FOOD SECURITY AND AGRICULTURAL TRANSFORMATION: INNOVATIONS AND STRATEGIES FOR SUSTAINABLE ECONOMIC GROWTH.

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Extended Abstract

Agricultural techniques and food security measures must undergo a paradigm shift to achieve sustainable economic growth, especially in areas that are vulnerable to climate change and have growing populations. The ability to always supply enough food to the whole population of a state or nation is known as food security. The World Food Summit defined food security as the state in which all people, at all times, have physical, social, and economic access to enough wholesome food that satisfies their dietary needs and food choices for an active and healthy life.

This research makes the case that low-tech methods, even if they provide lower yields, may be the most suited to increase food security as a foundation for sustainable agriculture because of input intensity and a lack of democratic control over the conditions for advanced technology adoption. In addition to discussing the socioeconomic ramifications of sustainable agriculture and its difficulties, the necessity of agricultural sustainability was investigated. Instead of being a survivalist tactic, smallholders' embrace of advanced technologies may become a decision based on the management of ecological hazards.

This study investigates the crucial relationship between agricultural transformation and food security, looking at creative solutions and calculated moves to promote long-term economic prosperity. We use theoretical frameworks and empirical data to examine the various issues impeding food security, such as post-harvest losses, water scarcity, land degradation, and market access limitations. We also explore the revolutionary possibilities of technical advancements like digital platforms, biotechnology, and precision agriculture in raising agricultural resilience and productivity.

Agricultural change and food security are inextricably intertwined. Since greater access to food is made possible by higher production and incomes, agricultural transformation is frequently a prerequisite for achieving food security. Food instability, on the other hand, might impede agricultural transformation by preventing farmers from investing in better methods and technologies.

The study highlights how crucial it is to implement integrated strategies that include infrastructure development, capacity training, and policy reforms to promote inclusive and equitable agricultural transformation. We contend that to guarantee food availability, affordability, and accessibility, climate-smart agriculture adoption, food system diversification, and value chain strengthening are essential to sustainable economic growth.

In addition, we emphasize how important community-based projects, public-private partnerships, and information sharing are to advancing methods of sustainable agriculture and improving food security results. With a thorough examination of the mutually beneficial relationship between food security and agricultural transformation, this study adds to the current conversation on sustainable development and offers useful information for practitioners, academics, and policymakers. Sustainable economic growth requires both agricultural change and food security. Resilient and equitable food systems that can feed the world's expanding population, enhance livelihoods, and contributed to a more sustainable future can be created by embracing innovation, implementing integrated strategies, and encouraging cooperation between governments, the private sector, and civil society.