

Economic growth and environment

Tourism Sustainability and Climate Change

Dominika Tóthová, dominika.tothova@econ.muni.cz

Specifics of the environment

- Public goods Common resources
- Externality
- The environment knows no boundaries
- Complexity and uncertainty
- Irreversibility of changes
- Temporal and spatial variability



Think about it...



Companies that make paper produce the chemical dioxin as a by-product of this activity. Scientists say that once these substances enter the environment, the risk of cancer, birth defects and other health problems increases among humans.



Paper mill Slovany. (2021, May 28). In Wikipedia. https://cs.wikipedia.org/wiki/Pap%C3%ADrna Slovany

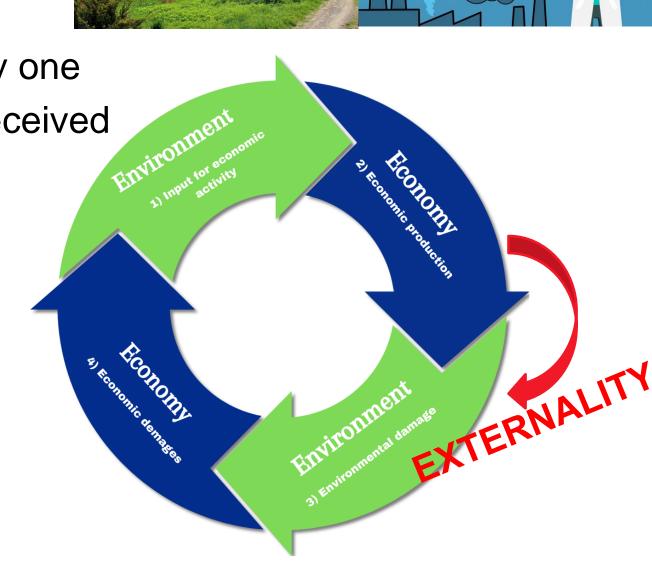
Why is the production and release of dioxin a serious problem for society?



Externality

= cost or benefit that is caused by one party but financially incurred or received by another

- Negative externality
- Positive externality
- Production externality
- Consumption externality



Environmental externalities

Negative externalities

- Damage to the environment
- Costs borne by other entities





Positive externalities

- Benefits of a Environmental quality
- Benefits that may not be paid by other entities



Which externalities appear more frequently in the context of the environment?



Think about it...



The different types of goods we consume:

- car, ice cream, book, chair
- playgrounds, parks, public lighting
- rivers, mountains, beaches, lakes



What problems can happen when we don't pay for using shared resources?"

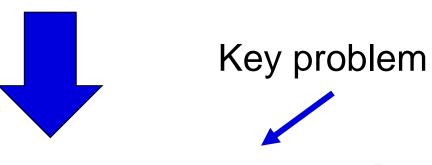


Common resources

main characteristics rivalrous non-excludable

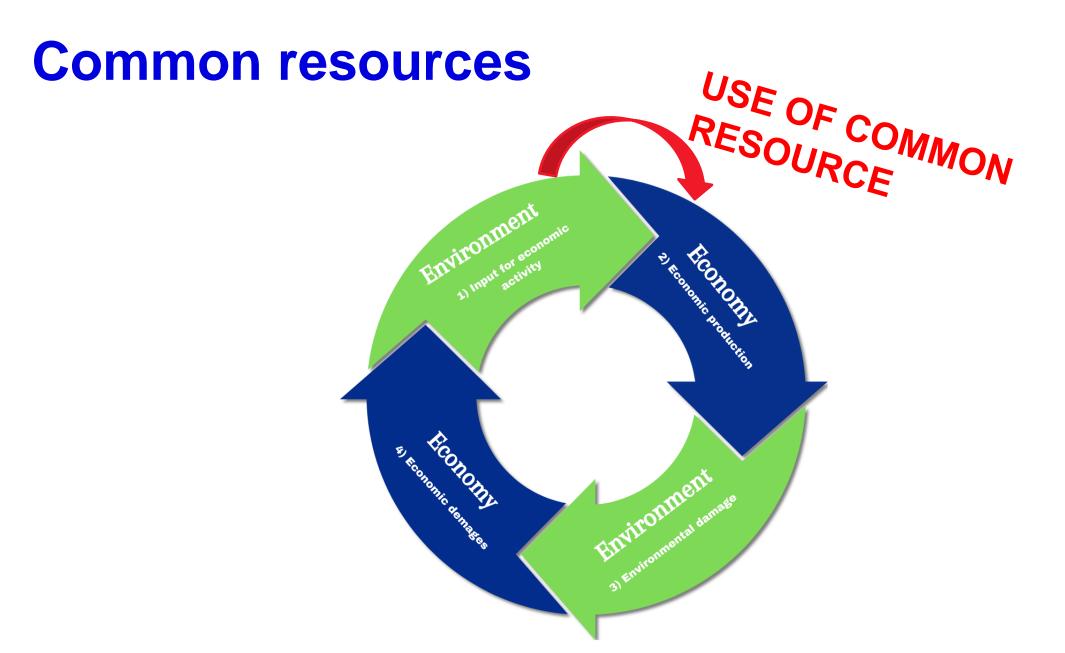






overuse and depletation

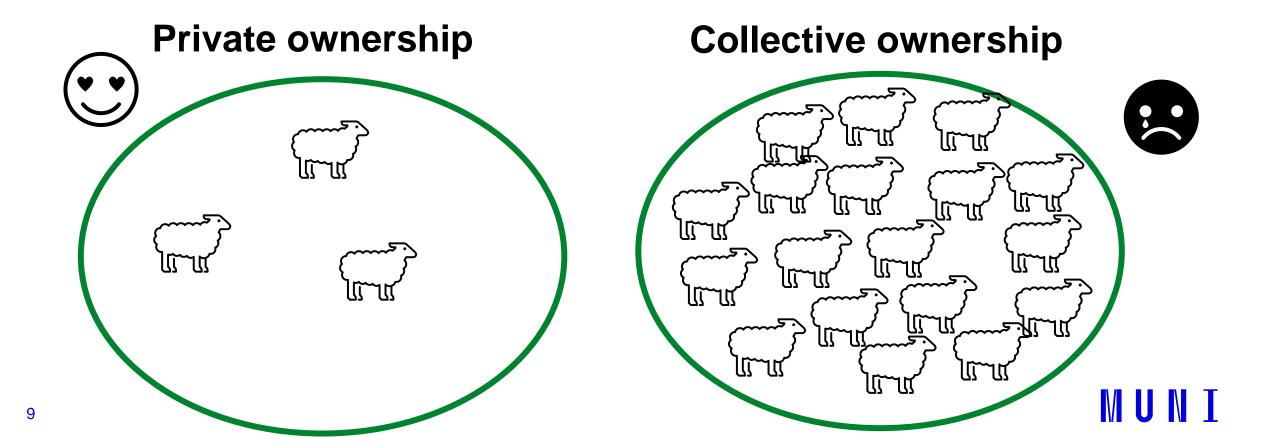






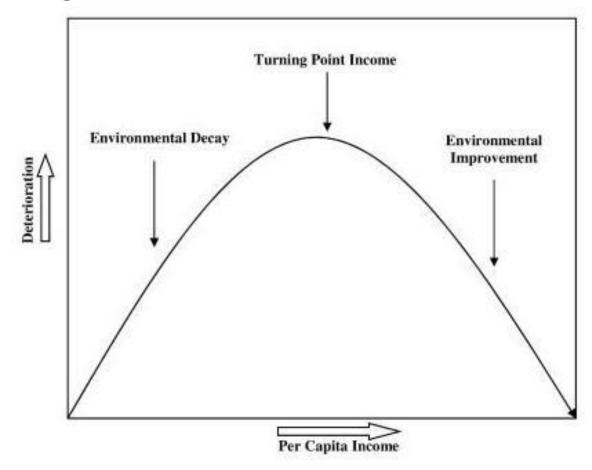
Common Resources - Tragedy of the commons

Situations why common resources are used more than is desirable for society as a whole



Environmental Kuznets curve

- $-\uparrow$ economic growth $\rightarrow\uparrow$ environmental burden
- $-\uparrow$ economic growth $\rightarrow \downarrow$ environmental burden



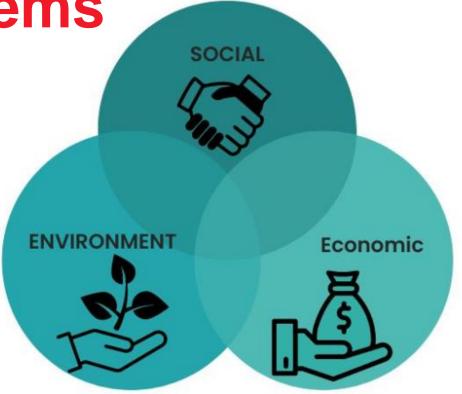


The consequences of climate change and other environmental problems

–Economic impacts

Social and health problems

-Environmental impacts



Climate Change

Environmental Impacts

- Habitat destruction
- Ocean acidification
- Changes in species distribution

Health and Societal Impacts:

- Heatwaves
- Food insecurity
- Climate refugees

Economic Impacts:

- Agricultural losses
- Infrastructure damage
- Insurance costs



Biodiversity loss

Environmental Impacts:

- Ecosystem collapse
- Invasive species
- Reduced carbon sequestration

Health and Societal Impacts:

- Spread of diseases
- Loss of traditional livelihoods
- Mental health impacts

Economic Impacts:

- Reduced fisheries
- Tourism decline
- Increased costs for agriculture





Water Pollution

Environmental Impacts:

- Aquatic ecosystem degradation
- Loss of biodiversity
- Degraded freshwater systems

Health and Societal Impacts:

- Waterborne diseases
- Toxic exposure
- Loss of access to clean water

Economic Impacts:

- Decline in fisheries
- Water treatment costs
- Health care costs





MUNI ECON

Picture sources:

- https://en.wikipedia.org/wiki/File:Sustainability-Components.jpg
- Pexels.com
- Chat GPT

