AMBO UNIVERSITY WOLISO CAMPUS SCHOOL OF GRADUATE STUDIES COLLEGE OF BUSINESS & ECONOMICS INSTITUTIONAL ECONOMICS LECTURE 3 PROPERTY RIGHTS

1

Lecture content

- 1. Common Property Problem
- 2. Coase Theorem (1960)
- 3. Alternative approaches to Coase Theorem
- 4. Criteria for efficiency of property rights
- 5. Economic advantages of property rights
- 6. Changing property rights

Common Property Problem

- 1. Why people pollute their living environment?
- 2. Why firms surrounding Finfine town pollute downstream rivers with their byproducts?
- 3. Why farmers overgraze common lands?
- 4. Why illegal hunting is so rampant in Ethiopia?

Common Property Problem...

Because of:

- Lack of property rights!
- > everybody's land is no one's land!
- ➤ Marginal benefit of using a resource is always greater than marginal costs to the users!

Coase Theorem

- If no one "owns" a resources, no one benefits from managing (pricing) its usage and hence becomes everyone's resources.
- The solution is to assign the property right to one party and allow them to trade its use in the marketplace.

- If property rights exist and transaction and information costs are low:
 - ➢ Then parties will be able to bargain among themselves (without government intervention) to obtain an efficient outcome (Coase, 1960).

➤Call for reducing government interventions in the name of controlling and monitoring resource uses!

□An Example of the Coase Theorem:

- Marketplace
 - ✓ Consider a firm upstream from a farmer:
 - Firm produce a good valued by consumers but dumps pollutants into the river as a byproduct.
 - Cost of using the river to the firm is zero (0).
 - Assume that cost of pollution abatement equipment \$3million.



- \checkmark For a farmer who lives:
 - Downstream from the firm
 - Uses water to irrigate his agricultural products
 - Pollution affects/degrades his product
 - Assume crop damage estimate to be \$8million.

- 1. If ownership to the river is assigned to the firm:
 - Farmer is willing to pay the firm to reduce pollution (bribing?)
 - Willing to pay firm to reduce gallons discharged up to marginal value of crop damage due to pollution
 - Firm will be willing to accept payments that are > = marginal costs of treatment/reduction.

✓ Farmer will be willing to pay <= \$8million.

- The firm can buy equipment for about \$3million.
- Some saving to both parties: (\$8 M-\$3M~\$5M)?

- 2. If ownership to the river is assigned to the farmer:
 - √The firm will be willing to pay the farmer up to the marginal value of "avoided" treatment costs and value of lost output (~\$3M + ?\$), or install pollution abatement equipment.
 - $\sqrt{The farmer will be willing to accept payments}$ > = marginal cost of crop damage.

- Either way: socially efficient (marginal value = marginal cost) solution.
 - However, there are different income effects
 - Concluding which is best => normative statement

Alternatives to Coase Theorem

- Criticisms of Coase Theorem:
- 1. Higher transaction costs.
 - Transaction costs of getting all affected parties together may be too great to get to optimal solution if rights assigned to firm.
- 2. Strategic behavior.
 - ✓ Offering lower bribe/demanding more payments by the parties involved.
 - Individuals are not rational!

Alternatives to Coase Theorem...

□ Alternative approaches:

Standards

- Set same standard for all firms,
- \checkmark But not all firms are productively efficient.
- ✓ Different firms need different cost minimization strategies.
- \checkmark To set individual quotas: requires knowledge of each firm's costs.
- Have higher administrative costs
- \checkmark Not only have to monitor emissions
- ✓ Enforcement costs: legal proceedings (time delays and expense)

✓ Provide no incentive for firms to reduce pollution below current "authorized" levels

Alternatives to Coase Theorem...

. Taxes

- ✓ Can produce "optimal" amount of pollution at minimum costs and lower administrative costs
- ✓ Automatically allocates pollution levels among firms based on their costs
 - Provides incentive for firms to reduce pollution levels through technological innovation
- ✓ Easy to adjust/"tune"
- \checkmark Tax revenues can be used finance admin costs

Alternatives to Coase Theorem...

3. Tradable Permits

✓ Cost efficient

• Firms will purchase permits from more efficient firms if permit cost < abatement (technology) costs

\checkmark Technological incentive to reduce pollution

• Marginal cost of abatement = permit cost

✓ Administratively simpler

- Require less information about the firms' cost
- Better able to handle "spatial" variation in pollution
- Adjust "automatically" for changes in inflation and growth

Criteria for efficiency of property rights

- Three important criteria for efficiency of property rights:
 - 1. Universality: all scarce resources are owned by someone;
 - 2. Exclusivity: property rights are exclusive rights; and
 - 3. Transferability: to ensure that resources can be allocated from low to high yield uses.

Case studies

- In light of these criterion, evaluate the efficiency of:
 - 1. Federal Democratic Republic of Ethiopia. (1997). Rural Land Administration Proclamation of the Federal Government of Ethiopia. Proclamation No. 89/1997.
 - 2. Oromia National Regional State rural land use and land administration policy N0130/2007.

Case studies...

• Evaluate the policies in terms of effects on:

- Tenure security,
- Investment in land improvement technologies,
- Transferability of land and other fixed assets built on the land,
- Access to finance collateralizing the fixed assets,
- Mobility of people from rural to urban,
- Farm sizes and land fragmentations
- Agricultural productivity and rural transformation

Case studies...

1/23/2019

• Proclamation N0130/2007 article 6

- It states "selling of products of fixed assets like product of coffee, mango, avocado, papaya, orange etc. shall be possible if and only if the following conditions are fulfilled:"
 - a. The land occupied by the product to be sold shall not exceed half of the total land holding o f the individual.
 - b. The product shall be sold for three (3) years only, after which the buyer should return the land to its original holder.
 - c. the rural land use right shall be terminated if the land is required for more important public uses. 20

/23/2019

Case studies...

- Proclamation N0130/2007 article 10 sub article 1 and 2 :
 - a. one can rent only half of his land holding and for the period of maximum of three years.
 - b. Rent agreement to be made in the presence of government representative in writing.

Criteria for efficiency...

• Proclamation N0130/2007 article 9 (1-2)

- ✓ Farmlands whose holders are deceased and have' no heirs or are' gone for settlement or left the locality on own wish and stayed over a <u>given</u> <u>period of time</u> shall be distributed to others.
- ✓ Land distribution may be undertaken on irrigable land in order to use irrigable land properly and equitably.

Mandatory reading

• De Soto H. (2000) *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else, Richmond: Black Swan*

THANK YOU

1/23/2019

-