

Unit 2: Valuing Market and Non-Market Ecosystem

3.1 Basic Brief Introduction:

Market value & Non-market value

A fundamental distinction in economics is between market and non-market goods and services. Goods and Services in a free market economy are sold for prices that reflect a balance between the costs of production and what people are willing to pay. Some environmental goods and services, such as fish and seaweed, are traded in markets, thus their value can be directly observed.

Conversely, a non-market good or service is something that is not bought or sold directly. Therefore, a non-market good does not have an observable monetary value. Examples of this include beach visits, wildlife viewing, or snorkeling at a coral reef.

Non-market value.

Definition: Most environmental goods and services, such as clean air and water, and healthy fish and wildlife populations, are not traded in **markets**. Their economic **value** -how much people would be willing to pay for them- is not revealed in **market** prices.

Monetary valuation is the practice of converting measures of social and biophysical impacts into **monetary** units and is used to determine the economic value of non-market goods, i.e. goods for which no market exists.

Cost-benefit analysis is used specifically to evaluate the economic efficiency of alternative policies that impact on **ecosystem** services. ... The obtained monetary values are then aggregated to calculate the total net **benefit** of each policy option in terms of net present value (NPV).

Green GNP- Is an economic and environmental accounting framework which measures the national wealth by accounting for exhaustion of natural resources and degradation of environment and investment in environment support.

3.2 Use of monetary valuation:

Monetary valuation, or monetarisation, is the practice of converting measures of social and biophysical impacts into monetary units so that they can be compared against each other and against the costs and benefits already expressed in monetary units. The fundamental question that monetarisation seeks to answer is how to value (impacts on) non-market goods (i.e. goods for which no market, and hence no price, exists, such as a clean atmosphere).

Monetary valuation is not a new idea. Since 1936, monetary valuation has been a common and essential practice in Cost Benefit Analysis (CBA) of public and private projects with economic, environmental and social impacts. Monetary valuation allows for the overall assessment of a project, when the total monetarised and discounted environmental, economic and social impacts are aggregated into a single score (Net Present Value, NPV). If $NPV > 0$ the project is worth carrying out. Alternative projects can, hence, be compared and the one with the highest NPV is deemed superior to all others.

By: M. K. PODDAR, Asst. Professor, S.I.T Sitamarhi
Web link: <https://ajourneywithtime.weebly.com/sd.html>

Monetary valuation methods have been developed within the utilitarian paradigm of welfare economics inherent to both neoclassical and ecological economics. Welfare economics is the study of economic efficiency, i.e. how to maximise social wellbeing. When this wellbeing is maximised among equal and autonomous agents in and across generations, the goal of welfare economics becomes identical to the goal of sustainable development.

References:

1. S. Deswal, A. Deswal, An Introduction to environmental science, DhanpatRai and Co.
2. N. Das Gupta, Environmental Accounting, Wheeler and co.
3. Daly H.E, Beyond Growth: The Economics of Sustainable Development, Beacon Press
4. D.K. Asthana, MeeraAsthana, Environmental Science, S. Chand and co.
5. P.Rogers, K.F Jalal and J.A Boyd, An introduction to sustainable development, Earthscan
6. Willian P. Cunningham, Mary Ann Cunningham, Principles of environmental science, T.M.H
7. <https://www.journals.elsevier.com/ecosystem-services>
8. <https://www.omicsonline.org/ecosystem-ecography.php>
9. <https://en.wikipedia.org/wiki/Ecosystem>