Ecosystem and Economics

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Abstract: Crux of the article is to rveal relation between fundamental economics concepts relaed to environment . Problems arise due to industrialisation as well as usage of fossil fuels and their impact on ecosystem .

Key words: Chlorofluorocarbons, Carbon Dioxide , Ozone Shield.

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Introduction:

Since humans intermingle with the environment, and because humans allocate scarce resources applying economic values and tools, this study can lead to greater insights about why environmental problems exist and what the best solutions to those problems are. Environmental economics cannot answer all environmental policy questions, but still will be the only source of answers for many[1-6].

Externality

An externality exists when a person makes a choice that affects other people in a way that is not accounted for in the market price. An externality can be positive or negative but is usually associated with negative externalities in environmental economics. For instance, water seepage in residential buildings occurring in upper floors affect the lower floorsAnother example concerns how the sale of Amazon timber disregards the amount of carbon dioxide released in the cutting.Or a firm emitting pollution will typically not take into account the costs that its pollution imposes on others. As a result, pollution may occur in excess of the 'socially efficient' level, which is the level that would exist if the market was required to account for the pollution. A classic definition influenced by Kenneth Arrow and James Meade is provided by Heller and Starrett (1976), who define an externality as "a situation in which the private economy lacks sufficient incentives to create a potential market in some good and the nonexistence of this market results in losses of Pareto efficiency".In economic terminology, externalities are examples of market failures, in which the unfettered market does not lead to an efficient outcome.

Common goods and public goods

When it is too costly to exclude some people from access to an environmental resource, the resource is either called a common property resource (when there is rivalry for the resource, such that one person's use of the resource reduces others' opportunity to use the resource) or a public good (when use of the resource is non-rivalrous). In either case of non-exclusion, market allocation is likely to be inefficient.

These challenges have long been recognized. Hardin's (1968) concept of the tragedy of the commons popularized the challenges involved in non-exclusion and common property. "Commons" refers to the environmental asset itself, "common property resource" or "common pool resource" refers to a property right regime that allows for some collective body to devise schemes to exclude others, thereby allowing the capture of future benefit streams; and "open-access" implies no ownership in the sense that property everyone owns nobody owns.

The basic problem is that if people ignore the scarcity value of the commons, they can end up expending too much effort, over harvesting a resource (e.g., a fishery). Hardin theorizes that in the absence of restrictions,

users of an open-access resource will use it more than if they had to pay for it and had exclusive rights, leading to environmental degradation. See, however, Ostrom's (1990) work on how people using real common property resources have worked to establish self-governing rules to reduce the risk of the tragedy of the commons. The mitigation of climate change effects is an example of a public good, where the social benefits are not reflected completely in the market price. Because the personal marginal benefits are less than the social benefits the market under-provides climate change mitigation. This is a public good since the risks of climate change are both non-rival and non-excludable. Such efforts are non-rival since climate mitigation provided to one does not reduce the level of mitigation that anyone else enjoys. They are non-excludable actions as they will have global consequences from which no one can be excluded. A country's incentive to invest in carbon abatement is reduced because it can "free ride" off the efforts of other countries. Over a century ago, Swedish economist Knut Wicksell (1896) first discussed how public goods can be under-provided by the market because people might conceal their preferences for the good, but still enjoy the benefits without paying for them.

Conservational snags

Consuming the atmosphere as a dumping ground for chlorofluorocarbons (CFCs) or carbon dioxide (CO_2) damages the ozone shield and reduces climate stability; damming a river to provide hydropower destroys riparian habitations and agriculture and, possibly, a whole range of associated cultural and recreational activities; quarrying of minerals destroys land and constructing big reservoirs submerges landscapes of historic, recreational or aesthetic value. It can be seen from these examples that environmental problems occur mainly when the use of the environment to supply resources to, or disposal of wastes from, economic activity reduces its ability to supply other environmental services. In addition the environmental problems have a negative impact on economic activity.

Scrambling the trade- offs

Measuring the most reliable trade-offs upon diverse uses of the atmosphere is where the study of environmental economics is important. Resolving environmental problems requires an understanding of fundamental economic concepts such as scarcity [7]. Diverse flaws of market mechanism in the areas of environmental degradation and pollutions, for example, should emissions be stopped by regulation or should they be taxed? In fact, environmental economics provides a solid foundation for most of the policy measures designed to address environmental problems. It seeks to compare the expected social benefits and social costs of policy measures and advocates the promulgation of only those measures which promise to increase the net social welfare[8-11].

Conclusions

Environmental economics provides ‘defensive’ or ‘software’ type remedies through directly addressing the core reasons of the glitches rather than handling the indications. It can aid frame suitable national and international environment policies to pact with environmental hitches in utmost effective modes.

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