

Review Questions

1. What is the meaning of the term ‘the tragedy of the commons’ and how does this relate to ecological damage?

In ‘The Tragedy of the Commons’ Hardin argued that when human beings have free access to ‘the commons’ i.e. commonly owned, finite resources, or resources that are being depleted faster than they can be replaced e.g. fish stocks, then each individual will seek to get as much as they can from the shared resources. This yields benefits to those individuals, but ultimately results in over-exploitation and resource exhaustion which is not in anyone’s long term interest. The rate of exhaustion of the resource depends on the number of users, the intensity of their use, and the quantity of the particular resource.

In relation to the environment, examples of ‘the commons’ include the atmosphere, oceans, and rivers.

Students could illustrate using fish stocks or national parks like the Lake District in the UK, Yosemite in the USA, and the 187 national parks in China. These are open to all but limited in extent. As more and more people use the parks, they become overcrowded and the values of peace and serenity which the parks hold for visitors disappear.

Pollution could also be used as an example, although it involves putting something into the commons rather than taking something out of them e.g. waste from agriculture, industry, and households into rivers and seas, and greenhouse gases into the atmosphere. However, the same principle applies. The cost to the individual polluter of putting wastes into the environment is less than the cost of purifying them or of introducing a different technology that would avoid creating them. Unless action is taken by the authorities, pollution of atmosphere, rivers, and seas will increase to the detriment of all. It will become more and more difficult for rivers and oceans to sustain living organisms and global warming will get worse. (See the Garrett Hardin society website at:

http://www.garretthardinsociety.org/articles/art_tragedy_of_the_commons.html.)

2. Explain how it is argued that market-based measures such as the ‘polluter pays’ principle address ecological problems.

Students could start by explaining the principle behind the polluter pays approach; the idea is to make the party responsible for producing the pollution responsible for paying for the damage done to the environment. The policy internalizes the costs i.e. makes the polluter carry the cost of waste disposal in the cost of the product. The theory is that the increased costs will encourage producers to reduce the amount of waste they generate, leading to a reduction in waste and an increase in the possibilities of reuse and recycling.

Students could give some examples of the polluter pays policies. These range from green taxes such as congestion charges on motorists levied in cities like London and

Stockholm and by countries such as Singapore, to making polluters buy pollution permits e.g. the EU Emissions Trading Scheme. (For details of the London congestion charge see <https://tfl.gov.uk/modes/driving/congestion-charge> and for an explanation of the EU scheme see:

<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/796&format=HTML&aged=0&language=EN&guiLanguage=en>.)

3. Why do 'green' thinkers and activists argue that such market based measures are not adequate to tackle the ecological problem?

Students will find that environmentalists are critical of market solutions to the ecological problem. There is a feeling that putting prices on pollution may simply mean that people will feel that they can continue polluting since they are paying for it, or that corporate power and influence will always lead to prices being set too low.

In relation to climate change, for example, it is argued that the market policies adopted have not been sufficiently strict. Thus, carbon trading cannot solve the problem because heavy polluting industries (those who use lots of fossil fuels coal, oil, and gas) will find it cheaper to purchase carbon credits and continue polluting the environment than radically change their production technologies.

Critics also claim that programmes such as the EU Emissions Trading Scheme have been too generous, e.g. with emissions targets or with the number of carbon credits issued to business, thereby reducing the effectiveness of the programmes. The critics argue that effective policies are those that result in fossil fuels being left in the ground and promote the use of renewable energy. (See Climate Action Network Europe at: <http://www.caneurope.org/>.)

Green economists argue that fundamental long-term changes in consumer and producer behaviour are required. Specifically, an increased awareness about one's responsibilities in relation to sustainable development, and the creation of appropriate infrastructure and strong institutions at local, regional, national, and global levels to support sustainable development. (Clive Spash is a foremost environmental economist.

For his website, see <http://www.clivespash.org/>

For an example of his critique of carbon trading see http://www.clivespash.org/wp-content/uploads/2015/04/2010_Spash_Brave_New_World_NPE.pdf.)