





### Concepts, laws and paradigms Exercise

INSTRUCTIONS

#### LEARNING OBJECTIVE:

In the following extract from a course on scientific approaches to integrated natural resource management<sup>1</sup>, identify the concepts, laws and paradigms of different schools of thought.

### PROCEDURE STEP-BY-STEP:

After studying the slides below, consider notions of "integrated natural resource management" by answering the following questions:

- 1) What are the different types of "integrated natural resource management"?
- 2) Which schools of thought produced the paradigms to which these notions refer?
- 3) What are the main concepts and laws?

### A. From normative to patrimonial management

- Normative management:
  - o Dominant approach in economics, no innovation since 1974 (Pigou, 1920, Coase, Dales, Baumol et Oates, Weizman)
  - o Key concept: externalities
- Adaptive management:
  - An approach originally developed in ecology
  - o Key concepts: adaptive capacity and resilience
- Patrimonial management:
  - o Approach linked to patrimony
  - o Key concepts: perceptions, decision making processes



<sup>1.</sup> Acces to the entire course "New participatory approaches for natural resource management": http://elearning.cirad.fr/tmp/uved/commod/html/t1/t13/t13.html

## Normative management and externalities

- Externality
  - = the cost or environmental/social benefit not included in the market price of a good or service
    - orchard/beekeeper
    - o railroad/field
    - o mine/pollution
- => These costs are not taken into account by those who cause them, nor are the benefits paid for by those who receive them

### Adaptive management and resilience

- Management of dynamic ecosystems require :
  - o Diverse and flexible regulations
  - Monitoring and corrective responses
- Adaptive capacity (or resilience) relies on :
  - Knowledge (production and exchanges)
  - o Identification of points of intervention
  - Construction of an ensemble of options (the opposite of a normative approach)
- Resilence and territory: location where specific resources are constructed (organization of stakeholders)
- http://www.resalliance.org

# Patrimonial management and patrimony (1/2)

• Patrimony:

"the compendium of all material and immaterial elements that help maintain and develop, by adaptation in an evolutionary context, the identity and autonomy of its holder, through time and space." (Ollagnon 1989)

Patrimony: is transmitted, is subject to responsibility

Good: is appropriated, is subject to law

# Patrimonial management and patrimony (2/2)

- Patrimonial management: approach that considers that the points of view and perceptions of the stakeholders involved in the patrimonial relationship are legitimate.
- Need for mediation: process using a neutral third party in the search for an accord between different stakeholders regarding a question or problem.
- Enabled the development of tools to support this management: patrimonial audit Ollagnon 1989, strategic analysis of environmental management Mermet 2004, Commod 2004.