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AN OVERVIEW ON THE AGRICULTURE

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ABSTRACT

Agriculture is back in the news after 20 years of neglect by foreign donors, as rising food prices increase food insecurity and poverty. In the next years, increasing food productivity and output in developing nations, particularly in Sub-Saharan Africa and with smallholders, will be critical. This, however, necessitates finding viable solutions to a number of complex technical, institutional, and policy issues, such as land markets, seed and input research, agricultural extension, credit, rural infrastructure, market access, non-farm employment in rural areas, trade policy, and food price stabilization. This article examines what has been written on these issues in the economic literature. It examines the role of agriculture in development and the interactions between agriculture and other economic sectors, the determinants of the Green Revolution and the foundations of agricultural growth, issues of farmer income diversification, approaches to rural development, and issues of international trade policy and food security, all of which have been at the heart of the debate.

KEYWORDS: *Agricultural Policy, R&D In Agriculture. Rural Poverty Alleviation, Economic Development, And Sustainable Development Policy On Incomes.*

INTRODUCTION

Agriculture continues to play an important role in development, particularly in low-income nations where the sector is significant in terms of both aggregate revenue and total labor force. Agriculture, which had been a major concern of developing country governments, donors, and the international community during the 1960s and 1970s, faded from the development agenda in the 1980s and 1990s, only to reap reappearance in the first decade of the twenty-first century due to neglect and underinvestment

The World Development Report 2008, Agriculture for Development, and Agriculture at a Crossroads, both of which originated from worldwide consultative procedures of scientists, decision-makers, and donor organizations, have reignited interest in the sector's issues. Donor nations have committed significant amounts for agricultural investment, such as the $22 billion given by the G8 countries during their 2009 summit in Aquila, Italy. These commitments were made in the aftermath of three worldwide crises that occurred at the same time: the food crisis, the climate crisis, and the financial crisis. Food costs have risen twice in four years, with the United Nations Food and Agriculture Organization (FAO) food price index reaching a new high in June 2008 and March 2011. Droughts, fires, and monsoon floods have wreaked havoc on crops throughout the globe, from Russia to Pakistan. This has

resulted in hunger, increasing food insecurity, and poverty vulnerability in impoverished nations[1].

The role of agriculture in development:

Agriculture, growth, and poverty reduction:

Dual economies, having a traditional agricultural component and a contemporary capitalist sector, are often used to characterize developing countries. 4 Agriculture is thought to have lesser productivity than the contemporary economy. Lewis' approach is based on the concept of agricultural surplus labor. In the contemporary world, salaries will be higher due to decreased agricultural production.

This encourages workers to migrate from agricultural to the modern sector, resulting in economic development. Other predecessors emphasize the significance of the agriculture sector's food supply. Agriculture is essential for economic development in Schultz's opinion since it ensures society's sustenance, without which growth is impossible. Kuznets' empirical finding that the significance of the agricultural sector decreases with economic development mirrored this early perspective of agriculture's role in economics. Agriculture's function in economic growth, according to this viewpoint, is to provide cheap food and low-wage labor to the contemporary sector. Aside than that, there are minimal links between the two industries. Growth and increased productivity in the agriculture sector may help boost overall economic growth by freeing up labor and money for other industries. Industrialization, on the other hand, is regarded as the ultimate driving force behind a country's growth, whereas agriculture is seen as a typical low-productivity industry[2].

Agriculture and urban bias:

Historically, the agricultural sector's most significant contribution to growth in impoverished nations has been to generate savings, i.e. excess extracted via different methods above and above what was needed for agricultural producers' reproduction, which allowed for industrialisation. The literature has gone into great detail on the tax and pricing strategies that are required to achieve excess extraction. The debates between Preobazhensky and Bukharin in the 1920s and 1930s over the so-called "basic" forms of socialism accumulation in the Soviet Union, when farmers faced artificially low prices for their produce and punitive taxes, made these policies renowned. In recent years, governments in developing nations have placed a significant burden on farmers by adopting urban-biased policies, which is consistent with these early conceptions of agriculture as producing a surplus that could be exploited for the benefit of industry[3].

The foundations of agricultural growth:

Green Revolution and technological adoption: fertilizer and irrigation investments. The widespread use of fertilizers, without which high-yielding cultivars could not thrive, permanently altered agricultural methods. Irrigation, which allows water to be stored and transported to dry regions, boosted agricultural output by allowing more land to be used for farming. The Green Revolution dramatically boosted global food production while dramatically reducing the frequency of hunger, particularly in Asia. However, there have been significant drawbacks. First, since just a few species of high-yield rice or wheat were cultivated prior to the Green Revolution, tens (if not hundreds) of thousands of seed types are no longer utilized. Because there aren't enough variations to combat disease and pests, increased agricultural homogeneity means seeds are more susceptible to disease and pests. Pesticide usage increased to preserve these few types, resulting in significant negative environmental consequences. Second, the increasing quantity of food production accessible globally has been a significant source of overpopulation, at least according to a Malthusian perspective of development[4].

Agricultural investment and appropriate technologies:

There are two major issues. The first is a lack of suitable technology, while the second is a lack of acceptance. The former requires that research be better targeted to African nations and their circumstances, while the latter demands that technological adoption obstacles be reduced. Of course, poor yields may be the result of a mix of ineffective technology and adoption obstacles. Long-term agricultural development is dependent on agricultural R&D and its ability to create more productive technologies. 9 Such innovations sparked the Asian Green Revolution, and given the restricted possibilities for land growth in Sub-Saharan Africa, such breakthroughs are critical for African farmers. Crops that have been grown in other areas may not be suitable for Africa due to the variety of the nations and differences with, example, Asian countries. High-income nations are unlikely to transfer technology to low-income African countries[5].

Extension services as a means to foster adoption:

Even if new and more productive technology are available, farmers may be unaware of their availability or lack expertise on how to apply them properly. Since the Second World War, extension services have been employed to disseminate modern technology in underdeveloped nations. Related services, such as health and nutrition, are included in extension services. Extension services used to primarily consist of new technology teaching, as well as input and credit supply. Most field workers, on the other hand, lacked the technical knowledge and field experience required to successfully provide services to farmers. During the 1970s, a new method known as the "training and visit" (T&V) approach started to expand, mostly because to the World Bank. It involved not just educating farmers about new technology, but also getting their input on the issues they faced. The input was sent to supervisors, who were then responsible for resolving any issues that arose. On a regular basis, Extension workers interacted with just a small number of contact farmers. Because of the increased staffing needs, the new system's cost was very expensive, rendering it unsustainable[6].

Environmental challenges:

Agricultural R&D and extension services are not new, and their effect has already been seen in Asia. Any agricultural revolution today, on the other hand, would confront environmental limitations that the Green Revolution did not anticipate. The problem of agricultural system sustainability is high on the agenda, and the preservation of ecosystems and biodiversity will be critical for agriculture's future potential. Increased yields in Africa have resulted in deforestation and land degradation as a result of increasing area under agriculture. Soil deterioration has the potential to reduce land production in the future. These negative consequences have been so severe in Ethiopia's highlands that any benefits from technical advancement have been canceled out. More intense output in large regions may aid in the establishment of a sustainable system. However, since Africa's agricultural revolution will rely on increasing input usage, intensification must be both economically and environmentally sustainable over time. In comparison to farmers in other emerging nations, African farmers have utilized less fertilizers[7].

Barriers to technology adoption:

In 2000, for example, African adoption rates of contemporary rice, wheat, and maize varieties per harvested area were less than half of those in East and Southeast Asia. Low adoption rates may seem illogical when compared to projected returns, but given the numerous restrictions farmers encounter, they may well be the product of sensible decision making. In general, a farmer's education and wealth, as well as the adoption of the same technology by neighbors, are positively linked to technological adoption. Although this does not prove causation, it does indicate that poor education, a lack of credit markets, and externalities may be significant obstacles to technological adoption. The economic research on ‘‘poverty traps" is extensive[8].

The rural non-farm sector and rural development:

Income diversification in rural regions: In the past, governments ignored the non-farm sector in rural areas, believing it to be unproductive and of little importance. According to recent contributions, the rural non-farm sector acts as a link between agricultural and industrial lives, and therefore plays an essential part in a country's structural development. Further agricultural development will be limited by the ability of agriculture to employ a continuously increasing rural labor population due to capital-led intensification of output. As a result, the rural and peri-urban sectors will be critical in absorbing extra workers. Agriculture's development stimulates employment in other sectors via production and consumption connections, and it's an essential complement to agriculture for reducing rural poverty.

DISCUSSION

Agriculture, often known as farming, is the process of simplifying nature's food webs and redirecting energy for human planting and animal consumption. Shifting Cultivation (rotating crops), Intensive Pastoral Farming (focused on grazing animals), Subsistence Cultivation (seeking a living; often done for family consumption), and Commercial Cultivation (usually focused on cash crops such as cocoa, cotton, palm oil, and other commodities) are the four types of agriculture. Agriculture is vital to the overall health of a country's economy. Agriculture is the foundation of a country's economic structure. Agriculture offers job possibilities to a significant proportion of the people in addition to supplying food and raw materials[9].

CONCLUSION

The economic literature on agriculture's role in development was evaluated in this study. We started by looking at agriculture's position in the development process and its linkages with other sectors, since the fundamental issue is how to utilize agriculture to assist a structural change of the economy. Agriculture development has a great potential to alleviate poverty in impoverished nations. Because of this potential, increasing agricultural production in poor nations is a crucial and necessary step in achieving the Millennium Development Goals. Higher agricultural earnings would help about 75% of today's poor living in rural regions. Furthermore, agriculture has the potential to drive economic development in emerging economies that rely heavily on agriculture, such as many Sub-Saharan African nations. However, this assumes significant improvements in productivity, which are dependent on a variety of variables such as new technology and their acceptance, farm size and availability to land, and environmental problems for which there are no "silver bullet" answers. Institutional problems linked to market failures, absent markets, and property rights are the most challenging[10].

The agriculture-for-development goal remains significantly unfinished," according to the report, with severe research shortages. Property rights, agricultural extension, rural infrastructure, and food price stability are among the most urgent problems that economics should concentrate on, in our opinion. The most urgent problem right now is improving food security and putting in place adequate coping strategies for the poor. Economists and politicians have struggled to come up with appropriate policy tools to control food price volatility. Macroeconomic attempts to price stability in national markets are ineffective. Social safety nets, which assist the poor in coping with income shocks, have the potential to reduce negative consequences and prevent families from slipping into chronic poverty, but they need effective targeting mechanisms and a stable institutional framework. Beggar-thy-neighbor trade practices to keep prices stable and ensure national food security have backfired, harming impoverished people and reversing some previous successes. Increased agricultural production is the greatest tool for protecting small farmers from income shocks, but it is the most technically and institutionally challenging issue

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