

COMPARISON BETWEEN INDIAN AND AMERICAN AGRICULTURAL ECONOMIES

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ABSTRACT

This paper explores the comparison between Indian and Agricultural economies and explores the modes both use to further their GDPs. It explores the means used by the governments to secure food for their citizen body and also briefly touches upon the history of agriculture in both countries.

Keywords: Agriculture, Economy, Governance, Indian, American, Labour

Introduction

Indian agriculture is labour intensive, mostly subsistence farming, nearly 60% of its population is dependent on farming and most farms are rainfed. On the other hand, American farming is capital intensive, mostly commercial farming. Less than 3% of its population is dependent on farming and most farms are irrigated. Both countries give subsidies to their farmers but US subsidies are more than India as, hence the Doha round dispute. For a number of obvious reasons the pace and pattern of recent economic development in China and India invite a systematic comparison. It is always interesting to measure and compare the progress of these two great neighbours, comprising a large fraction of the world's poorest people, both having recently launched massive programmes of expansion and development after centuries of foreign domination, chaos and stagnation.

Over and above that, the significant differences in the institutions and policies, the two countries have chosen to adopt for attaining broadly similar economic goals. This is particularly true with respect to agriculture. Although, in both countries the major emphasis is on rapid industrialization because of the predominantly agrarian nature of the economies, the agricultural sector provides the basic foundation for industrial expansion with supplies of food, raw materials, and labour, with markets for industrial goods and with foreign exchange earned

through exports of primary products. In both countries the pace of industrial advance is severely constrained by the vagaries of agricultural production and dependence on agriculture as a direct source of income is also very substantial, even after all these years of industrialization.

To conclude, in agriculture our yields per acre are well below the international norms. India could be a giant exporter of food, only if we could put our house in order to near world-class standards.

Background

Agriculture has played a vital role in the Indian economy and its growth. From around 9000 BC Agriculture has contributed to the Indian economy. India has seen a lot of change in its rulers and due to this agriculture has also changed a lot during those times. We can see that Indian agriculture has seen changes in it with different types of civilizations. Some of them are Indus Valley Civilization, Agriculture in Vedic Period, Agriculture in Mauryan Empire, South Indian Agriculture, Agriculture in Chola Period, Agriculture System During the British Period, Agriculture System in Modern India. The farmers followed different types of techniques and technology of production in different periods. We have also seen a change in the cropping pattern and the different types of crops cultivated in different periods. There is no doubt that agriculture has changed a lot with time before the farmers used to grow crops for self consumption or followed subsistence agriculture but with time they followed commercialization strategy and started to sell the crops in market and also shifted to cash crops from food crops.

Pre colonial and colonial Scenario of agriculture sector in India

During the pre-British era, a major part of India's population was dependent on agriculture. The farming technologies and irrigation facilities were not satisfactory. However, agriculture in villages was self-sustaining and independent. The village communities either purchased or consumed the raw materials and articles directly. Consequently, starvations and famines were rare if not frequent. Of course, agricultural practices remained primitive, but the villages functioned independently and were self-sufficient. All of this went for a toss when the Britishers set feet on the Indian subcontinent.

The British Rule can be divided into two parts: The rule of the East India Company (1757-1858) and the rule of the British Government (1858-1947). Britishers ruled India for around 200 years and the process of occupying India was slow and lengthy. During British rule the Indian Economy remained agrarian. Around 85% of India's population was dependent on agriculture at that time but the sector still remained backward and stagnant.

The self-sufficiency also vanished from the country except the huge part of the country being involved in agriculture. Britishers also introduced some of the reforms in the agriculture sector but those were just to exploit the farmers. The reforms were The Land Settlement System or popularly known as Zamindari System and the other one was commercialization of agriculture.

The major cause of this stagnant state of Indian agriculture was the various land settlement systems of the colonial government. The main of this was the zamindari system which was practiced in the then Bengal presidency first. Under this, the majority of profits went to the zamindars instead of the cultivators, ultimately filling up the pockets of their colonial heads.

Just like their colonial masters, the zamindars did nothing to improve the state of agriculture. They were only concerned with collecting rent despite the economic condition and the plight of the cultivators. However, the revenue settlement policy particularly fuelled this ruthless nature adopted by the zamindars. Under this, the rent can be paid until a fixed date, failing which their colonial masters would take away all their rights. And on the other hand Britishers focused on commercialization of agriculture because British industry had started flourishing and they wanted some of the cash crops which they could get from Indian farmers at lower price. So they started commercializing agriculture in spite of several famines in the country. So the condition of the agriculture sector was very bad during the colonial period as there was no initiative from the British government to improve the working conditions. So the agriculture sector remained backward, primitive and stagnant.

The history of agriculture in the United States covers the period from the first English settlers to the present day. America too had different rulers and the rulers had different mindset and American agriculture changed a lot with time. Its civilization starts from Pre-colonial period, colonial period, New Nation(After American revolution), Railroad age etc. After the American Revolution they got independence from British rule and after that they had a lot of changes in their economy which led to changes in their cropping pattern and the types of crops cultivated. American Agriculture Economy focused on subsistence farming but eventually they shifted to commercialization.

Pre colonial and colonial Scenario of agriculture sector in America.

During the pre colonial time american agriculture economy was followed by vast activities. They supported a diverse range of indigenous cultures. They didn't depend wholly on cultivation of crops but some of them were primarily hunter gatherers , other populations relied on agriculture.

Economic historians have tended to view the colonial economy through one of two lenses. The first approach focuses primarily on the high ratio of land and natural resources to labor that

European colonists encountered in North America. According to this “demographic” model, natural resource abundance raised labor productivity, especially in agriculture, contributing to the colonists’ high standard of living and removing the demographic constraints that limited population growth in Europe (Smith 1980). Unchecked natural increase combined with migration, both voluntary and forced, to produce the economy’s rapid extensive growth. The second view of the colonial economy focuses on the role played by key exports as drivers of economic growth. This “staple exports” thesis emphasizes European demand for tobacco, rice, indigo, and other exports as a major determinant of the size and structure of the colonial economy

Discussion

When we map the differences between agriculture economics in India and in the US, we see stark differences, but we also see commonalities between the two.

Agriculture is an important part of India's economy and at present it is among the top two farm producers in the world. This sector provides approximately 52 percent of the total number of jobs available in India and contributes around 18.1 percent to the GDP. Agriculture is the only means of living for almost two-thirds of the employed class in India. As stated by the economic data of financial year 2006-07, agriculture has acquired 18 percent of India's GDP. The agriculture sector of India has occupied almost 43 percent of India's geographical area.

Agriculture, food, and related industries contributed \$1.109 trillion to the U.S. gross domestic product (GDP) in 2019, a 5.2-percent share. The output of America’s farms contributed \$136.1 billion of this sum—about 0.6 percent of GDP. The overall contribution of agriculture to GDP is actually larger than 0.6 percent because sectors related to agriculture rely on agricultural inputs in order to contribute added value to the economy. Sectors related to agriculture include: food and beverage manufacturing; food and beverage stores; food services and eating and drinking places; textiles, apparel, and leather products; and forestry and fishing.

Indian agriculture is labour intensive, mostly subsistence farming, nearly 60% of its population is dependent on farming and most farms are rainfed. On the other hand, American farming is capital intensive, mostly commercial farming. Less than 3% of its population is dependent on farming and most farms are irrigated. For a number of obvious reasons, the pace and pattern of recent economic development in China and India invite a systematic comparison. It is always interesting to measure and compare the progress of these two great neighbours, comprising a large fraction of the world's poorest people, both having recently launched massive programmes of expansion and development after centuries of foreign domination, chaos and stagnation. Over and above that, the significant differences in the institutions and policies, the two countries have

chosen to adopt for attaining broadly similar economic goals. This is particularly true with respect to agriculture. Although, in both countries the major emphasis is on rapid industrialization because of the predominantly agrarian nature of the economies, the agricultural sector provides the basic foundation for industrial expansion with supplies of food, raw materials, and labour, with markets for industrial goods and with foreign exchange earned through exports of primary products. In both countries the pace of industrial advance is severely constrained by the vagaries of agricultural production and dependence on agriculture as a direct source of income is also very substantial, even after all these years of industrialization.

One should note here that the prices at which output is valued are more favorable to industry in China than in India, the relative share of modern industry in national income is larger in China. Both have traditionally been agrarian economies and well over half of their billion-plus people continue to depend on land for their livelihood. Given their large populations and histories of famine, India and China also share similar concerns on issues such as food security. However, while India's agricultural sector is growing by about 2.5 per cent; China's has been steadily growing at between 4 and 5 per cent over the last 15 years. By 2005, China had in fact emerged as the world's third largest food donor. China with less cultivable land produces double the food grains, at 415 million tons per year compared with India's 208 million tons per year.

Conclusion

As developing-country incomes rise, the resulting increases in food demand may help expand U.S. agricultural export markets. But what are the catalysts for income growth in the poorest countries? In a number of countries, improved domestic agricultural productivity is a strong driver of income growth. Many developing countries rely heavily on the agricultural sector for economic growth, and agricultural productivity growth plays a key role in reducing poverty and improving food security.

Enhanced agricultural efficiency, through improved input quality or resource allocation, generates greater food availability, increases demand for industrial goods and services, and could result in higher export earnings. As agricultural productivity rises, a reinforcing cycle of supply and demand may be generated between agriculture and the rest of the economy, which can stimulate income growth. As agricultural efficiency improves, labor and capital are released to search out higher wages in other economic sectors, facilitating growth in the rest of the economy.

Developing countries such as India, Indonesia, and Colombia have achieved growth in agricultural productivity, while at the same time increasing U.S. agricultural imports. Agricultural productivity growth in these three countries from 1990 to 2006 was above the world average of 1.5 percent. During the same period, per capita gross domestic product (GDP) rose

4.2 percent in India, 3.2 percent in Indonesia, and 1.5 percent in Colombia, nearly matching or exceeding the global average of 1.6 percent. As incomes rise, consumers purchase more higher value foods, including meat products. Increased demand for domestic meat, in turn, boosts demand for feed and fodder. Between 1998 and 2008, annual feed and fodder export volumes to Indonesia increased 28 percent, and those to India and Colombia increased 18 percent.

Developing Countries Will Strengthen Their Position as Important U.S. Agricultural Export Destinations: Future demand for agricultural products will increasingly come from developing countries, which have seen much higher income growth as a group than developed countries. Even during the recent worldwide recession, most developing countries were able to avoid the deep economic downturns experienced by many high-income countries. According to the International Monetary Fund, the GDP in emerging and developing countries grew 2.5 percent in 2009, while advanced economies shrank by more than 3 percent. Average annual growth in developing countries is projected at around 6.5 percent through 2015, compared with about 2.5 percent in advanced economies. Developing countries have faster growing populations and incomes, which are increasingly spent on high-value food products. The U.S. is well placed to compete in these new and expanding markets.

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