

AGRICULTURE IN INDIAN AND WORLD ECONOMY**ROOP RAJ GAHLOT****Department of Economics,
Jodhpur National University, Jodhpur, Rajasthan (India)****ABSTRACT**

Agriculture is an important sector in the developing world. It contributes to economic growth and development as well as a major employer to majority of the people of Sub-Saharan Africa including Nigeria, especially those in the rural areas and other developed nations of the world.

Contribution of agriculture in an economy is judged by the value of the total quantity of output in the Net National Product (NNP). A ratio between the output of agricultural sector and the output of non-agricultural sector in the NNP furnishes reasonable evidence of the nature of economy and its stage of development.

KEYWORDS: Agriculture, Indian Economy, World Economy, Agricultural Sector

INTRODUCTION

Agriculture which is predominantly the base of systems of economy in most of the under developed countries is the primary occupation of rural people in those countries. It is primary because it supplies basic necessities of human life, provides basic inputs for industries and, in addition to these, purveys goods for exports and other purposes. “. . . the rise in agricultural production . . . makes important contributions to general economic development and that, within considerable limits at least, it is one of the preconditions which must be established before a take off into self sustained economic growth becomes possible” (Nicholls, 1970). Earlier development economists like Arthur Lewis (1954), Hirschman (1958) and Fei and Ranis (1961) have identified and analyzed how agriculture contributes to the overall economic growth of a country (Higgins, 1982). They highlighted that the ‘unlimited labor supply’ in the agricultural sector of an under-developed country can be transformed to industrial sector and the ability of agriculture to transfer its abundant resources to other sectors actually lead the economic growth of any country. Simon Kuznets (1961) observes that “an increase in the net output of the agriculture is, in

and of itself, sum of the increases in the net products of the several sectors" (61). So long as the rate of growth of the non-agricultural sector is higher than that of the agricultural sector, the proportional contribution of agriculture in the total product will decline.

AGRICULTURE AND WORLD TRADE

Changes in exports have a major effect on the health of agriculture in the United States. Export volumes and prices affect farm incomes directly and indirectly affect the businesses that supply farm inputs and process and distribute farm products. It has been estimated that a one dollar increase in exports generates a second dollar's worth of related economic activity and that one new job is created for each additional \$50,000 of exports. The value of U.S. agricultural exports consistently exceeds the cost of imports. In 1994, the U.S. exported \$46 billion of agricultural products compared to \$27 billion of imports, generating a \$19 billion trade surplus. Crops and crop products accounted for most of the exports--about \$37 billion--with livestock products accounting for the remaining \$9 billion. Most of the imports were classified as competitive, i.e., they competed with similar products produced in the U.S. Only \$7 billion of imports were products not produced in the U.S., such as coffee, bananas, cocoa, and spices.

ROLE OF AGRICULTURE IN ECONOMY

Today, India ranks second worldwide in farm output. Agriculture and allied sectors like forestry and fisheries accounted for 13.7% of the GDP (Gross Domestic Product) in 2013, about 50% of the total workforce. The agricultural practices in India dates back to the Rigveda, about 1100 BC. The economic contribution of agriculture to India's GDP is steadily declining with the country's broad-based economic growth. Still, agriculture plays a significant role in the overall socio-economic fabric of India.

Agriculture plays a crucial role in the life of an economy Agriculture is the backbone of the **Indian economy**. The traditional and earlier approaches proposed by development economists like Lewis, Fie and Ranis, and so on highlighted the important roles of agriculture sector in the economic development of any country (Vogel, 1994). A fast track development of this sector is crucial for other sectors as well. Only a strong and efficient agricultural sector can feed the growing population of a country, provide employment, play vital role in the foreign trade and earning of foreign exchange and give a strong base to the industries. Because of these multifaceted functions of agriculture, it has got a

multiplier effect on any country's socio-economic and industrial scenario. Thus according to the traditional analysis the role of the agricultural sector is confined to the source of food, source of livelihood, role in foreign trade, capital/savings transfers and its role in industrial development (Stringer, 2001). Despite major emphasis on industrial development during the last four decades, agriculture continues to occupy a place of pride in our economy.

IMPORTANCE IN THE CONTEXT OF FOOD SECURITY

The character and content of a country's economic structure alongside the potential for its further growth and development are largely dependent not only upon the quantity but also upon the type of its output generated and distributed in the economy. For example, an undue emphasis on the production of industrial inputs in the economic policy of a country for gearing up the pace of the economic development may result in cutting down of the food production and thereby creating an acute shortage of food- and ultimately, it hits hard the have-nots alone (Sharma and Desai, 1980).

SOURCE OF LIVELIHOOD

Most of the developing countries depend on agriculture and allied activities for their livelihood. Agriculture provides immense employment opportunities to the masses and this assumes much significance when the growing working force does not come out of the yoke. The figure may be varied from 10 percent to 60 percent in the contemporary scenario generally prevailing in the developing and underdeveloped countries across the globe.

INDUSTRIAL AND SERVICE SECTORS

Agriculture has been a constant source of inputs for major industries in most of the developing countries. The production, productivity and growth of the agro-related industries like cotton, sugar, tobacco and edible as well as non-edible oils are highly dependent on the productivity of agriculture. Since economic soundness and development of industries are dependent upon with the agricultural sector in most of the developing countries. If there doesn't exist much scope for the rapid expansion of agricultural sector then it will have a direct bearing upon the industrial sector as well seriously hampering the possibilities for a massive industrialization.

The positive inter-relationship between agricultural growth and non-agricultural sectors is already a highly established relationship especially in the contexts of Asian countries. The countries with high agricultural growth rate have got the simultaneous experience of high growth in non agricultural sectors. It is generally admitted in the present development debates and academia that one percent of annual growth rate in the agricultural sector tends to fuel 2.1 percent of industrial and service sectors' acceleration (FAO, 2001).

SOURCE OF REVENUE FOR THE GOVERNMENT

Though the direct contribution of agricultural taxes to the central and state governments is not significant, yet they get a significant part of their total revenue in terms of land revenue, irrigation charges, taxes imposed on the commodities purchased by the cultivators etc. central government also earns revenue from export duties on agricultural production. Freight charges imposed by Indian Railways for carrying agricultural product generate huge revenue to the central exchequer. On over all view, India has always been benefited by agriculture. With increasing industrialization in India, the contribution of agriculture would always prove to be vital for making India a powerful and stable economy in the future.

ROLE IN FOREIGN TRADE AND DRIVE TO EXPORTS

The items like tea, coffee, spices, cotton, fruits and vegetables are the traditional items of exports and they are produced in farms and not in the factories. Agriculture contributes in the building up of the foreign exchange reserve and its contribution is so significant that it may reverse the terms of trade as well as the balance of trade of any country in which it plays vital role.

SUPPLY OF SAVINGS FOR INDUSTRIAL INVESTMENT

The process of the development of an economy, particularly during its initial stages, depends on the savings from agriculture for investing in industrial and service sectors. After a point of time, the savings from the agriculture sector will not be invested in the same sector itself mainly because it will not create positive marginal productivity and hence, savings from agricultural sector is invested and re-invested in industrial sector for further economic growth.

NON-TRADITIONAL ROLE OF AGRICULTURE IN ECONOMIC DEVELOPMENT

It is natural that when economy grows, the subsequent share of agriculture, in terms of national income as well as livelihood, tends to decrease. The primary reason for this phenomenon is the decreasing demand for food with the income rise and expanding food supply (even with same laborer and land) with technological advancement. The intermediate goods purchased from non-agricultural sectors have also been increased and there exists a complex linkage to industrial and service sectors have been evolved. In the context of changing roles of agriculture, the non-traditional role of agriculture has been confined to contributions to Agribusiness activities, Social Welfare infrastructure, poverty reduction and rapid productivity growth.

INVOLVING AGRIBUSINESS ACTIVITIES

The traditional functions of processing, storage and transportation have been given up and more complex and specialized functions have come in the way of agriculture. A new, long and circular chain of

merchants, distributors, assemblers, suppliers, brokers and the like has come in the way (Newman et al, 1989; FAO, 1997). Agricultural commodities are used as inputs in food processing industries. In Argentina, Korea and Brazil, more than 60 percent of the inputs are given to them for further economic activity in contradiction to India where more than two-third is consumed directly (Holyt and Pryor, 1999). The share is less among USA, Mexico and Philiphine.

SOCIAL STRUCTURAL INFRASTRUCTURE

Agriculture involves in a number of welfare enhancing activities – ‘income’ transfer and income-shock of financial support are some of them. For example, if a recession or any other economic shock is confronted by an economy, it will be affected by different aspects like assets, public traffic, and gender. During the crisis situations, agriculture can act as buffer and safety net (FAO, 2002). In many cases, agricultural submitting can act as a buffer, softest nut and the negative agriculture sector.

RAPID PRODUCTIVITY

It is a historically given fact that growth in the productivity of agriculture is much faster than the productivity growth of the manufacturing sector. The pace of growth in the productivity of farming sector, especially in agricultural exporting rich economies, has been comparatively rapid. This has come into the larger visibility in the case of US where the total factor productivity in the farming sector has been much more rapid than the non-farming sectors (Jorgenson and Gollop 1992). This has remained more or less the same in the contexts of Australia and Canada as well (Martin and Mitra, 1998). Worth mentioning in this context is the fact the quality of food products thus coming out of the farming and the further conditioning of the same in industrial conditions have considerably increased the safety factors and has enhanced their consumption in the global markets.

AGRICULTURE’S ECONOMIC CONTRIBUTION TO THE DEVELOPING WORLD

The relationship between agricultural growth and rural poverty is already articulated in unambiguous terms by several studies to the extent the former is constantly associated with the falling rates of the latter (Binswanger and von Braun, 1991; Timmer, 1992; Bell and Rich, 1994; Johnson, 1998; Mellor, 2001). The positive impacts of a solid growth rate in the agricultural sector are many. While, on the one hand, it considerably lowers the food prices especially for consumers in urban areas and rural net-food buyers and enhances more opportunities to yield income so as to prevent rural to urban migration considerably; on the other hand, it exerts impact upon trade, increased productivity and migration through positive inter-sectoral overflows (Lipton and Ravallion, 1995; Timmer, 1992). Food-security remains no longer a central concern and this situation has further had a critical positive effect upon goods and services beyond the agricultural sector itself. In fact no economy has been able to grow and

sustain itself without first successfully dealing with the problem of food security (Timmer et al, 1983; World Bank, 1996).

Agriculture has played a key role especially in the post-reform economic context of China where agricultural GDP almost touched 8% per annum during the early phase of reform period then gradually reaching a consistent 4% (still remarkable) that have continued to remain in the 21st century as well (1978-1984). Due to heavy industrialization the role of agriculture has considerably subsided resulting in a decline in the employment and output rates. The early phases of reformation period had witnessed high rates of return in agricultural sector which was additionally strengthened by the government interventions and the changes introduced including a conversion in the decision making mechanisms. The state had indeed set base prices to procure staple crops in the late 70s and early 80s before liberalizing policies were adopted. Ever since the agricultural sector has shifted completely towards cash crops and horticultural goods, there has also been a remarkable growth in the share of fisheries and aqua cultural produces. Constitutions of networks between markets and specialization in specific produces have been particular features of this trend.

On the contrary countries which have had successful agricultural revolutions, like India and Philippines, remained unsuccessful in transforming that success into a proportionate growth in their respective economies. Although India was quite late to enter into the liberalization programmes, even this late entry has reaped encouraging results.

In Poland there is the tendency to add elements that stem from our history and past experiences. For example, our peasants are proud that they produce not only basic products, necessary for life, but also, that they have played a special role in fighting for freedom. There is a saying on all the flags and banners of the Peasant Party: 'Feed and protect.' Also, the Catholic church is deeply rooted in the rural areas. Our peasants are 99 percent Catholic. One of the famous figures in the history of the Polish church. Cardinal S. Wyszyński wrote several papers about the role of peasants strengthening Poland. In one of several papers about the roles of peasants stressing that the territory of Poland shifted several times, he wrote that where peasants speak Polish the nation is rooted in the soil. The nation is where the peasant is on the soil. This is often presented as a special value of farming and peasants.

Another reason used to justify the special treatment of agriculture is regional disparities. Regional disparities link with something that is called social justice. Income differences and also differences in the level of infrastructure development mean that the people do not have the same access to the basic services, to the basic achievements of the civilization. It is unjust. To change this disparity means to bring social justice to life. So it is important and worth stressing that rural policy and agricultural policy

may add a special factor to the idea of social justice. It is becoming important in constructing rural policy in Poland and in other post-communist countries because during the last six years this disparity is growing very, very quickly. Looking at the differences in local income in gminas (gmina - the smallest administrative area or unit -similar to a county in the US), according to the latest surveys, the 10 percent (or 295) gminas having the highest incomes compared with the 10 percent (or 295) with the lowest, have per capita income ten times as high. This is a problem. Regional disparities do not exist only in the European Community; they have become a problem in Central Europe too.

The discussion of Brazil simultaneously invokes certain counter instances in this respect. An immediate paradox that comes to vicinity is that of the Nigerian economy. Curiously enough the Nigerian economy indeed accredited its agricultural sector with due significance in the early days of its independence and it could rightly be labeled as an agrarian economy. Agriculture was very much significant in sustaining the larger economic growth of the whole nation during those days – both in terms of employment redistribution and its contribution to the total GDP (Ogen, 2003:231-234). In these early phases of independence Nigeria was one of the leading countries in the whole world in the production of cocoa, to produce and export palm oil in very large quantities and one of the largest exporters of palm kernel. Besides Nigeria was also prominent in the exporting of groundnut, hides and skins, cotton (Alkali, 197:15-16). In 1960, 60% of the total GDP of Nigeria was contributed by the agricultural sector where the farmers still depended upon the traditional tools and methods and despite produced 70% of agricultural exports and 95% of the domestic food requirements (Lawal, 1997:195). Nevertheless, the scenario in Nigeria has taken a reverse direction in the later periods due to a completely unsystematic approach and a total neglect of agricultural sector – a policy continued by more or less all the successive governments (Ogen, 2003; Lawal, 1997).

On the contrary the response on behalf of the Brazilian economy has been an entirely a positive one which further not only opened its domestic market to the outside world but also incorporated high level technological standards inaugurating an era of opportunities for both domestic and foreign companies to involve in joint ventures of different sorts as well as reducing the cost involved considerably. On the contrary the negligence for agricultural sector has by and large converted the Nigerian economy into a mono-cultural one with its base remaining on singularly on the crude oil sector. The different governments in Nigeria, from 1975 onwards, have attempted to resolve this situation through different policy measures. In 1975 the government even decided to involve itself directly in the production of cash crops.

The role of agriculture to Nigeria's economic growth and development is cleared from various publications of the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS) that overall GDP, agricultural GDP, and government spending to the agricultural sector of Nigeria generally assumed upward trends in last few years and Credit to agriculture and government spending to the agricultural sector were the factors found to significantly influence the contribution of agriculture to national economic growth and development.

Provision of sufficient food for the growing population puts agriculture at the center of current growth and development issue in developing countries. This is because the level of population growth in most developing countries is far more than the level of agricultural production and growth. Malthusian theory of population growth is becoming true in these countries; hence, the need to grow and develop agriculture to meet the food requirement of the people is very important. Looking at the Malthusian theory, if food supply fail to meet demand then food prices will rise. This will also have effect on workers' wages and subsequently affect industrial profits, investment and overall economic growth and development in the society (Uniamikogbo, 2007).

Agriculture has been the main stay of the Nigerian economy providing employment and source of livelihood for the teeming population. It contributes with over half of the GDP of the Nigerian economy during much of post-independence in the country. Nonetheless, the role it plays in the economic growth and development of the country has gone down over the years due to the overwhelming and dominant role of the crude oil sector in the economy, on which the country extensively depends. With the high food demand in Nigeria, the country has to make use of its abundant natural resources and to take advantage of its current democracy to increase the volume of crop production towards satisfying the food and nutritional requirement of the rapidly growing population and to ensure food security in the country (Enoma, 2010). Therefore, agriculture can be characterized as the source of national wealth and economic growth and development in Nigeria. Agricultural Development economists have researched significantly on how agriculture can best contribute to overall economic growth and development. Looking at Lewis theory of development, Todaro and Smith (2003) indicated that the underdeveloped economy consists of two sectors, which are the ancient and traditional agricultural sector characterized by zero marginal labor productivity and the modern industrial sector. In his historical approach to the process of economic growth and development, Rostow (1960) distinguishes five stages of economic growth and development, which are: Traditional society; Pre-conditions for takeoff; Take-off; Drive to maturity; and Age of high mass-consumption. According to Rostow, the take-off stage is the most

important figure in the life of a society when growth becomes its normal condition. The significance and importance of the traditional society make a decisive breakthrough and a multiple interest gets built into the society structure with agriculture playing significant role at this stage. From this theory, it is evident that agriculture plays a significant role in the first three stages of economic growth and development (Traditional society, pre-conditions for takeoff and takeoff stages). The agricultural sector greatly influences industrial and economic backbone from which a country's economic growth and development can take off. Therefore, beyond reasonable doubt, agricultural activities are usually concentrated and more practiced in the less-developed countries where there is an urgent need for rural transformation, redistribution, poverty alleviation and socio-economic growth and development (Stewart, 2000).

CHALLENGE

The size and complexity of agricultural trade issues is unsettling. Many would like to return to the days of the 1950s and 1960s when the United States was less affected by world economic and political events. This just won't happen. The world will continue to shrink, interdependency among the peoples of the world will continue to grow. Major new trade agreements, NAFTA and GATT-UR, have been negotiated and are being implemented. New policies affecting the relationship of U.S. and southern agriculture will be developed in the future. There will be trade-offs, winners and losers, and painful adjustments for some. The challenge is for agricultural and governmental leaders to take positions supported by fact and sound logic rather than emotionalism. The public hope that governments and international organizations' efforts will be a step in that direction.

CONCLUSION

The development of agriculture provides necessary capital for the development of other sectors like industry, transport and foreign trade. In fact, a balanced development of agriculture and industry is the need of the day. From this paper, it may be concluded that agriculture occupies an important place in the development of an economy. It is Farmers play an important role in any society, of course, since they feed people. The farmer has generally been quite successful at producing food. Indeed, sometimes his success has created his biggest problem: the agricultural sector has suffered periodic bouts of over production that has depressed prices. For long periods, government helped smooth out the worst of these episodes. But in recent years, such assistance has declined, reflecting government's desire to cut its own spending, as well as the farm sector's reduced political influence. It also have contributed to the success of world agriculture. It is not unusual to see today's farmers driving tractors with air-conditioned cabs hitched to very expensive, fast-moving plows, tillers, and harvesters. Biotechnology has led to the

development of seeds that are disease- and drought-resistant. Fertilizers and pesticides are commonly used (too commonly, according to some environmentalists). Computers track farm operations, and even space technology is utilized to find the best places to plant and fertilize crops. What's more, researchers periodically introduce new food products and new methods for raising them, such as artificial ponds to raise fish.

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