Original Article

Green Growth

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Abstract - The term "green growth" and its sister other stakeholders from Asia and the Pacific agreed to move beyond the sustainable development rhetoric Concepts "green economy" and "sustainable development" have attracted attention worldwide in recent years. Green Growth means fostering and economic growth development while simultaneously combating climate change and preventing costly environmental degradation and the inefficient use of resources. Green growth is a means of achieving sustainable development. The advocates of green growth argue that green and growth can go hand-in-hand. This paper briefly presents an introduction to green growth.

Keywords - *Green* growth, sustainable growth, green/sustainable development, green economy.

I. INTRODUCTION

The modern economy was created due to innovation and thrives on it. The economy encourages new ways of doing things and the invention of new products. Economic performance is usually measured by growth in GDP per capita. While development is a societal goal, economic growth is a way to achieve it. Economic development has improved the living conditions of people worldwide. Since the industrial revolution, economic growth has witnessed amazing success. However, economic growth has come at the expense of the environment. In view of growing global competition for resources, the old-growth model will be self-defeating.

The need for greening economic growth has become an international concern and an important part of national development. The need comes from the understanding of the economic costs associated with climate change and ecosystem degradation. Greening the economy is a new strategy for social transformation, simultaneously

reducing environmental pressures, promoting economic growth, and enhancing social well-being.

Green growth describes a path of economic growth that utilizes natural resources in a sustainable manner. Governments and international agencies embrace green growth as a strategy to help them address social equity and deliver both economic and environmental gains. and pursue a path of "green growth." Since then, policymakers and practitioners have largely embraced green growth. The main goal of green growth is to establish incentives that will increase well-being by improving resource management and boosting productivity [1].

Green growth describes a new path of economic growth and development that uses natural resources in a sustainable manner. It is about making growth processes resource-efficient, cleaner, and more resilient without necessarily slowing them. It is related to sister terms such as "green economy" and "sustainable development." Figure 1 shows the relationship between green growth, green economy, and sustainable development [2].

Growth, often measured with a metric such as GDP, is now recognized as a critical driver of poverty reduction and improvements in social indicators.

III. GREEN GROWTH STRATEGIES

The idea of green growth is generating a variety of political positions, from enthusiastic to cautious. National and international efforts to promote green growth have been intensifying in recent years. Greening the growth path of an economy depends taking some growth strategies: green policies, green innovation, and green economy.

A. Green Policies

Without green policies in place, the continuation of business-as-usual economic growth and development will have serious impacts on natural resources. Green policies are designed to deliver environmental benefits. Green growth policies are a critical part of such efforts and an essential part of implementing sustainable development. The policies should focus on what happens over the next 5-10 years. Developing coherent policies for development can play a crucial role in creating an enabling environment for green growth. In the United States, President Barack Obama took several steps toward green growth.

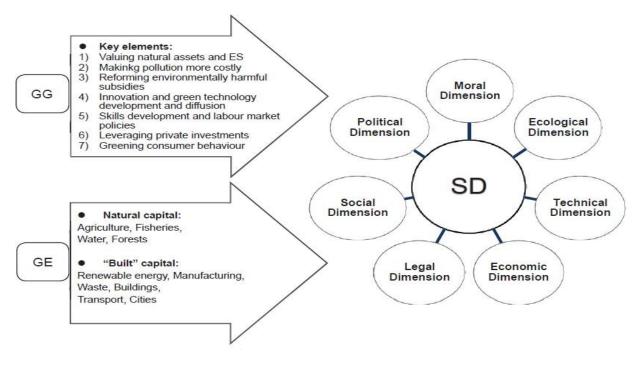


Fig. 1 Relationship between green growth, green economy, and sustainable development [2].

II. CONCEPT OF GREENGROWTH

The concept of green growth has its origins in the Asia and Pacific Region. At a ministerial conference held in March 2005 in Seoul, 52 Governments and And developed policies that would help shape the nation's green economy.

B. Green Innovation

Policies to foster green innovation, as measured by patent counts, need to be adjusted to the national situation. These require focusing the national public R&D effort more on fostering green innovation and using the opportunities offered by public procurement to strengthen and improve the markets for green products, thereby fostering innovation. Successful innovations are more likely to take place in fast-growing economies. Also, support to developing countries for science and development in green technologies will help increase innovation and technology advancements. Green growth policies pursue a variety of goals simultaneously.

C. Green Economy

The term green economy was first coined in 1989 by a group of leading UK environmental economists. Green growth is related to the concept of a green economy. Both the green economy and green growth aim at identifying possible ways of improving the results of economic activities.

They both stimulate international attention for transforming our present non-sustainable

economic structure in the direction consistent with the objectives of sustainable development. Green growth and a green economy are basically subsets of sustainable development. Achieving green. production sustainable development requires efficiency, energy efficiency, renewable energy, new material, and technology. Sustainable new development provides an important context for both green growth and a green economy.

B. Energy

The major goal of the green economy is the economic transformation to foster the improvement of social welfare and justice and fostering the revival of an impaired global economy by combating poverty [2].

Green growth strategies will be different for different countries, but all countries have opportunities to make their growth greener. Green growth will only be feasible if the broad governance and policy environment are conducive and stakeholders are confident. This will motivate businesses and consumers to undertake more environment-friendly activities.

Monitoring and measuring progress towards green growth requires some indicators. Examples of green growth/green economy composite indicators include [3]: (1) The Global Green Economy Index, (2) The Green Economy Benchmark Index, (3) The Low Carbon Competitiveness Index (LCCI), (4) The Climate Change Performance Index (CCPI).

IV. GREEN SECTORS

In order to succeed in implementing green growth, the following priority areas are critical: *A. Agriculture*

Due to its high exposure to climate change and its importance for the livelihoods of the majority of the population, agriculture has emerged as a priority for green growth. Greening agriculture is important for the food and nutrition requirements of future generations to be met. Green Growth in the

agriculture sector means providing enough food to feed everyone and reducing waste in the food supply chain

Energy is crucial to economic activity and is an essential component of green growth. A major transformation is required in the way we produce, deliver, and consume energy. Green growth is most sustainable when it maximizes using resources that are locally available. It is perceived as shifting the sources of energy from fossil fuel to renewable energy, such as wind and solar power.

C. Manufacturing

Manufacturing industries consume a large amount of energy and other natural resources and cause serious environmental pollutants. They have the potential to become a driving force for realizing a sustainable society by introducing. Understanding the greening level of the manufacturing industry is important to promote its green growth.

D. Business

Advocates of green growth naturally call on businesses to adopt green policies. Greening the business sector is an opportunity to promote green investments and social entrepreneurship. For example, the bank bolsters its green credentials by increasing loans for eco-friendly farming methods. Promoting green investment in targeted areas can support economic growth. Tourism faces significant sustainability-related challenges.

E. Transportation

Transport or mobility is becoming a major challenge facing developed and developing countries. The introduction of sustainable transportation systems in big cities will require a strong commitment from the government.

F. Cities

Cities experiencing rapid growth should have green growth as a top priority. Green

growth in cities fostering economic growth and development through urban activities that reduce the negative impact on the consumption of natural resources. It can foster the energy efficiency of buildings.

V. BENEFITS AND CHALLENGES

Green growth is the only way to sustain economic growth and development over the long term. It is vital to secure a brighter, more sustainable future for developing nations. It can contribute to job creation, economic prosperity, poverty reduction, and social equity. Other benefits of green growth include [4]:

- Increased and more equitably distributed GDP production of conventional goods and services
- Increased production of unpriced ecosystem services (or their reduction prevented)
- Economic diversification, i.e., improved management of economic risks
- Innovation, access and uptake of green technologies, i.e., improved market confidence
- Increased productivity and efficiency of natural resource use
- Natural capital used within ecological limits
- Other types of capital increased through the use of non-renewable natural capital.
- Reduced adverse environmental impact and improved natural hazard/risk management
- Increased livelihood opportunities, income, and/or quality of life, notably of the poor
- Decent jobs that benefit poor people created and sustained
- Enhanced social, human, and knowledge capital
- Reduced inequality

Green, sustainable growth comes with challenges. Achieving a green economy overnight is not feasible, and the costs of greening growth will depend on national ambition. Environmental policies affect relative prices and therefore change the structure of demand. The up-front capital requirements are high [5].

VI. CONCLUSION

Green growth, a new operating strategy, is regarded as a practical, vital tool for achieving sustainable development and providing new economic opportunities. It is an effort to reconcile various aspects of economic, environmental, and social values. It is about living in harmony with nature. It is not only theoretically possible but economically achievable.

Green growth has the potential to address economic and environmental challenges. It will likely transform the structure of our economy. Its success will require significant changes in the education system. More information on green growth is available in the books in [1, 5, 6].

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