



Agriculture Sector in India: As a Career

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ABSTRACT: The purpose of this paper is to study the growth rate of agriculture sector and job opportunities in agriculture sector in India. Agriculture in India since ages was practiced formerly on a survival basis as the village men were self-sufficient, people exchanged their goods and services with the fellow village men on a barter basis. Slowly and slowly with the development of means of communication, transport and storage facilities, agriculture has assumed its position as money and profit oriented business. Farmer grows those crops that fetch them a superior value this was much facilitated by the good markets and marketing. Markets and marketing of produce is considered as an integral part of agriculture, as individuals, organizations and agricultural based research institutes are encouraged to make more investment in the technology to increase agricultural production. Agribusiness is a big, business. People with a business background are needed and employed as: marketing and merchandising specialists, sales representatives, agricultural economists, accountants, finance managers and commodity traders, just to name a few and that's still not all. Other career possibilities exist in the areas of communications & education, social services, and agricultural production. Even though food production often takes center stage, do not forget that textiles and fibers also makeup a large portion of the agricultural industry.

Keywords: Agriculture, Agribusiness, growth, Economics, Education, Sciences, Food Science.

I. INTRODUCTION

Agriculture industry plays a major role in the Indian economic scenario contributing around 20% of Gross Domestic product (GDP). Around 62% of the Indian population depend on it for their livelihood. The field of agriculture include farm management, horticulture, businesses and industries that manufacture agricultural machinery, industries that buy and process farm products, banking activities for financing and developing farms, research for improving quantity and quality of farm products and so on. Nowadays, the state of agriculture has improved a lot and has become highly scientific, sophisticated and mechanized. Only a small percentage in this field are engaged in traditional farming occupation. The vast majority work as either agricultural professionals/ scientists or in business related careers, such as marketing and merchandising.

II. GROWTH RATE OF AGRICULTURE SECTOR

The growth rate of the agriculture in India mainly depends on the rainfall as majority of the cultivated area in India depends on rainfall. The Fig. 1 shown the initial period after the independence the agriculture sector was facing negative growth rate. However, after 1958 the growth rate has been positive except in 2002-03, when the Indian agriculture sector was affected by severe drought. With the introduction of green revolution, the agriculture sector experienced impressive growth rate during late 1960s' to early 1970s'.

Even though the growth rate of the agriculture has been fluctuating, the contribution of this sector in total Gross Domestic Product in India has been continuously falling.

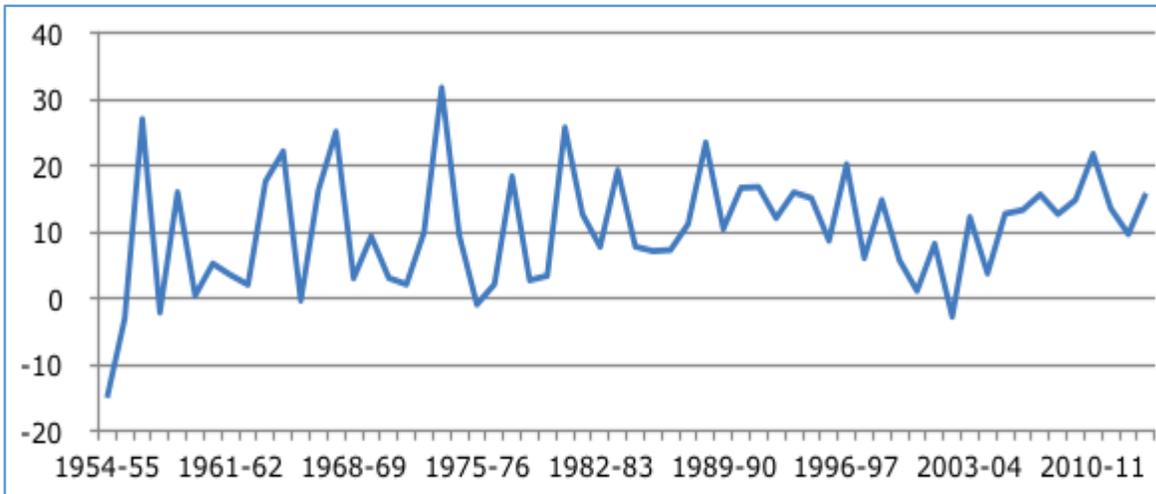


Fig. 1. Growth Rate of Agriculture Sector in India (1950–2013).

Despite the fact that majority of work force are employed has been quite low. As shown in the Fig. 2 at the time of Independence agriculture contributed almost half of the total GDP which has declined to 18% in the recent years which was more than 45% in 1954-55 (Arjun, 2013).

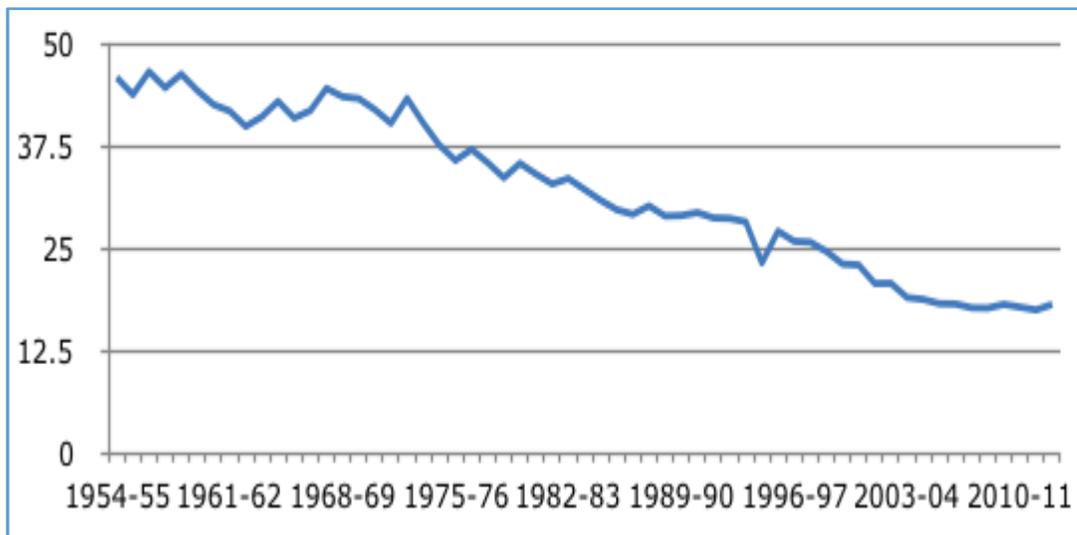


Fig. 2. Contribution of agriculture sector to total GDP of India (1954-2012).

India has seen tremendous growth in rice production. Growth rate of rice production has been very fluctuating. During 1983-84 the growth rate was as high as 27% whereas in 2002-03 the growth rate was as low as (-) 23%. The growth rate of rice production in India majorly dependent on the monsoon as majority of the cultivated land is dependent on rainfall. The severe drought of 2002-03 lead to significant decline in the entire agriculture sector as shown in Fig. 3. Similarly during 1965–66 the growth rate of rice production declined significantly. One of the reason for decline is the introduction of green revolution which led to shift in the production of wheat instead of rice. The Table 1 presents average farm productivity in India over three farming years for some crops. Improving road and power generation infrastructure, knowledge gains and reforms has allowed India to increase farm productivity between 40% to 500% over 40 years.

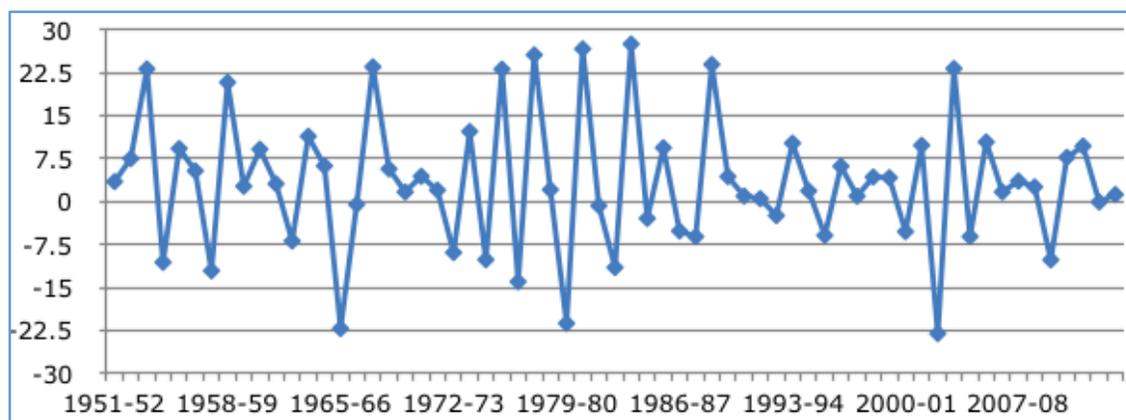


Fig. 3. Growth rate of rice production in India (1950-2014).

Table 1: Agriculture Productivity in India, Growth in Average Yields from 1970 to 2010.

Crop	Average Yield, 1970-1971	Average Yield, 1990-1991	Average Yield, 2010-2011
	Kilogram Per Hectare	Kilogram Per Hectare	Kilogram Per Hectare
Rice	1123	1740	2240
Wheat	1307	2281	2938
Pulses	524	578	689
Oilseeds	579	771	1325
Sugarcane	48322	65395	68596
Tea	1182	1652	1669
Cotton	106	225	510

III. REASONS A CAREER IN AGRICULTURE

1. Demographic Dividend. The Census of India 2011 estimates that by 2020 over 65% of the country’s population will attain working age, which has been summed up as India’s “demographic dividend”. But on the other hand, there is also the fact that one out of every three graduates in India are unemployed. As shown in the Table 2(%) further illustrates how India is sitting on a virtual time bomb that may result in disillusionment and disenfranchisement, unless opportunities for gainful employment are not devised urgently. Youth population ratio (%) in rural and urban areas by education level.

2. Viable and Feasible. Agriculture is a far more dynamic sector than perceived and with technology now in the picture, agriculture need not paint the typical picture one associates with it. Job profiles and titles in agriculture are as complex and diverse as those in the corporate sector. These profiles include Communications, Economics, Education, Sciences, Food Science, Engineering, Soils and of course direct farming. The possibilities are endless and opportunities abound.

3. Possibilities and Opportunities. There are so many reasons that favor a purposeful career in agriculture. Some of the factors are a result of the market while others are innate opportunities in agriculture itself. There are various incentives if one to choose agriculture as one’s chosen life career.

Table 2: Demographic Dividend.

Education level	RURAL			URBAN			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Illiterate	90.3	39	54.7	85.2	22.1	45.9	89.4	36.7	53.4
Primary	83.5	34.3	58	81.2	19.7	53.3	83	31.7	57.1
Higher secondary	54.2	20.5	40.3	46.8	8.8	29.5	52	16.5	36.8
Graduate	58.3	23.7	43.9	58.2	20.6	38.2	58.3	21.7	40.6
Tech degree	49.9	13.6	42.8	79.6	50.6	71.4	73.2	45.3	65.8
Diploma (< graduation)	59.1	25.2	49.1	61.6	31.8	51.5	60.5	29.4	50.5
Diploma (> graduation)	50.7	12.9	32.6	64	34.6	52.3	60.4	27.2	46.3
Total	64.8	28.8	47.2	56.4	14.4	36.5	62.3	24.7	44.1

IV. JOB OPPORTUNITIES IN AGRICULTURE SECTOR

Animal Science in the specialty area it you are interested in careers on the science side of agriculture. Animal scientists conduct research designed to improve the production and processing of meats, fish and dairy products. They use biotechnology to study the genetics, nutrition, reproduction, growth, and development of domesticated farm animals. Some animal scientists inspect and grade livestock food products, purchase livestock, or work in technical sales or marketing. As extension agents or consultants, animal scientists advise agricultural producers on how to upgrade animal housing facilities properly, lower mortality rates among their animals, handle waste matter properly, or increase the production of animal products, such as milk or eggs. The job opportunities in agriculture section in India are as shown in Fig. 4.

1. Career Opportunities in Agro - Industry Sector. Agro - industry provides jobs to scientists, engineers, technologists, sales and marketing people, besides the production people. These areas of work relate to production, food processing, grain and seed processing, meat and poultry packing, dairy processing, fats and oils, textiles, fibers, machinery and equipment, fertilizer and lime, pesticides, herbicide, feed manufacturing, constructions, etc. for which people with adequate knowledge, in the respective fields are required.

2. Agricultural Engineering. Agricultural branch of engineering provides better job prospects as compared to other branches. The job is related to activities aimed at improving agriculture, reconstructing rural areas in general and agricultural machinery, power, farm structures, soil and water conservation, rural electrification, etc.

3. Agricultural Management. Job opportunities also exist in this relatively new areas. Agriculture related Job opportunities are also available in estates and tea gardens.

4. Services Sector and Corporations. In order to regulate the functions of adequate and timely supply of seeds, chemicals, fertilizers, etc. at genuine price, as also to regulate quality of the food products supplied for consumption by people, there is requirement for people to inspect, grade, quality control chemicals, plants and animal quarantine, agricultural technicians, agricultural consultants, agricultural statisticians, veterinarians, foreign agricultural service, inspection and regulation, food and feed, seed and fertilizer. Various corporations providing job opportunities to agriculturists include National Seed Corporation, State Farm Corporation, Warehousing Corporation and Food Corporation.

5. State Agricultural Departments and Banking Sector. One can become an Agriculture Development Officers (ADO). The post is equivalent to that of the Block Development Officers (BDO). Recruitment to these posts is made on the basis of an examination conducted by public service commission/concerned department. You can apply for jobs offered by banks, finance sector seed companies, breeding farms, poultry farms and insurance companies etc. Reserve Bank of India, State Bank of India and the nationalized banks offer openings for postgraduates in

agriculture and allied areas as Field Officers, Rural Development Officers and Agricultural and Probationary Officers.



Fig. 4. Job Opportunities in Agriculture Section.

6. ICRISAT and Placements and Prospects. Another opportunity is to join embassies as Agricultural Specialist and other post. Also ICRISAT is an organization for research related job of agriculture field. India is among the largest producers of vegetables and fruits in the world and has an equally strong floriculture base. Today India's agriculture has become globalized and the idea of integrating Indian agriculture with the world economy is getting support. India has enormous potential as an exporter of agricultural commodities ranging from mushrooms to flowers, spices, cereals, oilseeds and vegetables.

7. Agricultural University. Different agricultural universities recruit agricultural postgraduates for different post from concerned field of specialization. Following are some of the positions which are generally advertised by agricultural universities- Plant Pathologist, Plant Pathologist, Breeder, Agro-meteorologist, Economic Botanist., Research Engineer, Agronomist, Scientist, Associate Professor and Professor.

8. Indian Council of Agricultural Research. One can choose career under ICAR in the areas of research one can become an Agricultural Research Scientists (ARS).

V. PROBLEMS FACED BY THE AGRICULTURE SECTOR

The major problems faced by the agriculture sector in India are as following:

- a) While agriculture is the source of livelihood and the largest employer, it also the major supplier for the non-agriculture sector.
- b) Introduction of green revolution and availability of technology has helped to increase total production of major crops in India.
- c) However, lack of irrigation facility and inefficient government policies has led to distress in the sector.
- d) The process of structural transformation has also been quite slow.
- e) Still majority of the cultivated area is dependent on the yearly rainfall. There has been increasing case of crop failure and farmer suicide in the recent years. Similarly, the lack of effective policy for the minimum support price has also emerged as one of the major problem.
- f) Majority of the rural population who are dependent on agriculture have small land holdings where the marginal productivity of each member is close to zero.
- g) The major challenges faced by the agriculture sector in India include the lack of credit, soil erosion, lack of agriculture marketing, inadequate storage facility and lack of proper mechanism.

VI. CONCLUSION

Apart from employment, agriculture also plays an important role in food security. According to (NSSO, 2013) an average Indian still spends more than half of the income in food security. However, the growth rate of the agriculture sector in India has been fluctuating. Helping our agriculture grow is not only burden of our farmers but of the larger public too. With the second largest population of the earth, food is our primary concern and there are a number of ways where you can support and help the growth of agriculture in the country as well as the world. There should be strong policies to boost the productivity of the agricultural sector. Similarly, the welfare of the small and marginalized farmers should also be taken into consideration. In the recent time the introduction of crop insurance seems to be a good initiation. However, the effectiveness of the scheme can only be analyzed after its implementation.

REFERENCES

- [1]. Arjun, K. M. (2013). "Indian Agriculture- Status, Importance and Role in Indian Economy". *International Journal of Agriculture and Food Science Technology*, **4**(4), 343–346.
- [2]. Chand Ramesh (2004). "Agriculture Growth during the Reforms and Liberalization: Issues and Concerns, Policy Brief ", National Centre for Agricultural Economics and Policy Research, New Delhi.
- [3]. Chadra, R. (2001). 'Trade and balance of payments' in Economic and Policy Reforms in India, National Council of Applied Economic Research, New Delhi, pp. 89-128.
- [4]. Data.gov.in. (2016). "Agriculture Production Stock Yield". Retrieved from <https://data.gov.in/catalog/agriculture-production-stock-yield>
- [5]. Department of Agriculture & Cooperation, & Statistics, D. of E. &. (2014). "Agricultural Statistics at A Glance 2014". New Delhi.
- [6]. Dev, S. M. (2013). "Small Farmers in India: Challenges and Opportunities". Mumbai.
- [7]. EPW Research Foundation (2002). "National Accounts Statistics of India (1950- 51 to 2000-01)".
- [8]. FAO (Food and Agriculture Organization of the United Nations) (2003). "ET0 Agreement on Agriculture: The Implementation Experience- Developing Country Case Studies", Rome, 2004, FAOSTAT database, Rome (<http://faostat.fao.org>).
- [9]. L.P. Yuan (2010). "A Scientist's Perspective on Experience with SRI in CHINA for Raising the Yields of Super Hybrid Rice".
- [10]. Ministry of Agriculture. (2015). "Agricultural Situation in India". New Delhi.
- [11]. NSSO. (2013). "National Sample Survey Office". new Delhi.
- [12]. Mahadevan, Renuka (December 2003). "Productivity Growth in Indian Agriculture: The Role of Globalisation and Economic Reform". *Asia-Pacific Development Journal*. **10** (2): 57–72.
- [13]. Planning Commission. (2015). "Data Bank on Agriculture and Allied Sectors". Retrieved from http://planningcommission.gov.in/sectors/agri_html/DataBank.html
- [14]. Ryan, J. G., & Asokan, M. (1977). "Effect of Green Revolution in wheat on production of pulses and nutrients in India". *Indian Journal of Agricultural Economics*, **32**(3), 8–15.
- [15]. Sebby, K. (2011). "The Green Revolution of the 1960's and Its Impact on Small Farmers in India". University of Nebraska – Lincoln, Nebraska.
- [16]. Sengupta, Somini (2008). "The Food Chain in Fertile India, Growth Outstrips Agriculture".
- Zalkuwi, J., Singh, R., Bhattarai, M., Singh, O., & B. Dayakar. (2014). "Profitability Analysis of Sorghum Production in India". *International Journal of Commerce, Business and Management*, **3**(5), 707–714.