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# The green growth theory for sustainability development and economic growth

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#### **Abstract:**

Any technical application that employs biological systems, living creatures, or derivative there to produce or modify items or processes for specific use falls under the umbrella term "biotechnology." Depending on the procedures as well as uses, there is often overlapping between bioinformatics as well as biomedical engineering. This research demonstrates how the use of botany inside the green growth concept has increased the quality, safety, shelf life, consistency, and nutritional value of the environment. The significance of biosciences for green growth production may be seen in the increased productivity, improved harvest, storage, as well as the distribution of food, environment and life in addition to the use of genetically modified fermentation and genetically modified green growth process. It will be extremely challenging to satisfy the urgent needs for climate change without green innovations and growth. In light of this context, this research employs a machine-aided citation, bibliometric analysis on green growth, with a special emphasis on research concerning developing nations, innovation, as well as Environmental technologies.

# **Keywords:**

Environment, Growth, Innovation, Natural Capital, Natural Resources, R&D Spillovers, Sustainable Development.



#### 1. Introduction:

Recent years have seen a rise in national and worldwide initiatives to encourage green growth like a new source of growth in the face of serious economic and environmental concerns. Greater responsible use of natural resources, energy efficiency, and the valuing of ecosystem services are all ways to build on this momentum and speed up the process of sustainable development and the alleviation of poverty. Green growth is of interest to both economic policymakers and those concerned with long-term sustainability (Oecd, 2012). It combines two pressing issues for improving environmental management, which is essential in the face of resource scarcity and climate change, and sustained, broadly shared economic growth in developing nations, which is essential for lowering poverty and boosting living standards (Oecd, 2012). Any transition towards green growth that promises to provide more and better jobs and more resilient livelihoods for the poor must take into account the size and nature of the informal economy, which is considerable in many developing countries (Oecd, 2012). As a result, more and more people are agreeing that its current system of economics not only sustainable and wasteful in its use of resources, but also unfair in how it distributes the costs and benefits of production.

"Most crucially, sound economic policy stands just at heart of every strategy for green growth," as the authors of a recent report put it. This research analyzes the effects of principles on national green growth programs. Growth agendas, such as the idea of green growth, have been adopted by worldwide communities in recent years as a means to promote sustainable development. While the business community is the primary target of this strategy, other interested parties and other actor constellations are also considered. There are a variety of contexts and circumstances that determine the standing and function of the local authority in such endeavors (Wittmayer, van Steenbergen, Rok and Roorda, 2015).

#### 1.1. Research aim:

The aim of this research was to analyze the processes followed by public entities in the process of applying green growth concepts that are supported by communities all over the world.

## 1.2. Research objectives:

• To maximize its efficient use mineral reserves flows, biological, energy, including information flows; adaptation technologies; mineral resources; and reprocessed products in order to increase the quantity of commodities and services produced in the techno domain.

- To maintain cultural diversity helps facilitate speedier adaptation by chance, and flexibility and self-regulation in the social and economic spheres are provided.
- To protect biodiversity so that the geo biosphere might possibly adjust to shifting environmental conditions; to uphold self-regulatory mechanisms and natural cycle times inside the biosphere.

## 1.3. Research questions:

- Why is the Green Growth Concept so crucial?
- 2) Explain the green growth strategy?
- 3) What extent does it operate on a notion of green growth?

#### 2. Literature Review:

Here we provide a summary of the most helpful resources that were consulted during the study process. All of the most important aspects of the research are addressed in this chapter's several sections.

# 2.1. Green growth in general:

Green Growth is argued to be essential for achieving sustainable development because of its capacity to address economic growth and environmental sustainability concerns (Kaushiva, 2016). Substantial economic and environmental gains are possible with Green Growth, which is both essential for the future of emerging countries and economically efficient (Kaushiva, 2016). The overarching goal of Green Growth policies is to incorporate environmental considerations in to other economic decision making through measures such as improving resource efficiency, revamping energy infrastructure, including the value of natural capital in economic analysis, and putting a price on environmental consequences (Kaushiva, 2016). Some scholars stress the significance of Green Growth's equitability, underscoring the connection between social and environmental progress.

Whereas each nation's Green Growth plan will be unique, most nations' aspirations for economic growth are consistent with Green Growth principles. Many people don't believe that Green Growth has shown its worth (Kaushiva, 2016). Despite the fact that fossil fuels are frequently the cheapest source of energy, the rising economy will drive up their use to meet the rising demand for power. Reports that natural capital depletion and unrestrained environmental deterioration pose minimal risk to economic growth inside the near and medium future



(Kaushiva, 2016). It is unclear whether or whether a shift to a green economy can deliver what growth countries are seeking, and for poor countries traditional growth may offer a faster route out of poverty. It is also not obvious that abandoning economic expansion is required to solve the environmental challenge (Kaushiva, 2016). While proponents of green growth claim it would help people escape poverty quickly, there is some evidence to suggest that this may take longer than with traditional growth tactics. Figure 1 shows the green growth.

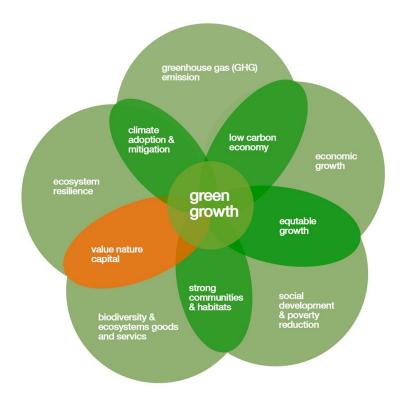


Figure.1: The Green Growth (source: Kenneth Lyngaas, 2016)

# 2.2. Green growth in developing countries:

Green Growth strategies, rising economies, and their potential are significant topics in the scant literature devoted to developing nations. Organization for Economic Co-operation as well as Development (OECD, 2012) suggests that fast developing countries like Brazil, China, India, and Indonesia adopt a strategy called "Green Growth" to mitigate the negative environmental and social impacts of their economic development. Indicate that there are takeaways to be had from their experience. Ethiopia is an example of a country where the Green Growth techniques designed for low-income nations may need to be strengthened in order to adequately address social and environmental issues. Those green growth initiatives may be economically costly, counter to public preferences, and inconsistent with competitive advantages and past investments.

## 2.3. Technology and innovation:

Innovation and the implementation of new green technology are important to ensuring poverty reduction, economic growth, and environmental sustainability. However, most technology comes from industrialized nations, and new technologies are rarely developed in developing nations (Brownsword and Somsen, 2021). Therefore, there is an argument for encouraging innovation in environmentally friendly pursuits by means such as reallocating R&D subsidies and carbon levies (Brownsword and Somsen, 2021). The majority of the roughly 160 worldwide programs that aim to aid developing country innovation within green growth concept have not reached scale or had a discernible impact on development trajectories, according to a review of the literature.

## 3. Methodology:

# 3.1. Data collection:

Newspapers or the Internet are few examples of secondary sources that have been used for long. In this research. There are two types of analysis are here: When applied to developing green growth concept, bibliographical coupling as well as machine-aided is two analysis used there are four pillars used in green growth concept. Green industrial policy entails four main tenets: 1) playing catch-up, 2) developing innovative methods of harnessing renewable energy, 3) fostering a culture of It is possible to draw conclusions about the Innovations in green technology rely upon environmental policy to stimulate demand; without such legislation, the market for such products would be much smaller, delaying crucial low-carbon transitions.

## 3.2. Data analysis:

#### 3.2.1. Machine-aided citation analysis for Green growth:

The following is a Machine aided analyze for the climate catastrophe and other environmental challenges increase and speed up in the twenty-first century, green growth has emerged as a new necessity. The state plays a crucial role in encouraging necessary environmental improvements and assisting enterprises in developing technological competence.

Accordingly, Green Growth relies in part on green industrial strategies, which can generate first-mover advantages, innovation-inducing effects, or export ability, among many other benefits to the domestic economy. These ideas shed light on the interplay between Green



Growth activities at home and abroad within the context of a worldwide green techno-economic paradigm.

## 3.4. Bibliographic coupling for green growth:

Green growth for underdeveloped economies, which makes advantage of bibliographic coupling, will gather steam in the coming years. There has been a positive turn of events for sustainable growth. Specifically, bibliographic coupling promotes green growth by fostering the creation of low-carbon technologies and other environmental advances. Green growth is generally thought of in terms of the home economy, and its core concept is that domestic enterprises as well as society at large will gain.

#### 4. Discussion:

Green growth is an approach to economic development that prioritizes protecting the quantities and quality of natural capital while capitalizing on new prospects for economic expansion. The term "green growth" may be used to indicate a foundational approach, such as the widespread adoption of pro-environment policies or a bolstering economic framework. Renewable Energy Development spearheaded efforts to increase the states use of renewable energy sources such wind, biomass, solar, geothermal, and hydroelectric. Still, inside the current economic context, attempts to promote green expansion and resource efficiency are frequently written off as too expensive and unimportant to warrant serious consideration.

The purpose of the green growth concept would be to make sure that cutting-edge, competitive agricultural and food production does not conflict with protecting the environment, nature, and climate. Both economic expansion and long-term sustainability can be fostered by adopting the green growth paradigm.

#### 5. Conclusion:

Green growth interacts to global environment and climate imperatives show how they can "catch-up" and "leapfrog" with green growth resources and environmental innovation; how a unique combination of all of this Green economy and national innovation framework competencies can empower the globe to scale up their own economic systems and transition to low-carbon paths. Especially in light of the concerning increase in the rate of emissions, it is becoming increasingly important to describe the mechanisms by which green growth is

possible and really occurs. In fact, if green growth is stifled, there will be far less of a chance of achieving the targets set by green growth Climate condition.

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