Public and Common Goods

Econ 102: Introduction to Microeconomics

1

1.1 Goals of today’s class

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• Learn about other types of market failures.
• Learn about new types of goods: public goods and common goods.
• Learn about appropriate policy to allocate these goods.

2 Classifying Goods

2.1 Excludable vs Non-Excludable

Excludable vs Non-excludable Goods

• Excludable: A good is *excludable* if only the people who pay for the good are able to enjoy its benefits.

• Non-excludable: A good is *non-excludable* if many people can enjoy the benefits of a good whether they paid for it or not.

• Are the following goods excludable or non-excludable?
  – Military protection / defense.
  – Parks.
  – Schools.
  – Newspapers.
  – Highways.
  – Peanuts.
2.2 Rival vs. Non-rival

Rival vs. Non-rival Goods

- **Rival**: A good is a *rival good* if one person’s use of the good diminishes or eliminates other people’s enjoyment of the good.
- **Non-rival**: A good is *non-rival* if one person’s use does not impact another person’s enjoyment of the good.

Are the following goods rival or non-rival?
- Military protection / defense.
- Highways.
- Schools.
- Hunting or fishing for sport / food.
- Television programs.
- Internet usage.

2.3 Public and Common Goods

Public vs. Private Goods

- **Private good**: A good that is excludable and rival.
  - These are most of the goods we talk about in this class.
  - These are goods that you can only consume if you buy them, and when you consume them, they are gone.
- **Public good**: A good that is non-excludable and non-rival.
  - Can be consumed / used simultaneously by everyone.
  - What are some examples of public goods?
- Desire to have public goods is a *market failures*: without any government intervention, there is no profit incentive to produce these goods.

Common Goods

- **Common good**: a good that is non-excludable, but rival.
- “Tragedy of the Commons”
  - Common goods get over-used, and can diminish or disappear absent of any regulation.
  - Non-excludable: allows anyone to use the good.
  - Rival: people’s use of the good diminishes its usefulness.
- What are some examples of common goods?
3 Common Goods

3.1 Tragedy of the Commons

Tragedy of the Commons

• This phrase originates from 16th Century England.
  – Rough grasslands that surrounded villages and castles were common property used for grazing.
  – Since everyone could use the grassland, no one had an incentive to make sure the land was not over-grazed.
  – Wool became a profitable export for England, and the grassland surrounding villages throughout England became over-grazed and eventually useless.
  – Eventually, the land was privatized and people made optimal grazing decisions.

Modern Examples

• Northern Wisconsin Logging.
  – In 1800s, Northern Wisconsin was covered with White Pine Forest.
  – In 1847, Knapp Stout and Company, a logging company, purchased thousands of acres of land in Northern Wisconsin.
  – Began logging operations in 1848.
  – By 1870, Knapp Stout and Company was said to be the largest logging company in the world, with a seemingly endless supply of lumber.
  – By 1901, White Pine in Northern Wisconsin was completely gone. Now, agriculture is the region’s primary industry.

• Atlantic Cod
  – Many commercial fishing companies.
  – Over-fishing leads to diminished population of Cod.

3.2 Efficient Use

Efficient Use of Commons Goods

• Problem, the private benefit of using a commons good is smaller than the social benefit.

• Social benefit is smaller, because your use diminishes others use.
3.3 Government Regulation

Common Goods Regulation

- Impose quotas.
- Impose use-tax. What curve would that shift?