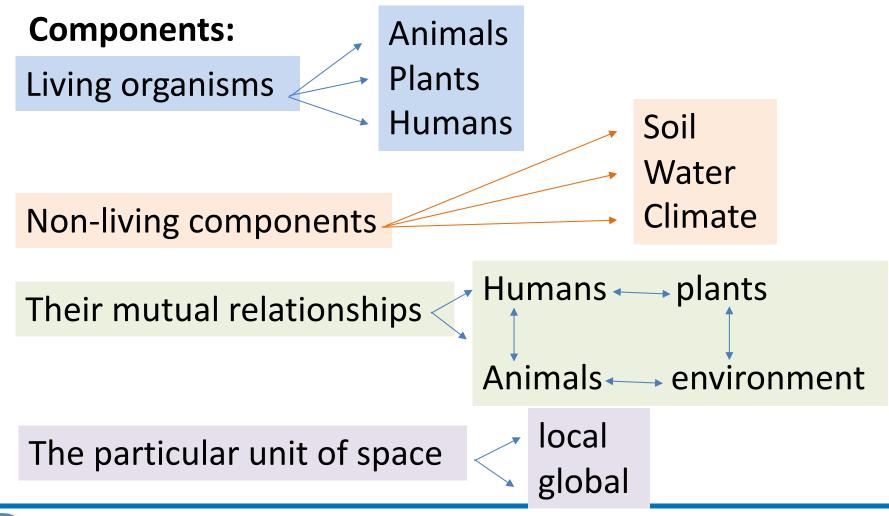


What is an ecosystem

The complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space



What is an ecosystem



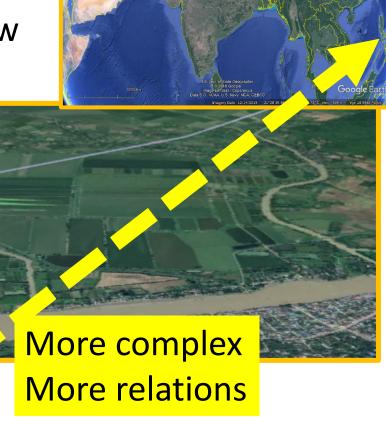


Dimensions of an ecosystem

The particular unit of space determines who or what are present in the ecosystem and how their interact

Local

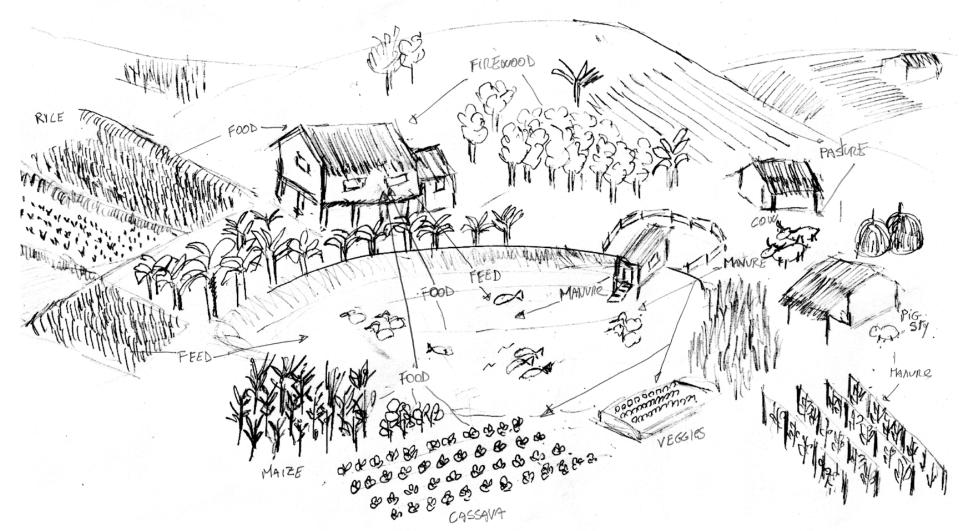
watershed



global

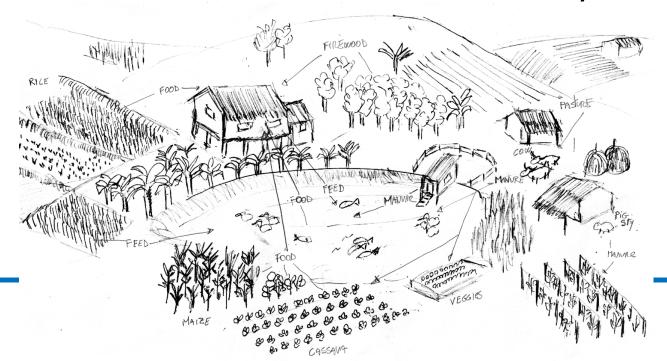
Relationships in an ecosystem

What interactions are within the system?
What about the links to the outer parts of the ecosystem?



Relationships in an ecosystem

- Relationship between different components
- Relationship with resources
- The flows of materials and resources
- The environmental conditions and their effects to the system
- The interaction of human activities into the system





Aquaculture and the ecosystem

Managing aquaculture without attention to the different components of the ecosystem has proven to be relatively ineffective and unsustainable





Sustainable ecosystems

A well functioning ecosystem in all its components should last forever

Sustainable Development

Sustainable Development

Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs





Economic development

Economic growth
individual/corporate profit
market expansion
consumption and use
externalities

Equitable

Social development

local self-reliance
human development
equity
participation
social accountability
accessible technology

Viable

Sustainable

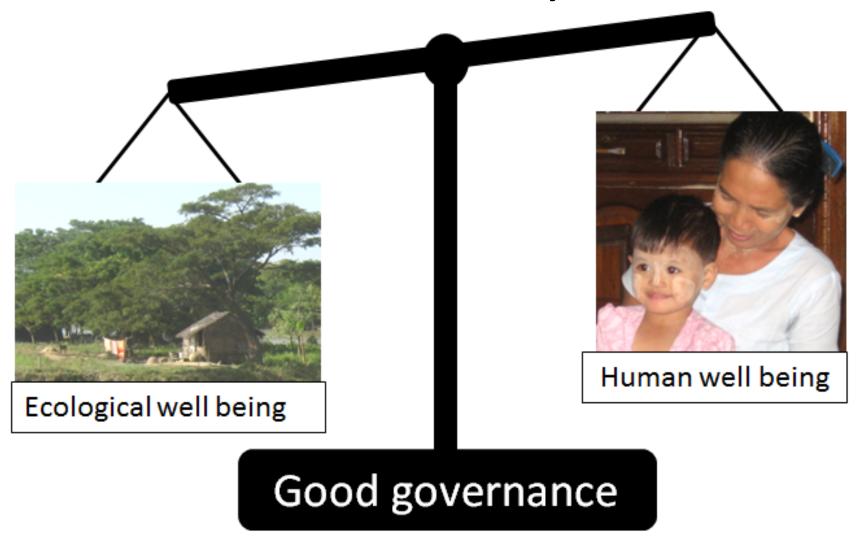
Ecological development

Bearable

resiliency
biodiversity
carrying capacity
resource conservation
climate conservation
ecosystem services

Governance

Sustainable ecosystems





Ecosystem Approach (EA)

Is a strategy for <u>the integrated management</u> of land, water and living resources that promotes <u>conservation</u> and <u>sustainable use in an equitable way</u> (CBD, 2000)





Activity 1: group work

Describe an ecosystem with its different components and determine changes and integrations depending on the scale. Identify possible cause-effect scenarios.

Determine what are the main drivers to guarantee sustainability in your given ecosystem



Activity 2: Plenary Discussion

What are the benefits of taking an ecosystem approach?

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



Aquaculture Management

"An integrated process that aims to improve the benefits that society receives from farming fish while maintaining ecological health and balancing other societal needs". Adapted from FAO



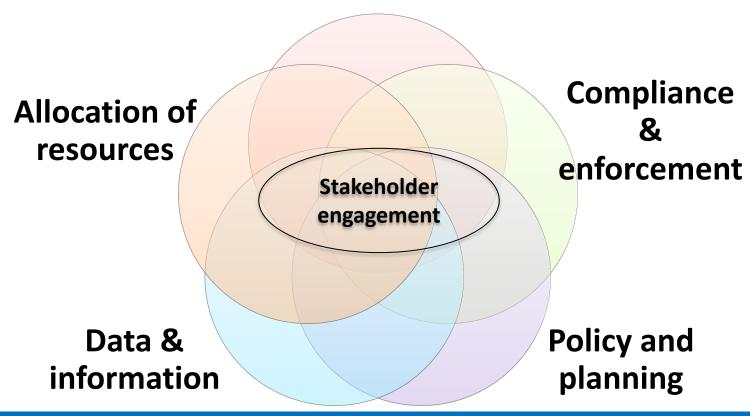
What does aquaculture management imply?

- informed decision-making
- formulation and implementation of rules & regulations
- compliance & enforcement
- allocation of resources

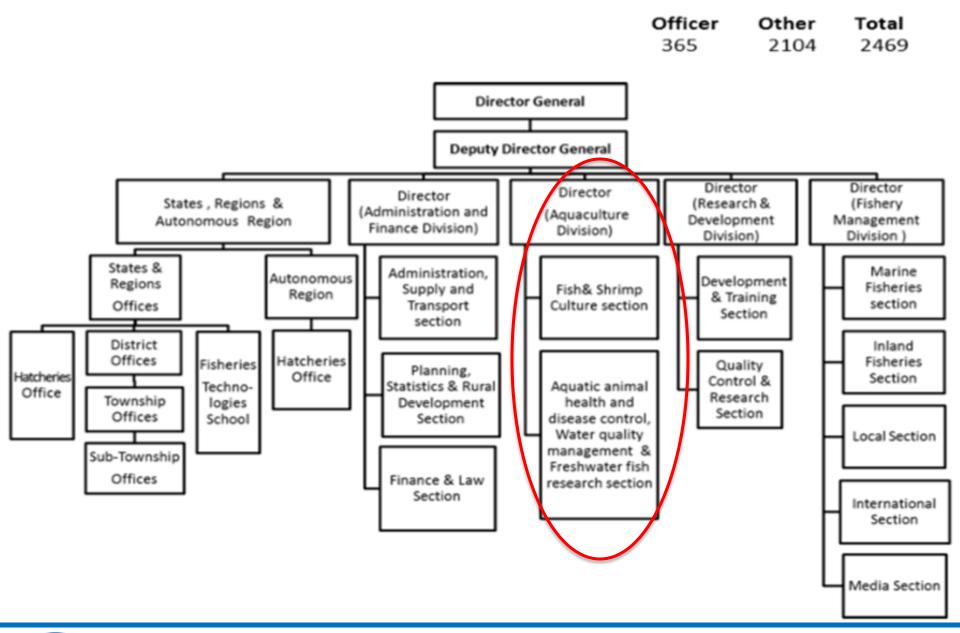


Relationships in an aquaculture management

Laws and regulations









Conventional aquaculture management

Common characteristics:

Focused on...

- Farm licensing
- Farm management (production)
- hatcheries
- Health and safety
- Environment (water quality)
- R&D
- Training/extension



Activity 3: Conventional aquaculture management

Discuss what you know about conventional aquaculture management in Myanmar



Essential EAAM

To download all materials please visit:

