

Lecture 11: November 2, 2000

# **Thinking globally, acting locally: community-based natural resource management (CBNRM)**

## **Overview**

Recognizing the limits of 'top-down' conservation, there has been an increasing shift toward community-based resource management (CBNRM).

This shift presents both new challenges and new opportunities for protecting the environment. Sometimes it works well, sometimes not.

To understand the potential of CBNRM, we need to know something about how social scientists have viewed community management in the past.

A key concept is...

## **PROPERTY**

**WHO OWNS WHAT AND IN WHAT WAYS IS CRUCIAL IN SHAPING OUR ENVIRONMENTAL BEHAVIOR**

**INCREASINGLY, WE HAVE RECOGNIZED LIMITATIONS TO RESOURCE MANAGEMENT BY BOTH PRIVATE OWNERS AND GOVERNMENT, SO WE HAVE INCREASINGLY TURNED TO COMMUNITIES.**

To understand why, we need to think about what property is, and different types of property affect our interactions with the environment:

## **Types of property:**

## ∅ **Private property**

The right of individuals or corporations to exclude others

e.g. private homes, farms, industry

## ∅ **State property**

The right of a government to control access

e.g. national parks, national forests, public buildings, military facilities

## ∅ **Common property**

The right of a private social group to exclude others and manage resources collectively

e.g. some fisheries, watershed councils, CAMPFIRE

## ∅ **Open access**

NOT property; resources not 'owned' by anyone; uncontrolled/unmanaged

e.g. clean air, oceans, some grazing lands

# **How are property rights related to environmental problems?**

Particular forms of property rights affect how we use resources.

Changing these rights may help to solve certain environmental problems.

# Private property

## Arguments:

- Does private ownership create incentives to manage resources sustainably? *Or...*
- Does private ownership create incentives to exploit resources quickly and move on (externalities problems, *capital mobility*)
- Private use creates externalities, public goods problems
- Inequality in private ownership can lead to degradation (e.g. Brazil 1% of owners control 70% of land)

## Solutions:

- Regulation—restrictions or requirements for private property (e.g. Endangered Species Act, zoning laws, etc.)
- Incentives-based approaches (e.g. green taxes)
- Land reform (redistribution of ownership)

Question: Absolute or limited private property rights?

# State property

## Arguments:

- State control of resources is necessary to prevent over-use (e.g. National Forest system)
- State control is ineffective and unfair (e.g. battles over grazing lands)

## Solutions:

- Increased state enforcement (e.g. increased grazing fees)
- Privatization (e.g. 'Sagebrush rebellion', 'Wise Use' movements)
- Devolution of state control: community-based natural resource management...

## Common property

### Arguments:

- Collectively-managed resources will be overexploited (the "tragedy of the commons")
- Collectively-managed resources can be effectively regulated by and for the interests of the communities if they have rights to benefit from the resource
- Local people have superior knowledge of local conditions/ecosystems (e.g. 'indigenous knowledge')

### Solutions:

- Privatization
- State control
- Strengthen community-based natural resource management

## 'Tragedy of the commons'

Garrett Hardin 1968 (*Science*):

"the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another; and another... But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein lies the tragedy. Each man is locked into a system that compels him to increase his herd without limit--in a world that is limited." (p. 1244)

"Freedom of the commons brings ruin to all." (p. 1244)

Hardin confuses common property (managed by a group) with open access (managed by no one)

Some resources have been sustainably managed by communities for generations through:

- Culture, customs, local rules and practices (e.g. Maine lobstermen)
- Community sanctions

Problems of local vs. global commons (e.g. global climate, oceans, etc.)

## **Two examples of community-based natural resource management (CBNRM):**

- **CAMPFIRE (Zimbabwe)**
- **Watershed councils in Oregon**
- **Quincy Library Group (N. California)**

## **Conclusions:**

**Is CBNRM ‘the answer’?**

Probably not in all circumstances:

- **Problems of the global commons (e.g. Montreal protocol 1987, IWC ban on whaling vs. Rio Summit/Kyoto Protocol—global climate change,**

## **biodiversity)**

- **Weak community institutions (loss of ‘social capital’)**
- **A shift from a preservation ideology to a conservation ideology**
- Possible domination by powerful groups (local elite, big business, etc.)

**But, where both state ownership and private ownership have failed, CBNRM should be considered as a viable alternative (contrary to the ‘tragedy of the commons’ thesis)**