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## RESEARCH ARTICLE

### AGRICULTURAL GROWTH LEADS TO THE NATIONAL GROWTH

\*Dr. Preeti Malik

Department of Business Administration, Maharaja Surajmal Institute, (Affiliated to Guru Gobind Singh Indraprastha University), C-4, Janak Puri, New Delhi-110058, India

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#### ABSTRACT

The research paper covers briefly that how the agricultural growth of any nation is directly proportionate to the development of that nation in various aspects. This can be analysed by studying the impact of various factors like Overpopulation, Per capita Consumption levels, Malnutrition, Disease, Need of increase in food production, production of raw materials, purchasing power of the masses, release of workers from agriculture, export of agriculture produce, Techniques of planning of agriculture, Joint or collective planning, Land reforms in India- A farce, Redistribution of land, Consolidation of holdings and service cooperatives, Capital Starvation of Agriculture, Money lender, exploitation of the farmer, deprivation of the village, Infrastructure for agriculture, Productivity in agriculture, Farmer's suicide on the agricultural sector directly or indirectly. The paper covers the above factors briefly by analysing the data till now and discusses its relevance in the development of the nation.

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#### INTRODUCTION

This paper discusses the broad parameters of the growth of the Indian economy since the nation's independence and a cross-country evaluation of where India stands and to analyse the factors behind the changes in India's economic conditions and the relation between agricultural sector, on the one hand, and the impact of industrial sector on agriculture, on the other. The combination of protectionist, import-substitution, and Fabians' social democratic-inspired policies governed India for sometime after the end of British occupation. The economy was then characterised by extensive regulation, protectionism and public ownership of large monopolies, pervasive corruption and slow growth. Since 1991, continuing economic liberalisation has moved the country towards a market-based economy. By 2008, India had established itself as one of the world's fastest growing economies. Growth significantly slowed to 6.8% in 2008–09, but subsequently recovered to 7.4% in 2009–10, while the fiscal deficit rose from 5.9% to a high 6.5% during the same period.

##### \*Corresponding author: Dr. Preeti Malik

Department of Business Administration, Maharaja Surajmal Institute, (Affiliated to Guru Gobind Singh Indraprastha University), C-4, Janak Puri, New Delhi-110058, India.

India's current account deficit surged to 4.1% of GDP during Q2 FY11 against 3.2% the previous quarter. The unemployment rate for 2010–11, according to the state Labour Bureau, was 9.8% nationwide. As of 2011, India's public debt stood at 68.05% of GDP which is highest among the emerging economies. The highest *amotrade*- amount of trade (counting exports and imports) stands at \$606.7 billion and is currently the 9th largest in the world. During 2011–12, India's foreign trade grew by an impressive 30.6% to reach \$792.3 billion (Exports-38.33% & Imports-61.67%).

#### Objectives of the Study

- To analyse the role of agriculture in economic development.
- To study the effect of land system/ Zamindari reforms in developing country.
- To analyse the exploitation of farmers/ deprivation of villages and capital starvation of agriculture.

#### Research Methodology

The study was explorative cum descriptive in nature. It is an empirical research based upon the secondary data.

The secondary data was collected through study of various academic works in the relevant field.

### **GDP of India has great impact since 1991 mainly on the following two essential sectors:**

**Industry and services:** Industry accounts for 26% of GDP and employs 22% of the total workforce. India is 11th in the world in terms of nominal factory output according to data compiled through CIA World Fact book figures. The Indian industrial sector underwent significant changes as a result of the economic liberalisation in India economic reforms of 1991, which removed import restrictions, brought in foreign competition, led to the privatisation of certain public sector industries, liberalised the FDI regime, improved infrastructure and led to an expansion in the production of fast moving consumer goods. Post-liberalisation, the Indian private sector was faced with increasing domestic as well as foreign competition, including the threat of cheaper Chinese imports. It has since handled the change by squeezing costs, revamping management, and relying on cheap labour and new technology. However, this has also reduced employment generation even by smaller manufacturers who earlier relied on relatively labour-intensive processes.

**Agriculture:** India ranks second worldwide in farm output. Agriculture and allied sectors like forestry, logging and fishing accounted for 17% of the GDP in 2012, employed 51% of the total workforce, and despite a steady decline of its share in the GDP, is still the largest economic sector and a significant piece of the overall socio-economic development of India. Crop yield per unit area of all crops have grown since 1950, due to the special emphasis placed on agriculture in the five-year plans and steady improvements in irrigation, technology, application of modern agricultural practices and provision of agricultural credit and subsidies since the Green Revolution in India. However, international comparisons reveal the average yield in India is generally 30% to 50% of the highest average yield in the world. Indian states Uttar Pradesh, Punjab, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, West Bengal, Gujarat and Maharashtra are key agricultural contributing states of India.

India receives an average annual rainfall of 1,208 millimetres (47.6 in) and a total annual precipitation of 4000 billion cubic metres, with the total utilisable water resources, including surface and groundwater, amounting to 1123 billion cubic metres. 546,820 square kilometres (211,130 sq mi) of the land area, or about 39% of the total cultivated area, is irrigated. India's inland water resources including rivers, canals, ponds and lakes and marine resources comprising the east and west coasts of the Indian ocean and other gulfs and bays provide employment to nearly six million people in the fisheries sector. In 2008, India had the world's third largest fishing industry. India is the largest producer in the world of milk, jute and pulses, and also has the world's second largest cattle population with 175 million animals in 2008. It is the second largest producer of rice, wheat, sugarcane, cotton and groundnuts, as well as the second largest fruit and vegetable producer, accounting for 10.9% and 8.6% of the world fruit and vegetable production respectively.

India is also the second largest producer and the largest consumer of silk in the world, producing 77,000 million tons in 2005.

### **Factors affecting Agricultural Growth in India**

#### **The State of the Nation**

**Overpopulation:** India suffers from the problem of overpopulation. The population of India is very high at an estimated 1.27 billion. Though India ranks second in population, it ranks 33 in population density. Indira Gandhi, Prime Minister of India, had implemented a forced sterilization programme in the early 1970s but the programme failed. Officially, men with two children or more were required to be sterilised, but many unmarried young men, political opponents and ignorant, poor men were also believed to have been affected by this programme. This program is still remembered and regretted in India, and is blamed for creating a public aversion to family planning, which hampered Government programmes for decades.

**Per-Capita Consumption Levels :** While the national income per capita is the useful summary measures of the well being of the people, the per capita private consumption expenditure is a more direct evidence of such well being or level of the people's living. In 1960-61, the per capita private consumption expenditure of the rural population was Rs. 261.2 while that of urban population was Rs. 359.2 thus the per capita consumption expenditure of the urban population was about 37.7% higher than that of the rural population. Nearly two-third of our people both in the rural (63.26%) and urban (64.51%) were living below the national average in 1960-61. But India's gross national income per capita had experienced high growth rates since 2002. India's Per Capita Income has tripled from Rs. 19,040 in 2002-03 to Rs. 53,331 in 2010-11, averaging 13.7% growth over these eight years peaking 15.6% in 2010-11. However growth in the inflation adjusted Per capita income of the nation slowed to 5.6% in 2010-11, down from 6.4% in the previous year. As of 2010, according to World Bank statistics, about 400 million people in India, as compared to 1.29 billion people worldwide, live on less than \$1.25 (PPP) per day.

These consumption levels are on an individual basis, not household. Per 2011 census, India has about 330 million houses and 247 million households. The household size in India has dropped in recent years, with 2011 census reporting 50% of households have 4 or fewer members. Some households have 6 or more members, including the grandparents. These households produced a GDP of about \$1.7 Trillion. The household consumption patterns per 2011 census: about 67 percent of households use firewood, crop residue or cow dung cakes for cooking purposes; 53 percent do not have sanitation or drainage facilities on premises; 83 percent have water supply within their premises or 100 metres from their house in urban areas and 500 metres from the house in rural areas; 67 percent of the households have access to electricity; 63 percent of households have landline or mobile telephone connexion; 43 percent have a television; 26 percent have either a two wheel (motorcycle) or four wheel (car) vehicle.

Compared to 2001, these income and consumption trends represent moderate to significant improvements. One report in 2010 claimed that the number of high income households has crossed lower income households. GNI per capita in India is (1,170 \$).

**Malnutrition:** India has about 61 million children under the age of 5 who are chronically malnourished, compared to 150 million children worldwide. Majority of malnourished children of India live in rural areas. Girls tend to be more malnourished than boys. Malnourishment, claims this report, is not a matter of income, rather it is education as in other parts of the world. A third of children from the wealthiest fifth of India's population are malnourished. This is because of poor feeding practices – foremost among them a failure exclusively to breastfeed in the first six months – play as big a role in India's malnutrition rates as food shortages. India's government has launched several major programs with mandated social spending programs to address child malnourishment problem. However, Indian government has largely failed. A public distribution system that targets subsidised food to the poor and a vast midday-meal scheme, to which 120 million children subscribe —are hampered by inefficiency and corruption. Another government-paid program named Integrated Childhood Development Service (ICDS) has been operating since 1975 and it too has been ineffective and a wasteful program. A 2011 UNICEF report claims recent encouraging signs. Between 1990 to 2010, India has achieved a 45 percent reduction in under age 5 mortality rates, and now ranks 46 in 188 countries on this metric. India has a higher prevalence of child malnutrition, as manifested in stunting and underweight, than any other large country and was home to about one-third of all malnourished children in the world in the early 2000s. There are, however, substantial inter-state differences in child malnutrition and also in the (generally meagre) progress made since the early 1990s. The persistence of widespread malnutrition may seem surprising considering the recent overall shining performance of the Indian economy. Between 1993 and 2006 net state domestic product per capita nearly doubled in the wake of 4.5% average annual growth. The main objective of this paper is to identify the reasons why rapid economic growth has failed to reduce malnutrition more substantially. The methods used are OLS, instrument-variable, fixed-effect and first-difference regression analyses on the basis of panel data at the level of states in India. The results suggest that the persistence of malnutrition is mainly explained by modest poverty reduction □ despite high overall economic growth □ due to minuscule factor productivity and income growth in the agricultural sector, still employing 54% of the Indian labour force. Widespread rural female illiteracy and restricted autonomy for women are other significant explanations.

**Diseases:** So far as the health of our people is concerned, it is going down day by day. The height of younger generation, the girth of their chest and their weight- all are deteriorating. The health of atleast 50% of our children born in villages and slums is a distressing sight, mainly because of malnutrition- because their mothers did not get enough protein to eat during the days of their pregnancy and are not able to provide them with nourishing food after they have been born.

## Role of Agriculture

**Purchasing Power of the masses:** According to World Bank international poverty line methodology, India's poverty dropped from 42% of its total population in 2005 to about 33% in 2010. In rural India, about 34 percent of the population lives on less than \$1.25 a day, down from 44 percent in 2005; while in urban India, 29 percent of the population lived below that absolute poverty line in 2010, down from 36 percent in 2005, according to the World Bank report. Since the early 1950s, successive governments have implemented various schemes to alleviate poverty, under central planning, that have met with partial success. All these programmes have relied upon the strategies of the *Food for work* programme and *National Rural Employment Programme* of the 1980s, which attempted to use the unemployed to generate productive assets and build rural infrastructure. In 2005, Indian government enacted the Mahatma Gandhi National Rural Employment Guarantee Act, guaranteeing 100 days of minimum wage employment to every rural household in all the districts of India. The question of whether these government spending programs or whether economic reforms reduce poverty, by improving income of the poorest, remains in controversy. In 2011, the Mahatma Gandhi National Rural Employment Guarantee programme was widely criticised as no more effective than other poverty reduction programs in India. Despite its best intentions, MGNREGA is beset with controversy about corrupt officials, deficit financing as the source of funds, poor quality of infrastructure built under this program, and unintended destructive effect on poverty.

**Export of Agriculture Produce:** Agriculture in India has a significant history. Today, India ranks second worldwide in farm output. Agriculture and allied sectors like forestry and fisheries accounted for 16.6% of the GDP in 2009, about 50% of the total workforce. The economic contribution of agriculture to India's GDP is steadily declining with the country's broad-based economic growth. Still, agriculture is demographically the broadest economic sector and plays a significant role in the overall socio-economic fabric of India. As Per the 2010 FAO world agriculture statistics, India is the world's largest producer of many fresh fruits and vegetables, milk, major spices, select fresh meats, select fibrous crops such as jute, several staples such as millets and castor oil seed. India is the second largest producer of wheat and rice, the world's major food staples. India is also the world's second or third largest producer of several dry fruits, agriculture-based textile raw materials, roots and tuber crops, pulses, farmed fish, eggs, coconut, sugarcane and numerous vegetables. India ranked within the world's five largest producers of over 80% of agricultural produce items, including many cash crops such as coffee and cotton, in 2010. India is also one of the world's five largest producers of livestock and poultry meat, with one of the fastest growth rates, as of 2011. One report from 2008 claimed India's population is growing faster than its ability to produce rice and wheat. Other recent studies claim India can easily feed its growing population, plus produce wheat and rice for global exports, if it can reduce food staple spoilage, improve its infrastructure and raise its farm productivity to those achieved by other developing countries such as Brazil and China. In fiscal year ending June 2011, with a normal monsoon season,

Indian agriculture accomplished an all-time record production of 85.9 million tonnes of wheat, a 6.4% increase from a year earlier. Rice output in India also hit a new record at 95.3 million tonnes, a 7% increase from the year earlier. Lentils and many other food staples production also increased year over year. Indian farmers, thus produced about 71 kilograms of wheat and 80 kilograms of rice for every member of Indian population in 2011. The per capita supply of rice every year in India is now higher than the per capita consumption of rice every year in Japan. India exported around 2 million metric tonnes of wheat and 2.1 million metric tonnes of rice in 2011 to Africa, Nepal, Bangladesh and other regions around the world. Aquaculture and catch fishery is amongst the fastest growing industries in India. Between 1990 and 2010, Indian fish capture harvest doubled, while aquaculture harvest tripled. In 2008, India was the world's sixth largest producer of marine and freshwater capture fisheries, and the second largest aquaculture farmed fish producer. India exported 600,000 metric tonnes of fish products to nearly half of all the world's countries. India has shown a steady average nationwide annual increase in the kilograms produced per hectare for various agricultural items, over the last 60 years. These gains have come mainly from India's green revolution, improving road and power generation infrastructure, knowledge of gains and reforms. Despite these recent accomplishments, agriculture in India has the potential for major productivity and total output gains, because crop yields in India are still just 30% to 60% of the best sustainable crop yields achievable in the farms of developed as well as other developing countries. Additionally, losses after harvest due to poor infrastructure and unorganized retail cause India to experience some of the highest food losses in the world.

**Need of increase in food production:** Since independence (from British-rule) in 1947, India, having the second biggest population in the world, faced two key economic challenges: achieving food security and alleviating poverty. In a country which relies predominantly on agriculture, the focus was to promote growth in the agricultural sector to meet both of these challenges. Agricultural promotion was initiated to increase food production for feeding close to 30 crore people (300 million) in the 1950s. It was the time (1950s and 60's) when India faced a huge food shortage and had to receive food under PL 480 agreement with the United States. Dependence on agricultural imports till the early 1960s convinced planners that India's growing population, as well as concerns about national independence, security, and political stability, required self-sufficiency in food production. This led to formulation of measures such as agricultural improvements called the Green Revolution, the public distribution system and price supports system for farmers. From a net importer of food in 1950s, India has transformed itself in the production of food grains (mainly rice, wheat, coarse cereals and pulses) during the last few decades. From a mere 50 million tons (mt) of annual food grain production in 1950s, India this year (2011-12) has produced a record 252 mt of food grains, mainly attributed to the significant jump in rice and wheat output. The average growth rate of food grains production from 1950 to 2011 was 3.2% per annum. Overall, wheat was the best performer, with production increasing from mere 6.6 mt in 1950-51 to 90 mt during 2011-12, a huge jump.

Wheat was followed by rice, which had a production increase from 20 mt to 102 mt at present.

**Release of workers from agriculture:** There are now nearly 9 million fewer farmers than there were in 2001, the first time in four decades that the absolute number of cultivators has fallen. The proportion of cultivators to the total workforce has been falling steadily, this is the first time since 1971 that the number of cultivators has fallen in absolute terms. Over the last 50 years, the proportion of farmers to the total population has been in steady decline, but the fall has not been big enough for the absolute number to go down, given population increases. But in the last decade, the fall in farming has combined with the slowing rate of population growth to create a fall in the absolute numbers of farmers. As in previous decades, the proportion of agricultural labour has increased; there are now 144 million agricultural labourers, 30% of the total worker population against 26.5% in 2001. "The rise in agricultural labour could be explained by the falling size of land holdings over time," census commissioner C Chandramouli suggested. Between cultivators and agricultural labour, there are now 263 million people working in agriculture, over half of all workers. Even as there has been a 3.6 percentage point decline in the proportion of people working in agriculture over the last decade, their absolute number has increased from 234 million a decade ago. The census also confirms trends thrown up by the National Sample Survey Organization, which is the rise of casual and irregular work. The proportion of 'main workers' - those who have worked at least six of the last 12 months - has fallen by 2.6 percentage points, while the proportion of marginal workers - those who worked between 0 and six of the last 12 months - has risen. Within marginal workers, over 80% had worked for at least three months, Chandramouli said. The census also confirms that female participation in the workforce has fallen slightly while it has risen for men. Delhi, Punjab and Chandigarh have India's lowest female workforce participation rates, Delhi being the nations lowest.

### Exploitation of the farmers

**Money Lender:** Agricultural and allied sectors accounted for about 52.1% of the total workforce in 2009-10. While agriculture has faced stagnation in growth, services have seen a steady growth. Of the total workforce, 7% is in the organised sector, two-thirds of which are in the public sector. The NSSO survey estimated that in 2004-05, 8.3% of the population was unemployed, an increase of 2.2% over 1993 levels, with unemployment uniformly higher in urban areas and among women. Growth of labour stagnated at around 2% for the decade between 1994 and 2005, about the same as that for the preceding decade. Avenues for employment generation have been identified in the IT and travel and tourism sectors, which have been experiencing high annual growth rates of above 9%. Unemployment in India is characterised by chronic (disguised) unemployment. The decline in organised employment due to the decreased role of the public sector after liberalisation has further underlined the need for focusing on better education and has also put political pressure on further reforms. India's labour regulations are heavy even by developing country standards and analysts have urged the government to abolish or modify them in order to make the

environment more conducive for employment generation. The 11th five-year plan has also identified the need for a congenial environment to be created for employment generation, by reducing the number of permissions and other bureaucratic clearances required.<sup>1</sup> Further, inequalities and inadequacies in the education system have been identified as an obstacle preventing the benefits of increased employment opportunities from reaching all sectors of society. Child labour in India is a complex problem that is basically rooted in poverty, coupled with a failure of governmental policy, which has focused on subsidising higher rather than elementary education, as a result benefiting the privileged rather than the poorer sections of society. The Indian government is implementing the world's largest child labour elimination program, with primary education targeted for ~250 million. Numerous non-governmental and voluntary organisations are also involved. Special investigation cells have been set up in states to enforce existing laws banning the employment of children under 14 in hazardous industries. The allocation of the Government of India for the eradication of child labour was \$21 million in 2007.

Public campaigns, provision of meals in school and other incentives have proven successful in increasing attendance rates in schools in some states. In 2009–10, remittances from Indian migrants overseas stood at ₹2500 billion (US\$38 billion), the highest in the world, but their share in FDI remained low at around 1%. India ranked 133rd on the Ease of Doing Business Index 2010, behind countries such as China (89th), Pakistan (85th), and Nigeria (125th). Women in India are mainly employed in agriculture and caring for livestock with only about 20% of the employed women engaging in activities outside agriculture. When employed, women earn substantially less than men, only about 66% of the male incomes in agriculture and 57% of the male incomes outside agriculture. Farmer suicides: Following the liberalizing economic reforms of 1991 the government withdrew support from the agricultural sector. These reforms, along with other factors, led to a rise in farmer suicides. Various studies identify the important factors as the withdrawal of government support, insufficient or risky credit systems, the difficulty of farming semi-arid regions, poor agricultural income, absence of alternative income opportunities, a downturn in the urban economy which forced non-farmers into farming, and the absence of suitable counseling services.

### Capital Starvation of Agriculture

**Techniques of Planning for agriculture:** "Slow agricultural growth is a concern for policymakers as some two-thirds of India's people depend on rural employment for a living. Current agricultural practices are neither economically nor environmentally sustainable and India's yields for many agricultural commodities are low. Poorly maintained irrigation systems and almost universal lack of good extension services are among the factors responsible. Farmers' access to markets is hampered by poor roads, rudimentary market infrastructure, and excessive regulation.—World Bank: "India Country Overview 2008"."With a population of just over 1.2 billion, India is the world's largest democracy. In the past decade, the country has witnessed accelerated economic growth, emerged

as a global player with the world's fourth largest economy in purchasing power parity terms, and made progress towards achieving most of the Millennium Development Goals. India's integration into the global economy has been accompanied by impressive economic growth that has brought significant economic and social benefits to the country. Nevertheless, disparities in income and human development are on the rise. Preliminary estimates suggest that in 2009-10 the combined all India poverty rate was 32% compared to 37% in 2004-05. Going forward, it will be essential for India to build a productive, competitive, and diversified agricultural sector and facilitate rural, non-farm entrepreneurship and employment. Encouraging policies that promote competition in agricultural marketing will ensure that farmers receive better prices."—World Bank: "India Country Overview 2011". A 2003 analysis of India's agricultural growth from 1970 to 2001 by the Food and Agriculture Organisation identified systemic problems in Indian agriculture. For food staples, the annual growth rate in production during the six-year segments 1970-76, 1976-82, 1982-88, 1988-1994, 1994-2000 were found to be respectively 2.5, 2.5, 3.0, 2.6, and 1.8% per annum. Corresponding analyses for the index of total agricultural production show a similar pattern, with the growth rate for 1994-2000 attaining only 1.5% per annum.

**Infrastructure for Agriculture:** India has very poor rural roads affecting timely supply of inputs and timely transfer of outputs from Indian farms. Irrigation systems are inadequate leading to crop failures in some parts of the country because of lack of water. In other areas regional floods, poor seed quality and inefficient farming practices, lack of cold storage and harvest spoilage cause over 30% of farmer's produce going to waste, lack of organized retail and competing buyers thereby limiting Indian farmer's ability to sell the surplus and commercial crops. The Indian farmer receives just 10 to 23% of the price the Indian consumer pays for exactly the same produce, the difference going to losses, inefficiencies and middlemen. Farmers in developed economies of Europe and the United States, in contrast, receive 64 to 81%.

**Productivity in Agriculture:** Although India has attained self-sufficiency in food staples, the productivity of Indian farms is below that of Brazil, the United States, France and other nations. Indian wheat farms, for example, produce about a third of the wheat per hectare per year compared to farms in France. Rice productivity in India was less than half that of China. Other staples productivity in India is similarly low. Indian total factor productivity growth remains below 2% per annum; in contrast, China's total factor productivity growth is about 6% per annum, even though China also has smallholding farmers. Several studies suggest India could eradicate hunger and malnutrition within India, and be a major source of food for the world by achieving productivity comparable with other countries. By contrast Indian farms in some regions post the best yields, for sugarcane, cassava and tea crops. Yields for various crops vary significantly between Indian states. Some Indian states produce two to three times more grain per acre than in other Indian states. The table compares the statewide average yields for a few major agricultural crops within India, for 2001-2002. Crop yields for some farms within India are within 90% of the best achieved yields by farms in developed

countries such as the United States and in European Union. No single state of India is best in every crop. Tamil Nadu achieved highest yields in rice and sugarcane, Haryana in wheat and coarse grains, Karnataka in cotton, Bihar in pulses, while other states do well in horticulture, aquaculture, flower and fruit plantations. These differences in agricultural productivity within India are a function of local infrastructure, soil quality, micro-climates, local resources, farmer knowledge and innovations. The Indian food distribution system is highly inefficient. Movement of agricultural produce within India is heavily regulated, with inter-state and even inter-district restrictions on marketing and movement of agricultural goods. One study suggests Indian agricultural policy should best focus on improving rural infrastructure primarily in the form of irrigation and flood control infrastructure, knowledge transfer of better yielding and more disease resistant seeds. Additionally, cold storage, hygienic food packaging and efficient modern retail to reduce waste can improve output and rural incomes.

## Land Systems

### Disparities in Joint or Collective Planning for Agriculture

A critical problem facing India's economy is the sharp and growing regional variations among India's different states and territories in terms of poverty, availability of infrastructure and socio-economic development. Six low-income states – Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa and Uttar Pradesh – are home to more than one-third of India's population. Severe disparities exist among states in terms of income, literacy rates, life expectancy and living conditions. The five-year plans, especially in the pre-liberalisation era, attempted to reduce regional disparities by encouraging industrial development in the interior regions and distributing industries across states, but the results have not been very encouraging since these measures in fact increased inefficiency and hampered effective industrial growth.

After liberalisation, the more advanced states have been better placed to benefit from them, with well-developed infrastructure and an educated and skilled workforce, which attract the manufacturing and service sectors. The governments of backward regions are trying to reduce disparities by offering tax holidays and cheap land, and focusing more on sectors like tourism which, although being geographically and historically determined, can become a source of growth and develops faster than other sectors. In fact, the economists fail to realize that ultimately the problem of equitable growth or inclusive growth is intricately related to the problems of good governance and transparency. In 2011 Engineering Jobs in India have been showing signs of steady growth. Critics of the neoliberal turn to policymaking in India, and the world in general, since the mid-1980s have pointed out that the growth process under a neoliberal regime is inherently anti-poor. Most of the dividends of economic growth is cornered by the already well off. In parallel with an egalitarian growth process, neoliberalism also whittles down whatever welfare State measures might have been in place before its adoption. In egalitarian growth and erosion of State assisted welfare provisioning increases socio-economic inequality drastically.

Drawing on some recent research, this article has provided empirical evidence in support of such a view. Two comparison groups provide a powerful and disturbing insight into India's growth process. First, there are many countries which have grown at rates very similar to India's but which have managed to register marked declines in socio-economic inequalities. In stark contrast to this, India has witnessed an increase in socio-economic inequality since 1990. Second, in comparison to its close neighbours, with whom India has many geographical, climatic, cultural and social commonalities; India emerges as the worst performer among the South Asian countries. The growth process currently underway in India is inherently biased against the poor, the marginalized and underprivileged. If economic growth is to lead to substantial improvements in the living standards (measured by indicators of well being like life expectancy, literacy, infant mortality) of the vast majority of the world's population, a radically different socio-economic paradigm must be put in place of the currently dominant neoliberal one.

**Redistribution of Land holdings:** The average size of land holdings is very small (less than 2 hectares) and is subject to fragmentation due to land ceiling acts, and in some cases, family disputes. Such small holdings are often over-manned, resulting in disguised unemployment and low productivity of labour. Some reports claim smallholder farming may not be because of poor productivity, since the productivity is higher in China and many developing economies even though China smallholder farmers constitute over 97% of its farming population. Chinese smallholder farmer is able to rent his land to larger farmers, China's organised retail and extensive Chinese highways are able to provide the incentive and infrastructure necessary to its farmers for sharp increases in farm productivity.

**Land Reforms in India:** Land reform usually refers to redistribution of land from the rich to the poor. More broadly, it includes regulation of ownership, operation, leasing, sales, and inheritance of land (indeed, the redistribution of land itself requires legal changes). In an agrarian economy like India with great scarcity, and an unequal distribution, of land, coupled with a large mass of the rural population below the poverty line, there are compelling economic and political arguments for land reform. Not surprisingly, it received top priority on the policy agenda at the time of Independence. In the decades following independence India passed a significant body of land reform legislation. The 1949 Constitution left the adoption and implementation of land and tenancy reforms to state governments. This led to a lot of variation in the implementation of these reforms across states and over time, a fact that has been utilized in empirical studies trying to understand the causes and effects of land reform. Land reform legislation in India consisted of four main categories: abolition of intermediaries who were rent collectors under the pre-Independence land revenue system; tenancy regulation that attempts to improve the contractual terms faced by tenants, including crop shares and security of tenure; a ceiling on landholdings with a view to redistributing surplus land to the landless; and finally, attempts to consolidate disparate landholdings. Abolition of intermediaries is generally agreed to be one component of land reforms that has been relatively

successful. The record in terms of the other components is mixed and varies across states and over time. Landowners naturally resisted the implementation of these reforms by directly using their political clout and also by using various methods of evasion and coercion, which included registering their own land under names of different relatives to bypass the ceiling, and shuffling tenants around different plots of land, so that they would not acquire incumbency rights as stipulated in the tenancy law. The success of land reform has been driven by the political will of specific state administrations, the notable achievers being the left-wing administrations in Kerala and West Bengal. The economic arguments in favour of land reform and showed that they are based on frictions in the allocation of land. These frictions could either be due to agency costs or imperfect property rights. We then evaluated the evidence on land reforms in India. The evidence suggests that land reforms had a negative effect on poverty, while the effect on productivity is mixed. In states where these measures were strongly implemented, the effect of land reform on productivity seems positive.

**Service Cooperatives:** Cooperative societies in India played an important role in development of agriculture, banking, credit, agro processing, storage, marketing, dairy, fishing and housing sectors. Cooperatives role in poverty alleviation, food security and employment generation is well established. It is observed that cooperatives may deliver goods and services in areas where both public and private sectors have failed. Several cooperatives were formed in urban and rural areas but the cooperative in village Mulkanoor, demonstrated the possibility of cooperation. As a result of continuous efforts of potential members, Mulkanoor Cooperative Rural Bank was established with 375 members from 14 villages within a radius of 10 km in 1956. Shri A. K. Vishwanath Reddy, the founder, at the age of 30 years collected a total share capital of Rs. 2300. The main objective of society was to provide loans with low interest rate to farmers to increase crop production and to stop male out migration as well as exploitation from money lenders. Today the Mulkanoor cooperative society has 6251 members, 106 employees with 6,968.23 lakhs working capital. Thus, Mulkanoor cooperative society is a successful model in the country and there is a need to strengthen the cooperative societies in the country on the same line to meet the demand of food, fodder, shelter and employment for our increasing human and live-stock population in days to come.

**Deprivation of the Village:** Slow agricultural growth is a concern for policymakers as some two-thirds of India's people depend on rural employment for a living. Current agricultural practices are neither economically nor environmentally sustainable and India's yields for many agricultural commodities are low. Poorly maintained irrigation systems and almost universal lack of good extension services are among the factors responsible. Farmers' access to markets is hampered by poor roads, rudimentary market infrastructure, and excessive regulation — World Bank: "India Country Overview 2008". Agriculture is an important part of Indian economy. In 2008, a New York Times article claimed, with the right technology and policies, India could contribute to feeding not just itself but the world. However, agricultural output of India lags far behind its potential. The low productivity in India is a result of several

factors. According to the World Bank, India's large agricultural subsidies are hampering productivity-enhancing investment. While overregulation of agriculture has increased costs, price risks and uncertainty, governmental intervention in labour, land, and credit markets are hurting the market. Infrastructure such as rural roads, electricity, ports, food storage, retail markets and services are inadequate. Further, the average size of land holdings is very small, with 70% of holdings being less than one hectare in size. The partial failure of land reforms in many states, exacerbated by poorly maintained or non-existent land records, has resulted in sharecropping with cultivators lacking ownership rights, and consequently low productivity of labour. Adoption of modern agricultural practices and use of technology is inadequate, hampered by ignorance of such practices, high costs, illiteracy, slow progress in implementing land reforms, inadequate or inefficient finance and marketing services for farm produce and impracticality in the case of small land holdings. The allocation of water is inefficient, unsustainable and inequitable. The irrigation infrastructure is deteriorating. Irrigation facilities are inadequate, as revealed by the fact that only 39% of the total cultivable land was irrigated as of 2010, resulting in farmers still being dependent on rainfall, specifically the monsoon season, which is often inconsistent and unevenly distributed across the country.

## **Conclusion**

Agriculture is more important than industry for the simple reason that the nation's development totally depends upon it. When agricultural productivity within a country does not increase faster than demand and raw materials are not easily and cheaply available from outside, the prices of raw materials rise relative to all others and industries will cease to develop. It is only when there is purchasing power in the pockets of agricultural workers to constitute the mass of people in India that a demand for industrial or non agricultural goods and services will arise. When the purchasing power of the population cannot be increased, there cannot be any industrial goods and social services.

With this despite increase in the productivity the proportionate contribution of agriculture to the national welfare steadily declines and the economy prospers i.e. the national income and income per capita or the standard of living rises. An increase in agricultural production can be brought if any of the three factors of production i.e. land, labour and capital can be increased. Agricultural land, rivers, mines and forests are forms of national wealth, ownership of which must vest absolutely in the people of India collectively. The cooperative principle should be applied to the exploitation of land by developing collective and cooperative farms. Agricultural exports have generally preceded or accompanied the economic development of many countries in the world. India ranked within the world's five largest producers of over 80% of agricultural produce items, including many cash crops such as coffee and cotton, in 2010. In the developed countries the general decline in the share of Agricultural sector in the national product was accompanied by an equal increase in per capita product. But in India although per capita product failed to rise significantly, the share of agricultural sector in national product declined quite markedly.

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