



Green Gross Domestic Product

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The green gross domestic product is a measurement of economic growth after adjusting the damage caused to the environment from the process of development. Green GDP monetarily measures the loss of biodiversity which is caused by the change in the climatic conditions. It can be calculated by subtracting resource loss or depletion, environmental degradation from the traditional GDP. It is a very helpful process of accounting as it is managing the balance between the economy and the environment.

Introduction

After Independence India is emerged out as developing economy in all aspects whether you take example of Agriculture sector, Industrial sector and Service sector. India has proved to be a powerful country in the global scenario. The criteria for the development of a particular economy are measured through various methods like Human development index, per capita income, etc. in which most common is Gross Domestic Product .

Now What is GDP?

GDP is the total money value of all the final goods and services produced in an economy at a given period of time. It measures the economic activity within the country. It is the tool through which a country's health can be measured in economic terms. GDP indicates weather the economy is expanding by producing more goods and services or contracting by producing less.

Now as we all know that:

$GDP = \text{private consumption} + \text{government investment} + \text{gross capital formation} + (\text{exports} - \text{imports})$.

With the growth and with the rapid development of the economy the ecosystem is damaged. The degrading environment nowadays is a threat to sustainable development. The development of economy is not going with the same pace as that with the environment. The development of infrastructure is the development for economy but a threat to environment, industrial development results in the growth of economy too but a danger by emitting pollutants into water bodies, and hence the countering relation between economy and ecosystem is degrading the sustainability. For sustainable measurement in economy there need to be a different criteria for measurement which will include the environmental resources that were needed to produce the output but were not included in the conventional GDP accounting. The resources which are being exhausted will be taken into account with the help of the new measure i.e. GREEN GDP or GREEN ACCOUNTING.

What is Green GDP?

It is a measurement of economic growth with the environment consequence of that growth factored into a country's conventional GDP. It aims at reducing environmental risks and ecological damages and it results in sustainable development without degrading the environment. Although it is difficult to quantify all the damage done to our natural resources. But GREEN GDP is calculated by subtracting the costs of environment and ecological damage done in a specific period of time from the conventional GDP. This concept was introduced by China by publishing its first green GDP data for the year 2004 in 2006. Green national accounting in this time period is essential as it concerns measuring of ecology and valuation of eco system. Now there are various pollutants in the economy which results in sustainability degradation.

Various pollutions damaging our environment are as follows:



Agriculture Contribution to Development

- **Factor Contribution** -Development of agriculture releases some resources for being transferred to the other sectors. As these resources are productive in nature, we call the transfer of these resources to the non-agricultural sectors as 'factor contribution' of agriculture.
- Employment generation through agriculture
- **Product Contribution** – Provision of wage goods and industrial raw materials
- **Market Contribution** – The contribution focuses attention on the flow of goods generated by the development of the agricultural sector flow which helps the development of the other sectors.

Agriculture Contribution to Pollution

Agriculture is also a source of air pollution. It is dominant anthropogenic source of ammonia. Livestock account for about 40% of global emissions, mineral fertilizers for 16% and biomass burning and crop residues for about 18%.



As it is been discussed here that GDP dealing with economic output only and is not considering other important factors significantly impacting human well-being and sustainable economic growth such as the state of environment. The economic growth is important for preserving environment hence the concept of 'GREEN GDP' involves subtracting from conventional GDP the value of consume natural and environment degradation. China was probably the only country as far now, which has potential official reports on 'GREEN GDP' on the national level. The 'Green GDP' accounting research project was launched in China in March 2004. The first "Green GDP" accounting study (China Green National Accounting Study Report 2004) was released in September, 2006 jointly by the State Environmental Protection Administration of China (SEPA) and the National Bureau of Statistics of China (NBS). According to the report in 2004 economic losses due to pollution cause negative economic impact to 511.8 billion yuan or 3.05 % of country's GDP. In addition, the cost of cleaning water and air resources was estimated at 1.8 % of GDP (287.4 billion yuan).

Conclusion

For sustainable measurement in economy there need to be a different criteria for measurement which will include the environmental resources that were needed to produce the output but were not included in the conventional GDP accounting. The resources which are being exhausted will be taken into account with the help of the new measure i.e. GREEN GDP or GREEN ACCOUNTING. The economic growth is important for preserving environment hence the concept of 'GREEN GDP' involves subtracting from conventional GDP the value of consume natural and environment degradation.

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