Green GDP Accouning: Economic Indicator for Sustainable Development in India

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ABSTRACT:
The purpose of this proposal is to present green GDP is the economic indicator for sustainable development. Green GDP can give a clear picture of economic progress by offering a new both a quantitative and qualitative approach to measuring the cost of ecological & environmental degradation.

The paper is discussed about how to computing GDP over Green GDP, which is effective for protecting economic and environment. Every economist talked about financial crisis, depression etc but few economists talk about environmental crisis. Environmental crisis will lead to economic crisis in major way.

Green GDP accounting tool is Harley- Darman approach and data collected is secondary.

I.   INTRODUCTION:

Green GDP is based on human capital as well as natural capital protection. It helps in improving the quality of life in current generation and future generation as well. It also manages sustainable development, which helps in increase of per capital income condition, infrastructure, green technology, innovation and socio welfare without hampering the natural resources.

In past decades, due to more industrialisation, urbanisation, acid rain, the greenhouse gas effect, Ozone depletion, deforestation, land degradation, water contamination, soil erosion, accumulation of vast quantities of highly toxic chemicals and other wastes have gradually created an environmental nightmare. Pollution began to cause serious harm on human health, danger aquatic life, reduce agricultural yields, a danger for wild life due to polluted air and drinking water, Irregularity in ecosystem and bio diversity. This loss should be taken into consideration while calculating GDP, and which can be possible to measure through Green GDP.

The green GDP calculation system and research started in the early 1970 by UN for national environmental protection agency. Then the System of Environmental Economics accounting(SEEA) offered a new type of accounting which measured the environment and its relationship with the economy using the underlying concepts and definitionsof the Green GDP. In 1993 handbook focused on monetary valuation of natural resources depletion and environmental degradation to be subtracted from GDP. SEEA published three papers on environmental calculation in the year 2003, 2007 and 2012 (SEEA 2012 central framework).

With rapid growth and modernisation, urbanisation, industrialisation of the worldwide economy, environmental problem increases in seriously manner. Whole world suffered a severe Pandemic like COVID-19, which is affecting in all aspects relating to economic work, physical and mental work also. It taught us directly this human world about protecting our environment. This is a wake-up call from nature to us. So, we have to adopt green GDP on serious note for sustainable development purpose.

STATEMENT OF THE PROBLEM:

As a major part of environmental accounting, environmental performance plays a vital role in environmental economic management system. In present scenario to maintain both economic growth with environmental growth is difficult to manage for present as well as future generation matter. We can find a broad way for sustainable development, which has a relationship with the whole economy rise and fall.

1.   One of the serious problems is our traditional GDP accounting, which only measure money value of an economic factor, which neglects the measurement of environmental performance.

2.   Audit practice is the difficult task in realty situation.

Therefore, exploring new environmental performance and economical factor has become academic frontier issue in India.

II.   LITERATURE REVIEW:

GDP stands on Gross Domestic Product, measuring money value of goods and services, produces within countries boundaries during a given period of time. It is the traditional method of calculating GDP, which only measures overall development of country. Traditional way of calculating GDP ignores environmental valuation, how it helps economy for sustainable development.

The first imperfection is that, the GDP indicator doesn't measure the sustainability of economic growth. For a country, it can achieve a temporary high GDP by over exploring its natural resources (By Rauchand Chi zolo), for sustainability of an economy, some form of environmental accounting is essential. (Li and lang zolo).

Green GDP is just an alternative way to the quantification and measures of the monetary impact of social and environmental damage caused by a country's economic growth. The stages of development of green GDP as represented by Rauch and Chi (2010). They state that the process of developing the green GDP can be roughly defined by three stages:
1.   Environmental Accounting
2.   Environmental valuation and
3.   Metric calculation.

According to Pigou (1929), the govt. categorically is the trustee for public interest to watch over and act to defend the exhaustible natural resources of the nation from rash and reckless exploitation. Pigou suggests three policy instruments for the rational use of exhaustible natural resources, protection of environmental quality, curbing wasteful consumption, State subsidies, taxation and legislation. Green GDP focus on human capital as well as natural capital protection. (SEEA 2012)

All the environmental related index and GDP, HDI are not taking into account the welfare loss due to environmental degradation and other losses. (Comim, kumar&Sheravan in 2007).

SEEA-2012 central framework: Green GDP is an accounting framework that describes the interactions between the economy and the environment and the stocks and changes in stock of environmental assets.

Several development metrics is similar to Green GDP have been developed as a part of larger group of sustainable development indicators. For example, index of sustainable economic welfare (ISEW) was developed in 1980 to address the flaws in GDP. It accounts both conventional economic transactions and non -market natural and social benefits. It determined by the balance bet/ positive transactions that benefit human well-being and negative economic activities that diminish it. Genuine Progress Indicator (GPI) developed in 1994, it is similar to ISEW. Another common GS (Genuine Savings) by world bank 1999, Happy Planet Index (HPI) was introduced by new economic foundation (NEF) in 2006, Past metrics are given idea about country's performance (Jianguowu 6th may 2015).

To recommend ways concern for the environment may be translated into greater cooperation among developing countries and between countries and different stages of economic and social development and lead to the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environments and sustainable development. (Brutlandcommitte 1987).

Previous articles had shown the gap between GDP & Green GDP. Traditional GDP ignores green accounting variables, so in my proposal I want to bridge this gap in my research.

III.   OBJECTIVE OF THE STUDY:

The main objective of green GDP is the regulatory tools that drive the development of green economy, green technology and environmental smart products and employment opportunities, land use polices, energy efficiency standard for appliances. Green GDP can help to meet sustainable development goals like no hunger, gender equality, clean water and other environmental challenges. It gives opportunity of the current economic crisis during COVID-19 pandemic, to start the transition by developing effective regulation to encourage in a green economy and to knowledge the value of natural capital.

➢   **MAIN OBJECTIVE:**
▪   To maintain GDP, it's the economic indicator for sustainable development in long term.
▪   A new approach from GDP towards GREEN GDP, which can measure both economic and environmental variables.
▪   Green GDP move towards green growth in India.

SIGNIFICANCE OF THE STUDY:

The main idea behind a Green GDP is the economic indication for sustainable has, the traditional GDP has limitations with measure natural resource, cost to achieve sustainable development. GDP only measures gross output and does lack the mechanism of recognising wealth and assets that come out as a result of economic output. So green GDP is accurate measure for economic and social well-being and environmental well-being.

IV. RESEARCH METHODOLOGY:

When we adopt some new approach towards sustainable development in India, there are some important questions arises as below:

1. Is green GDP being the economic indicator for sustainable development in India?
2. Is traditional GDP enough for measure of economics sustainable development?
3. Are green GDP helps India towards green growth and employment in our country?

HYPOTHESIS:

1. H_1 = Green GDP is the economic indicator for sustainable development in India.
2. H_1 = Green GDP is better measure than traditional GDP.
3. H_1 = Green GDP helps India to achieve towards green growth.

PROPOSED RESEARCH METHODOLOGY:

Green GDP is the economic indication for sustainable development. There is a different method to accounting such as water, atmosphere, soil, forest, minerals, grass lands, natural resources etc. and the internal control system, proper guide and regulations.

GDP is based on fully Kensian macroeconomic model, that is consumption investment and govt expenditure are carefully defined but wrong part is that, it neglected the natural resources. Ecological economist Herman Daly mentioned that, "Keynes did not focus on use of ecological sustainability, however from our current standpoint in the first decade of twenty centuries, it certainly seems reasonable to include environmental degradation as one of the outstanding faults of the economic system. We used to measure green GDP with the help of Herman-daly approach:

Green GDP = Consumption + private investment+ govt. spendings + Net EX (traditional GDP)
Green GDP= the traditional GDP- the cost of resource depletion – the cost of environmental degradation.

To estimate green GDP with sustainable development manner with the use of secondary official data, primary data and also, we can use some software like SPSS, tubule to measure green GDP. Also used some theoretical framework to measure the environment.

DATA AND VARIABLES:

The study will be based entirely on secondary data. The focus will be on the green GDP is economic indicator for sustainable development in India. The study will need for entire world-wide level but due to data availability and my convenience, study will be limited to India only, which included more variables like natural resources (water, air, atmosphere, soil, forest, minerals and green lands)

V. CONCLUSION:

The current economic and environmental crisis tells us that, time is ripe for government and around the world to implement a new kind of economy and environmental measure approach. Which is the economic indicator for resilient, sustainable development operates within the limits of our planet resources and creates a fairer society. The Govt. needs to internalise environmental costs, policies in the production sector in India, both at the micro and regional level.

We cannot wait until all the preconditions are ready, as it will be a long process to establish the system because of difficulty obtaining data and the approach, we have to kickstart it asap. Other countries already started promoting Green GDP, otherwise it will be too late to save the country's environment. It is most likely, however, that Green GDP accounting, like many of India's environmental campaigns, laws and regulations, will not achieve real success unless it is nested in a much broader set of political and economic reforms. Political and economic incentives must be in place to make it easy for local officials to do the right thing. Pricing for water and energy should reflect replacement costs and encourage industry and households to conserve resources; empowering the media and non-governmental sector to serve as aggressive watchdogs on both industry and local government practices and encourage public participation; and significantly increasing investment into capacity building for lawyers and judges to enhance environmental expertise would all be important accompanying measures. Without such a wholesale reform effort, the Green GDP will likely become yet one more example of a much-heralded environmental campaign that rapidly fades into obscurity.

This proposal tells us about that, it is alarming timing for measure environmental and economic crisis. So green GDP is the right strategy for sustainable development.

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