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Nigeria Millennium Development Goals: Can Revisiting Agriculture Help in Poverty Reduction and National Economic Development?

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Abstract

Since the beginning of the new century, there seems to be a renewed interest in agriculture. A review of major policy documents, including several well-publicised reports have shown that agriculture is back on the agenda again, and among the most influential report was the World Development Report of 2008 by the World Bank, which laid strong emphasis on the need to revisit agriculture sector. This paper argues that growth in the agricultural sector contributes proportionally more to poverty reduction than growth in any other economic sector as far as grass root people are concerned and therefore the focus of the government should be towards the development of the agriculture sector when aiming to achieve the proposed MDG-1. This paper reassesses the role of agriculture in Nigeria economic development and advocates for its re-introduction as basis for its national economic development and MDG. However, it is against this backdrop that the following guided questions are propounded for direction of discussions. What is the aim and scope of Nigeria millennium development goal? What is the importance of agriculture in Nigeria economic development? What is the role of exports in economic development? In what way has the government vertical coordination affected farmers? What is the role of State governments and markets? And finally, what is the role of agriculture in poverty reduction in Nigeria? By providing answers to these questions, this paper attempts to justify the need for Nigerian government to revisit and stage a fresh comeback for agriculture to take its fundamental roles in alleviating the problems of poverty, unemployment and economic growth, so that Nigeria MDG-1 can be successfully achieved.

Keywords: Agriculture development, agriculture infrastructure, agriculture industry, economic development, poverty reduction, agriculture for MDG

1. INTRODUCTION

According to Agboola, Olaniyi, Saliu and Ayanwale (2013, p. 1),

It is in the interest of every developmental communicator to inform and sensitise the populace on various social developments that may affect their livelihoods. Hence, there is a need to sensitise the government of Nigeria and its people to revisit agriculture sector to ensure food sufficiency in the nation.

In the period of post-World War II, one of the recurrent issues had been the sufficiency of future food supplies even in international debates. The debate on the need for future food supplies has been frequently driven by supply side considerations. Without doubt world food supplies will have to double the current supplies by 2025, because of increases in income and urbanization in addition to population growth. The Nigeria current population was estimated at 155million.

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Given this widespread agreement on the need or demand side of the equation and its magnitude, there is so little agreement on the ease or difficulty of generating the supply to meet that demand (McCalla, 1994). Agriculture is a crucial economic activity, providing employment and livelihoods for many and serving as the basis for many industries. In 2002, it was reported that in the Sub-Saharan Africa countries, about 203 million people, or 56.6 percent of the total labor force, were engaged in agricultural labor. To date, in most African countries, agriculture supports the survival and well-being of up to 70 percent of the population. Thus, for many, their livelihoods are directly affected by environmental changes, both sudden and gradual, which impact on agricultural productivity (United Nations Environment Programme, 2007).

Meijerink and Roza (2007) highlight that the gospel of agriculture as a panacea to poverty reduction in developing countries of the world spread with evangelical zeal by those who found the text compelling and convincing. These proponents have always been possessed by the spirit only to look around and see their colleagues edging out and moving out to other sectors of the economy entirely. And question has been raised, as to the reason why agriculture has yet to manifest all the great things that were prophesied by its proponents. Though the past decade has been one of agropessimism, but the promises that agricultural development seems to hold have yet to come past. This pessimism seems to coincide with pessimism about Sub-Saharan Africa in the hope that economic development would be brought about by agricultural development. After the success of the green revolution in Asia, the hope was that a similar agricultural miracle would transform African economies in general. But this hope never materialised, agricultural productivity did not increase much in Sub-Saharan Africa, and worse, the negative effects of the green revolution in Asia became more apparent, such as pesticide overuse and subsequent pollution (The World Bank Report, 2008).

Also in Asia the yield increases tapered off. The skeptics put forward several arguments why agriculture is no longer an engine of growth. For instance, the liberalisation of the 1990s and greater openness to trade has lead to a reduction in the economic potential of the rural sector, where cheap imported products from China compete with the locally produced ones. On the other hand, it does mean cheaper (imported) supplies-though substandard in quality. With rapid global technical change and increasingly integrated markets, prices fall faster than yields rise. So, rural incomes fall despite increased productivity if they are net producers. The integration of rural with urban areas means that healthy young people move out of agriculture, head to town, leaving behind the old, the sick and the dependent. It is often also the men who move to urban areas, leaving women in charge of the farm. This has resulted in the increased sophistication of agricultural markets (and value chains) which excludes traditional smallholders, who are poorly equipped to meet the demanding product specifications and timeliness of delivery required by expanding supermarkets. The natural resource base on which agriculture depends is poor and deteriorating. Productivity growth is therefore increasingly more difficult to achieve (Meijerink & Roza, 2007).

2. THE AIM AND SCOPE OF NIGERIA MILLENNIUM DEVELOPMENT GOAL

As far as eradication of extreme poverty and hunger is concerned in Nigeria, the first MGD goal focuses on making available more food for consumption and poverty alleviation amongst Nigerian society. According to UNICEF Report of Statistics and Monitoring (2012), in September 2000, 189 countries signed the United Nations Millennium Declaration [A/RES/55/2], committing themselves to eradicating extreme poverty in all its forms by 2015. To help track progress toward these commitments, a set of time-bound and quantified goals and targets, called the Millennium Development Goals, were developed for combating poverty in its many dimensions - including reducing income poverty, hunger, disease, environmental degradation and gender discrimination.

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What are the Nigeria Millennium Development Goals?

The Millennium Development Goals (MDGs) include 8 goals, 21 targets and 60 indicators for measuring progress between 1990 and 2015, when the goals are expected to be met. The table below lists the goals, targets and indicators included in the MDGs.

Key documents and links related to the MDGs may be found at the UN Statistics Division - Millennium Development Goals Indicators website. Those include access to the most recent version of MDGInfo, a database system designed for the compilation and presentation of development indicators for the global monitoring of progress achieved towards the MDGs since 1990.

Table 1: MILLENNIUM DEVELOPMENT GOALS

Goals and Targets		Indicators for Monitoring Progress
Goal 1: Eradicate extreme poverty and hunger		
Target 1.A	Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below \$1 (PPP) per day ^a 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target n.B	Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below \$1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target	Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under five years of age 1.9 Proportion of population below minimum level of dietary energy consumption

Source: Table 1: Taking from Unicef Report of Statistics and Monitoring 2012

summary and according to Chovwen, A., Orebiyi, O., Savadogo, A., Afere, T & Afolayan, E. (2009), scope of the eight MDG goals is as stated below:

- To eliminate hunger and malnutrition in the villages by increasing production, access and utilization of nutritious foods, with a special focus on improving nutritional status of pregnant women, nursing mothers and infants under two (MDG 1).
- To improve livelihoods of women and men and increase their incomes for both on and offfarm activities beyond extreme poverty (MDG 2).
- To ensure full attendance to primary schools for both boys and girls and eliminate gender disparity in schools (MDG 2) and 3).
- To improve access to medical services, especially focused on improving women's health and drastically reducing child and maternal mortality (MDG 4 and 5).
- To decrease rate of infection of HIV/AIDS, malaria, tuberculosis and other major diseases; and increase access to essential medicines such as antiretroviral medication (MDG 6).
- To integrate the principles of sustainable development into village programs to reverse the loss of environmental resources and enhance ecosystem services (MDG 7).
- To increase access to energy, clean air, water and sanitation for households, schools and medical services (MDG 7).
- To eliminate the digital divide by making available the benefits of communication mechanologies, especially access to the internet and mobile telephone services (MDG 8).

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3. THE IMPORTANCE OF AGRICULTURE IN ECONOMIC DEVELOPMENT

According to World Development Indicator (2006), agriculture constitutes the main source of employment of the majority of the world's poor. In total, the share of agriculture in total employment in developing countries constitutes 53% of the total workforce in 2004. In Sub-Saharan Africa 60% of the economically active population works in the agricultural sector. By the end of the 1950s the experience gained from efforts to promote economic development showed great differences among developing countries. Some had broken away relatively quickly from the import-substitution, government-control and - ownership pattern that had been the early development practice. While others adamantly continued to practice the same policies for several decades. Thus the experiences of different developing countries have created a repository of information and knowledge from which to draw.

However, despite early emphasis on industrialization through import substitution, a first major lesson was that there is a close connection between the rate of growth in the output of the agricultural sector and the general rate of economic development. The high rates of economic growth are associated with rapid expansion of agricultural output and low rates of economic growth with the slow growth of agriculture. This was the expectation, since agriculture forms a large part of the total domestic product and of the exports of the developing countries. What is more interesting is that the expansion of agricultural output was by no means confined to those countries with an abundant supply of unused land to be brought under cultivation (Meijerink & Roza, 2007). For instance, Taiwan and South Korea, with some of the highest population densities in the world, were able to expand their agricultural output rapidly by a vigorous pursuit of appropriate policies. These included the provision of adequate irrigation facilities, enabling a succession of crops to be grown on the same piece of land throughout the year; the use of high-yielding seeds and fertilizers, which raised the yields per acre in a dramatic fashion; provision of adequate incentives for producers by setting producer prices at reasonable levels; and improvements in credit and marketing facilities and a general improvement in the economic organization of the agricultural sector. Agricultural development is important because it raises the incomes of the mass of the people in the countryside; in addition, it increases the size of the domestic market for the manufacturing sector and reduces internal economic disparities between the urban centres and the rural districts (World Development Indicator, 2006).

4. THE ROLE OF EXPORTS IN ECONOMIC DEVELOPMENT

Meijerink and Roza (2007) highlighted that it was initially thought that there is a close connection between export expansion and economic development. The high-growth countries were characterized by rapid expansion in exports. Here again it is important to note that export expansion was not confined to those countries fortunate in their natural resources, such as the oil-exporting countries. Some of the developing countries were able to expand their exports in spite of limitations in natural resources by initiating economic policies that shifted resources from inefficient domestic manufacturing industries to export production. Nor was export expansion from the developing countries confined to primary products. There was very rapid expansion of exports of labourintensive manufactured goods. This phenomenon occurred not only in the extremely rapidly growing, newly industrialized countries (NICs), for example, Singapore, South Korea, and Taiwan, as well as Hong Kong, but also from other developing countries including Brazil, Argentina, and Turkey. Countries that adopted export-oriented development strategies (of which the most notable were the NICs) experienced extremely high rates of growth that were regarded as unattainable in the 1950s and '6os. They were also able to maintain their growth momentum during periods of worldwide recession better than were the countries that maintained their import substitution policies.

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land to a number of reasons why the export-oriented growth strategy seems to developing development than the import substitution strategy. First, a developing Source of specialize in producing labour-intensive commodities uses its comparative in total market and is also better able to use its most abundant resource, that -Saharan The experience of export-oriented countries has been that there is little or no end of the ment once labour-market regulations are dismantled and incentives are created wed great sell in the export market. Second, most developing countries have such small mportthat efforts to grow by starting industries that rely on domestic demand result in pment inefficient enterprises. Although, these enterprises will typically be protected Thus competition and the incentives it provides for efficient production techniques. Programment of the control of the co and their replacement by incentives, provides a great Implies to increases in output and to the efficiency with which resources are employed. The major of a developing country's entrepreneurs to adapt their resources and internal of the meanization to the pressures of world-market demand and international competition is a economic connecting link between export expansion and economic development. It is III Erowth in this connection to stress the educative effect of freer international trade in creating an part of

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methods of organization from abroad (Meijerink & Roza, 2007).

wertical coordination?

The production, processing, and marketing of a s appropriately managed and interrelated to the next, so that decisions about what to how much, are communicated as efficiently as possible from the consumer to the Acricultural economists believe that vertical coordination of markets is particularly the food industry because of its complexity, the large number of firms that participate more stages, and the relative perishability of the products involved (Gulati, Minot, Delgado, The saying that, to catch a monkey one must be ready to give peanuts can be with poor people who are more responsive to incentives than rich people. Nominal rates that are pegged without regard to domestic inflation have strong negative effects incentives to export; producer prices for agricultural goods that are set as a small fraction of their market price constitute a significant disincentive to agricultural production; and controls on investment serve as significant deterrents to economic activity. Indeed, in most entered from the controls lead to "rent-seeking" behaviour, in which resources are diverted from menture activity and instead are used to try to win import licenses, or to get the necessary name permissions. In addition, in many countries, "parallel," or black, markets emerged, which diverted resources from activities in the official sector.

conducive to the acceptance of new ideas, new wants, and new techniques of

countries, legal exports diminished sharply as smuggling and under invoicing intensified in increasing discrepancies between the official exchange rate and the black-market rate 2011). In many countries, the process of liberalisation and privatisation was by no means The withdrawal of the state often led to a vacuum – the private sector that was expected to that vacuum and improve service delivery (inputs, output marketing, credit, etc.), did not arise, slowly. As production, processing, marketing, the provision of inputs and credit, and retailing and directed and controlled by the government, vertical coordination (VC) in agro chains already and credit provisions to small farmers in return for supplies of primary produce. Often they were source of input and credit provision for small-scale farmers. The dismantling of state-controlled vertical coordination (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decline of input and credit supply to poor farmers (VC)s led to the decl

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5.1 The Role Of Governments And Markets

In earlier thinking about development, it was assumed that the market mechanisms of developed economies were so unreliable in developing economies that governments had to assume central responsibility for economic activity. This was to be done through economic planning for the entire economy, which in turn would be implemented by active government participation in the economy and pervasive controls over all private-sector economic activity. Government participation took many forms: Public-sector enterprises were established to manufacture many commodities, including steel, machine tools, fertilizers, heavy chemicals, and even textiles and clothing; government marketing boards assumed monopoly power over the purchase and sale of many agricultural commodities; and government agencies became the sole importers of a variety of goods, and they often became exporters as well. Controls over private-sector activity were even more extensive: Price controls were established for many commodities; import licensing procedures eliminated the importing of commodities not given priority in official plans; investment licenses were required before factories could be expanded; capacity licenses regulated maximum permissible outputs; and comprehensive regulations governed the conditions of employment of workers, especially the expatriates (IFAD, 2003).

The consequence, frequently, was that indigenous entrepreneurs often found it more financially rewarding to devote their energies and ingenuity to the task of procuring the necessary government import licenses and other permits and exploiting the loopholes in government regulations than to the problem of raising the efficiency and productivity of resources. For public-sector enterprises, political pressures often resulted in the employment of many more persons than could be productively used and in other practices conducive to extremely high-cost and inefficient operations. The consequent fiscal burden diverted resources that might otherwise have been used for investment, while the inefficient use of resources dampened growth rates. Related to the belief in market failure and in the necessity for government intervention was the view that the efficiency of the price mechanism in developing countries was very small. Initially, it was thought that there were fixed relationships between imported capital and domestic expansion. It was also reflected in the view that farmers are relatively insensitive to relative prices and in the belief that there are few entrepreneurs in developing countries.

5.2 Role Of Agriculture In Poverty Reduction

In a comprehensive study on the effect of agricultural development on the poor in Tanzania, (Minot, 2005) finds that the significant reforms that had been implemented during the 1990s (e.g. market liberalisation) have led to increased growth rates and a reduction in poverty. The headcount poverty rate declined, roughly, by equal amounts in urban and rural areas. Poverty reduction was greater among male-headed households than among female-headed households. In other words, men can take more advantage of opportunities created by market liberalisation than women. Interestingly, the gains in poverty reduction were greater among less educated households than among more educated households, which may be related to the fact that less educated households live in rural households, where poverty reduction has been significant. Additionally, it was found that large gains in poverty reduction were found in the Southern Highlands, where the removal of fertiliser subsidies and maize transport subsidies were expected to have negative consequences, as they used to favour this region.

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delineates the importance of growth in offsetting the negative effects of reforms such as much as subsidies (Meijerink & Roza, 2007). Furthermore, much has been written about the economic growth and poverty reduction. Dollar and Kraay (2002) reported the same clear link between national income and poverty incidence, which is not really mortant in reducing poverty such as public spending on health and education, and improvements in abour productivity in agriculture had little marginal effect on the average income of the poorest. The understandably led to much controversy.

Other findings qualify these results by noting that although economic growth raises the income of the poor on average, there are variations across countries. In some cases growth might even contribute to more inequality. In general, one can state that growth alone is a rather blunt instrument for poverty reduction, since the consensus of empirical work suggests that it is distribution - neutral. A more important finding is that the growth-poverty relationship works the other way too: in a situation where there is less inequality, there is more potential for growth – i.e. poverty constraint growth. Thus reducing poverty by enhancing asset ownership for the poor (e.g. through investment in infrastructure, credit targeted to the poor, land redistribution, and education) has emerged as important mechanisms to make growth 'pro-poor'.

Having discussed this far, I would declared that the most disturbing controversial question is, if economic growth is relevant or instrumental for reducing poverty, what about agricultural growth? Does agricultural growth contribute to reducing the poverty of small-holder farmers? Idealistically, the argument that by revisiting agriculture the number of poverty in developing countries could be reduced is a compelling one, but the question is, if agriculture is revisited will such policy be designed so as to alleviate poverty of people at the grass root level? Perhaps this could be an important question that could restrict overgeneralization of the claim that suggested optimism in the revisiting of agriculture as solution to poverty reduction by governments in developing countries. The World Bank Report of 2008 has cited the research study by Meijerink and Roza (2007). In the results of their study, they have highlighted that agriculture constitutes the main source of employment of the majority of the world's poor. In total, the share of agriculture in total employment in developing countries constitutes 53% of the total workforce in 2004.

In Sub-Saharan Africa 60% of the economically active population works in the agricultural sector. Much effort has been put into trying to raise productivity in agriculture, and calls have been made for more investment in agricultural science and technology, especially for Africa. The reasons for this seem evident when one considers the productivity growth in developing countries. In many regions tangible progress were being made in raising land and/or labour productivity measured in output quantity units. When productivity is measured as value added per hectare arable land or labour, Sub-Saharan Africa has not made much progress. East Asia and the Pacific, as well as South Asia experienced productivity growth in terms of value added per unit of land, but not much in terms of value added per unit of labour. Although, it is evident that progress has been made in some regions in raising productivity, many other regions have lagged behind (The World Bank Report, 2008).

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Irz, Lin, Thirtle and Wiggins (2001) reported that the effect on farm economy is achieved through higher incomes for farmers, including smallholders who constitute a large share of the rural poor, especially in Sub-Saharan Africa. It is also achieved through more employment as on-farm labour demand rises per hectare because the area cultivated increases or frequency of cropping increases. Positive effects on the rural economy are achieved by creation of more jobs in agriculture and the food chain. These include production links both "upstream" from the farm in demand for inputs and services for agriculture as well as "downstream" from the farm in the demand for processing, storage, and transport of produce. But there are also consumption links as farmers and farm labourers spend their increased incomes on goods and services in the local (rural) economy.

Finally, on a national level, an increase in agricultural output tends to decrease food prices and benefiting consumers and net purchasers of food, which may include farmers themselves. Since the poor, both urban and rural spend a greater proportion of their incomes on food they benefit relatively more. Therefore, low food prices are often an objective of governments. The effect depends a great deal on the degree to which farm production is tradable and the associated price elasticity of demand. In many countries markets do not function well and infrastructure is inadequate. In such cases farm produce cannot be treated as a tradable and increased output leads to major decreases in output prices (Meijerink & Roza, 2007).

6. CONCLUSION

In conclusion, policy attention has long focused on agriculture's traditional role to provide food, create jobs, earn export income, generate savings and funds for investment, and produce primary commodities for expanding industries. But the role of agriculture often goes beyond these direct, market-mediated contributions. Agriculture plays an important role in providing indirect non-commodity contributions that are public goods, social service benefits and environmental services not captured by markets. Agriculture thus contributes to (i) environmental services such as soil conservation, watershed services, biodiversity, and carbon sequestration; (ii) poverty reduction; (iii) food security; (iv) agriculture as a social safety net or buffer in times of crisis, and (v) social viability.

Several case studies have revealed that these above-listed indirect contributions of agriculture are not well understood, seldom analyzed in the context of development, and rarely reflected in national and rural development policy formulation. This may be due to the fact that the market signals are missing and policy signals are wrong and the lack of information concerning the sector's evolving market and non-market roles.

Finally, this paper has underscored the strong interdependence between agriculture and other sectors, as well as the many cross-sector linkages through which agricultural growth supports overall economic growth and the many benefits to society that are not measured by economic growth indicators alone.

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