

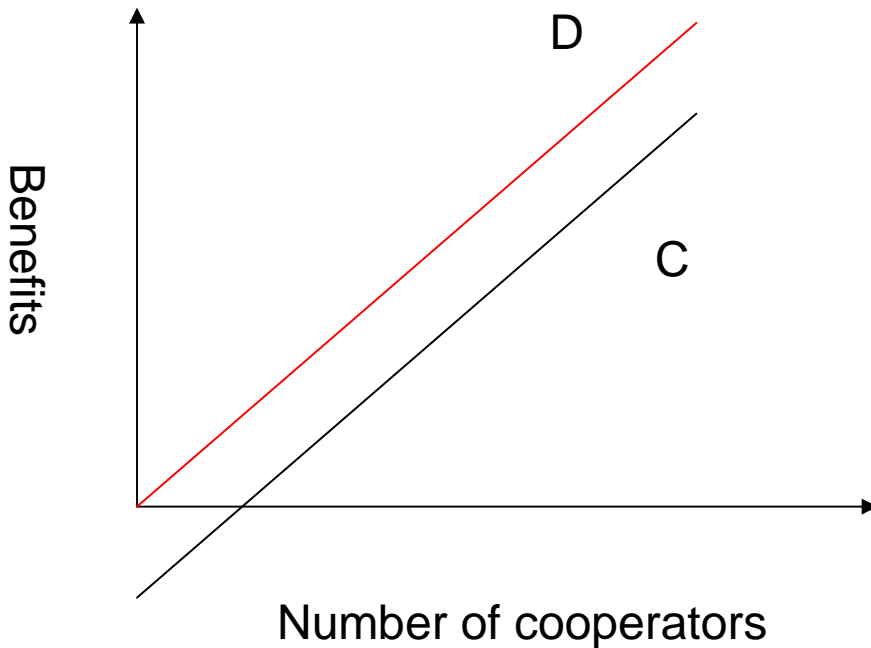
# Virtue and the Commons

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# The Commons Dilemma

- Private incentives may lead to suboptimal use of a common resource



Some examples:

Depletion of  
commonly-owned  
aquifers

Collapse of oceanic  
fisheries

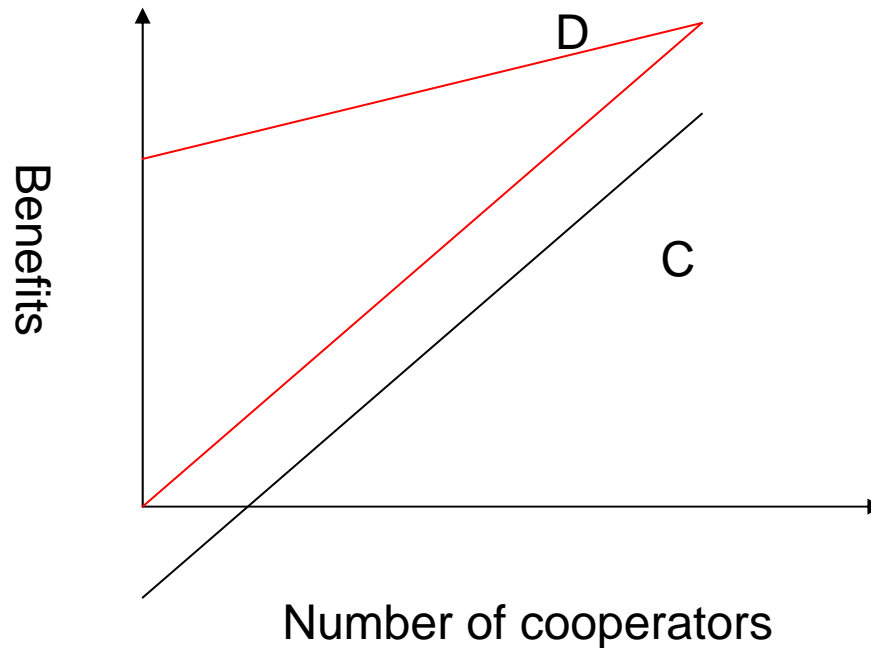
Global climate  
change

# The Commons Dilemma

- Three potential solutions:
  - Technical
  - Incentive-based
  - Education-based

# Technical solutions

- Decrease the social costs of “defection”



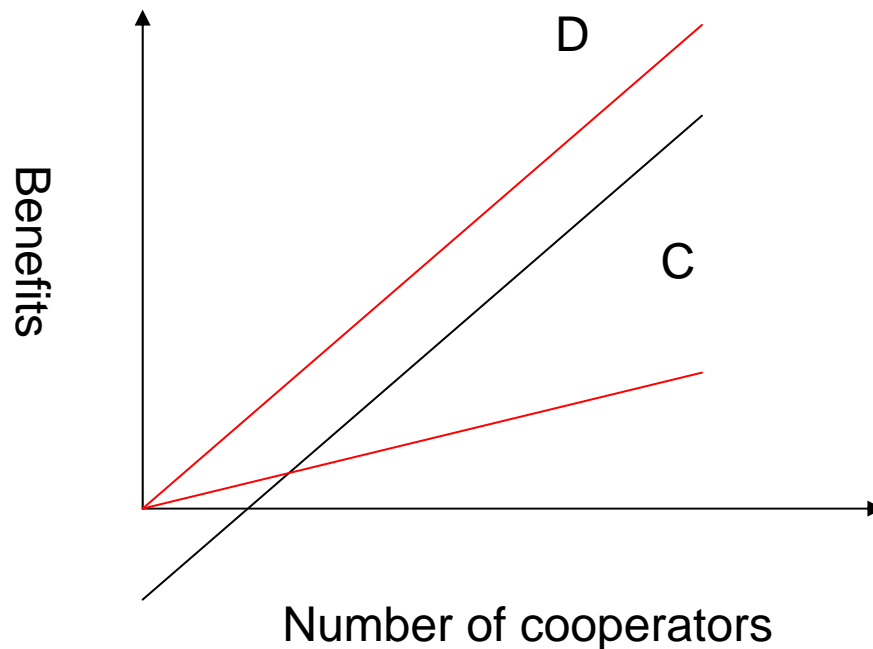
Some examples:

Desalination plants  
or efficient irrigation  
technologies

Geoengineering or  
carbon-capture  
schemes

# Incentive-based solutions

- Increase the private costs of “defection” and decrease the private costs of “cooperation”



Some examples:

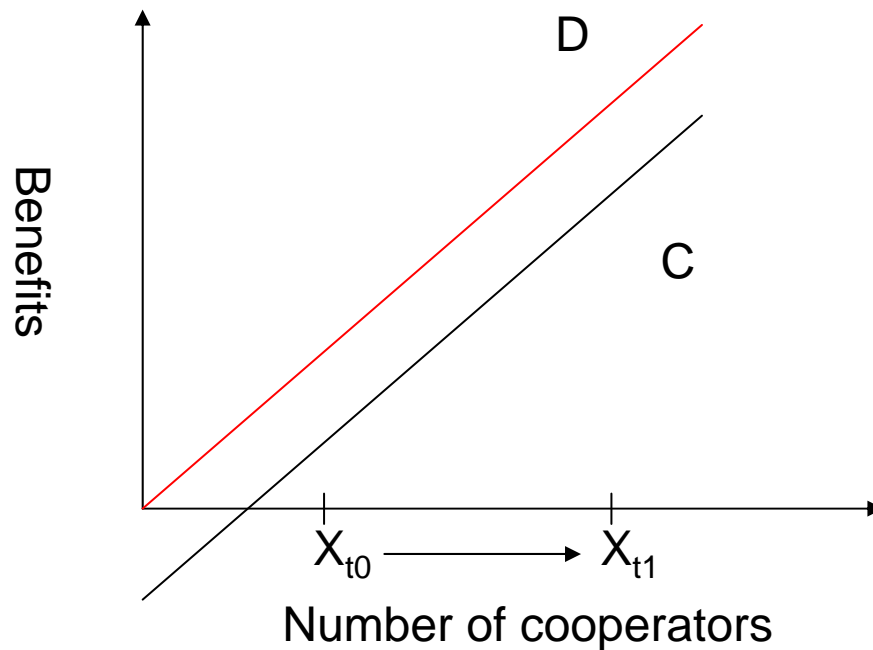
Privatization of water resources

Sanctions for overuse of water resources

Cap-and-trade or carbon taxes

# Education-based solutions

- Increase the number of spontaneous cooperators



Some examples:

Educational campaigns

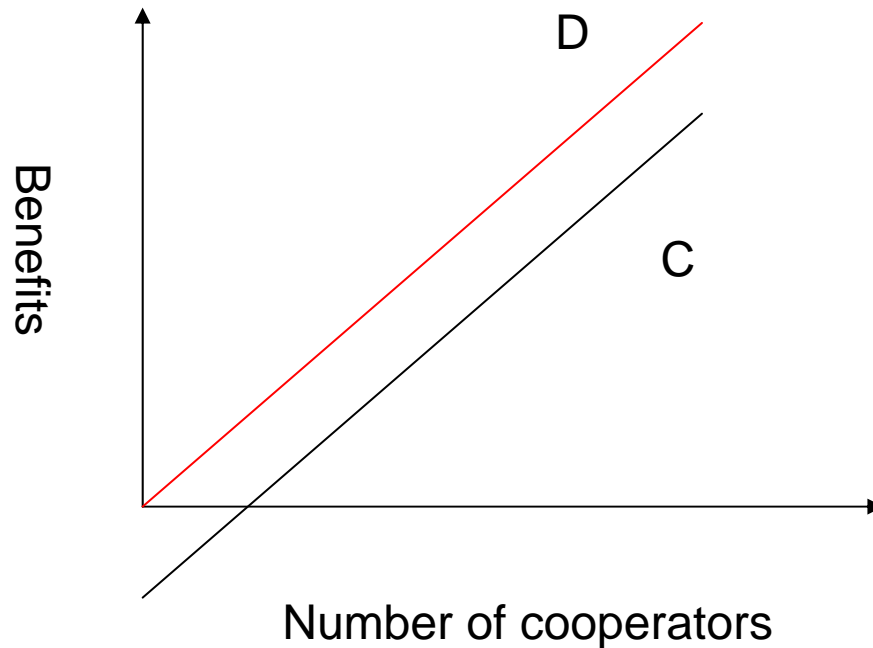
Appeals to conscience

Exemplary behaviour

Development of "green virtues"

# Virtue

- A “virtuous” individual has reason to act in pro-social ways



“Utility” for a non-virtuous individual

# Virtue

- Virtues are *character dispositions* or habitual patterns of responses to relevant situations
- that are informed by practical reasoning
- and hence give an agent good reasons to act in ways that promote good (e.g., pro-social) ends

# Virtue

- Virtues have both *cognitive* and *affective* or *motivational* components
- In the context of commons dilemmas, a virtue is a disposition that enables an agent to habitually act in ways that preserve the commons

# Virtue

- Acting in ways that systematically preserve the commons means more than simply refraining from overusing the resource

# Virtue

- In the context of commons dilemmas, virtues are dispositions, informed by practical reason, to invest resources in the solution of the dilemma, i.e., in
  - Technical solutions
  - Incentive schemes
  - Education-based solutions

# Virtue

- Virtues can be cultivated through education, but
- The evidence suggests that virtues are not *robust* but rather context-dependent or *conditional*: they are not stable across all contexts where they might be relevant
- There are no all-purpose “green virtues”

# The supply of virtue

- The supply of virtue in any given commons dilemma is affected by potential solutions to the dilemma
  - Technical solutions decrease the supply of virtue
  - Incentive-based solutions may either decrease or increase the supply of virtue
  - Education-based solutions may increase the supply of virtue in some contexts but lower it in others

# Technical solutions and the supply of virtue

- Technical solutions decrease the incentive to both act virtuously (“moral hazard”) and *become* virtuous
- Hence they may undermine themselves over time
- However, technical solutions may be useful on a faster time scale than other solutions

# Incentive schemes and the supply of virtue

- The efficiency of an incentive scheme depends on the supply of virtue
  - High virtue equilibria
  - Low virtue equilibria

# Incentive schemes and the supply of virtue

- Incentive schemes may work to increase or to decrease the supply of virtue:
  - A socialization effect works by increasing the social value of virtue for the individual
  - A corruption effect works by decreasing the social value of virtue for the individual
  - An epistemic effect works by making it easier to do the virtuous action
  - An “epistemic hazard” effect works by reducing the incentive to know what the virtuous action is
  - The net effect of incentive schemes on the supply of virtue depends on the specific mechanism

# Education-based solutions and the supply of virtue

- *Direct* interventions aim to intentionally change the level of virtue
  - E.g., educational campaigns.
  - These may be faster but produce less robust virtue
- *Indirect* interventions produce changes in the supply of virtue as a by-product of other interactions
  - E.g., participative democracy schemes
  - These may be slower but produce more robust virtue

# Education-based solutions and the supply of virtue

- *Epistemic* interventions aim to affect the beliefs of agents
  - E.g., consciousness raising campaigns.
  - These may be faster but produce less robust virtue
- *Motivational* interventions aim to affect the motivations of agents
  - E.g., exemplary behaviour
  - These may be slower but produce more robust virtue

# Education-based solutions and the supply of virtue

- Three desiderata: scale, intentionality, quickness
  - Should work in *large* societies
  - Can be *designed* to produce more virtuous people (relative to some specific context)
  - Can *quickly* produce more virtuous people
- Pick any two!

# Trade-offs for virtuous agents

- Trade-offs between the urgency of the problem and the future level of virtue
- Trade-offs between the spatial scale of the problem and the future level of virtue
- There may also be “synergies”: increases in the level of virtue and the effectiveness of incentive schemes may go together

# Solutions to commons dilemmas as public goods

- A solution to a commons dilemma is itself a public good, and hence presents a secondary collective action problem *even for the virtuous*

# Solutions to commons dilemmas as public goods

- In some cases, these secondary collective action problems have “ready-made” solutions, but not always
- Some potential solutions may present less daunting secondary collective action problems than others, which may induce further trade-offs with the future supply of virtue
- There is an art to virtuous activism!

# Concluding thoughts

- Virtuous activity does not necessarily require that we focus on the cultivation of the virtues, but may require that we invest resources in technical and incentive-based solutions to commons dilemmas