



# PUBLIC GOODS

(Visual 1)

- A public good is a good that is provided in the same amount to all consumers if provided at all.
- A pure public good is non-excludable and non-rival. Once provided it is impossible to prevent agents from consuming it. One agent's consumption does not reduce the amount available to other agents  
Examples: Public TV – World Service Radio - Air
- A free-for-all public good is non-excludable and rival. It is impossible to prevent agents from using it. One agent's consumption does reduce the amount available to other agents.  
Examples: Roads – Fish – Public Beach



# TRAGEDY OF THE COMMONS

(Visual 2)

1832 – Wm. Forster Lloyd – Observed the devastation of common pasture and the puny and stunted draft animals that grazed there.

1968 – Garrett Hardin created the economic term, tragedy of the commons.

- The commons refers to any resource shared by a group of people.
- Each household has the right to take resources from and to put waste into the commons.
- As population grows, greed runs rampant, and the commons collapses. Hence, the tragedy of the commons.

# EXTERNALITIES

(Visual 3)

**Externalities** occur when the production or consumption of one agent affects another's

- **Negative Examples:** mobile phone use in public places, toxic waste dumping reducing fishing yields, loud music in residential neighborhoods.
- **Positive Examples:** a neighbor who landscapes his property, soothing music in dentists' offices, regular exercise program.



# PIGOUVIAN TAX

(Visual 4)

**Pigouvian Tax** – The government taxes the company for each unit of pollution it emits.

- Companies have an incentive not to pollute.
- Extra costs get passed on to the consumer.
- Government uses the funds to fight pollution.



# COASE THEOREM

(Visual 5)

**Coase Theorem** - Private parties can bargain without cost over the allocation of resources, they can solve the problem of externalities on their own

- Disputes over resources arise because nobody owns them or because everybody owns them.
- A private property system in which rights are clearly defined and in which the cost of exchange is negligible will achieve the optimal allocation and efficient use of resources.

(Visaul 6)

	FACTORY PROFIT	FISHERMEN PROFIT	TOTAL PROFIT
<b>NO FILTER, NO TREATMENT</b>	500	100	600
<b>FILTER, NO TREATMENT</b>	300	500	800
<b>NO FILTER, TREATMENT</b>	500	200	700
<b>FILTER, TREATMENT</b>	300	300	600

**COASE THEOREM**

- What if the factory is given the right to dump?
- Which alternative seems to be the most advantageous to the fisherman?
- How might a reasonable and equitable solution be achieved?
- Which of the alternatives seem to be the most equitable?
- What are the negative and positive externalities if property rights are assigned to the fishermen?
- What are the negative and positive externalities if property rights are assigned to the factory?
- What solutions apart from Coase could solve this problem?