

ORIGINAL RESEARCH PAPER

Agricultural Economics

AN ANALYTICAL NOTE ON THE STATUS OF AGRICULTURE SECTOR IN INDIAN ECONOMY

KEY WORDS: Gross Domestic Product(GDP), Gross Value Added(GVA), Human Development Index (HDI)

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KBSTRACT

In the last 75 years of the Indian economy, more than 50 programmes were introduced for the agriculture and rural sector. In this scenario, it really becomes appropriate to study the current status of Indian agriculture which is the priority sector in India. This paper is an attempt to analyse the status of Indian agriculture which occupies the highest portion of the Indian labour force. The present study describes the different programmes implemented for agriculture and rural development in the previous 75 years. Moreover, the paper describes the trend of the share of the agriculture sector in Gross Value Added and the rate of growth of agriculture. It also evaluates the production trend of agricultural products, fisheries and livestock.

Introduction

India is known as one of the growing economy in the world. It stands in the fifth position for its Nominal GDP worth \$3.469 trillion only. India stands in the eighth rank for M-Cap Ranking, forty-fourth in the World Competitive Ranking, fifty-seventh in the World Innovation Index, and second in Internet Marketing. Moreover, India is known as an agricultural-based country. It stands first in the production of Sugar, Sugarcane, Milk, Banana and Jute. India stands second in the production of Rice, Fruits and Fish. Many aspects lie on the credit side of the Indian economy. On the debit side, India stands in the hundredth position on Global Hunger Index. It stands in one hundred and thirty-second position on Human Development Index. It ranks one hundred and fourth-two in the world per capita GDP (nominal). It stands in one hundred and sixteenth position on Sustainable Development Index.

There are different rankings for different indices. India has a mixture of good and bad rankings in those combinations of indices. So far the concept of 'Development' is concerned, it has also changed over the time period of the previous ten decades or more. Conventionally long term consistent high growth rate of an economy was referred to as 'development'. It was the time when the Indian growth rate was also referred to as the 'Hindu growth rate'. Later the concept of 'human development' was introduced by the United Nations Development Programme (UNDP) in 1990. Further, the concept 'Sustainable Development' was introduced at United Nations Conference on Environment and Development in 1992. Then, the concepts like 'Inclusive Development, Inclusive and Sustainable Development, ICT Development' etc. were introduced. Over time the concept of 'Development' is consistently changing its meaning. In this scenario, this paper is an attempt to analyse the status of Indian agriculture which occupies the highest portion of the Indian labour force.

Objectives of the Study:

This paper is an attempt to analyse the status of Indian agriculture which occupies the highest portion of the Indian labour force. The objective of the study is to understand the different programmes implemented for agriculture and rural development in the previous 75 years. Moreover, the paper tries to understand the trend of the share of the agriculture sector in Gross Value Added (GVA) and the rate of growth of agriculture. It also evaluates the production trend of agricultural products, fisheries and livestock.

Programmes for Agriculture and Rural Development:

For the last 75 years, policymakers of India have introduced many programmes/policies for Agriculture and Rural Development. We can classify those programmes into three categories. One is a programme for Agriculture and Rural Development, the other is a programme for Rural Wage Employment and the third is a programme for Rural Poverty

Alleviation Programme. The first programme for Agriculture and Rural Development was introduced in 1952 entitled Community Development Programme (CDP). Later, the Intensive Agricultural Development Programme (IADP) was introduced in 1960-61. Further, the Intensive Agriculture Area Programme (IAAP) in 1964-65, High Yield Variety Programme (HYVP) in 1966-67, Rural Electrification Programme (REP) in 1969, the Scheme for Discriminatory Interest Rate in 1972, Accelerated Rural Water Supply Programme (RWSP) in 1972, Prime Ministers 20 Point Programme in 1975, National Fund for Rural Development (NFRD) in 1984, National Drinking Water Mission (NDWN) in 1986, Agriculture and Rural Debt Relief Scheme (ARDRS) in 1990, Rajiv Gandhi Grameen Vidyutikan Yojana (RGGVY) in 2005, National Horticulture Mission in 2005, Rashtriya Krishi Vikas Yojana in 2005, National Food Security Mission in 2005, Pradhan Mantri Fasal Bima Yojana (PMFBY) in 2014, Padhan Mantri Gram Sinchai Yojana (PMGSY) in 2015 were introduced with the priority purpose of Agricultural and Rural Development in India.

Apart from this, many programmes for Rural Wage Employment were introduced in the previous 75 years of the Indian Economy. It started with Rural Manpower Programme (RMP) in 1960. Further, Crash Scheme for Rural Employment (CRSE) in 1971, Food and Work Programme (FWP) in 1977, National Rural Employment Programme (NREP) in 1980, Rural Landless Employment Guarantee Programme (RLEGP) in 1983, Jawahar Rojgar Yojana (JRY) in 1989, Employment Assurance Scheme (EAS) in 1993, Jawahar Gram Samridhi Yojana (JGSY) in 1999, Sampoorna Gramin Rojgar Yojana (SGRY) in 2001, Pradhan Manri Gramodaya Yojana (PMGY) in 2000, National Food for Work Programme (NFFWP) in 2005, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in 2005, Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDUGKY) in 2015, Shyama Prasad Mukharji Rurban Mission in 2016, National Apprenticeship Promotion Scheme in 2016, Startup India in 2016 were introduced to promote rural wage employment opportunities in India.

Indian planning was more concerned with rural poverty too. Policymakers introduced many programmes to alleviate poverty in rural India. Rural Poverty Alleviation Programmes include the Marginal Farmers and Agriculture Labours Scheme (MFAL) in 1969, the Small Farmers Development Agency (SFDA) in 1971, the Training of Rural Youth for Self Employment (TRYSEM) in 1979, the Integrated Rural Development Programme (IRDP) in 1979, Development of Women and Children in Rural Areas (DWCRA) in 1982, Indira Gandhi National Old Age Pension Scheme (NGOAPS) in 1995, Indira Gandhi National Widow Pension Scheme (IGNWPS) in 1995, National Family Benefit Scheme (NFBS) in 1995, Bhagyashree Bal Kalyan Yojana (BBKY) in 1998, Annapurna Yojana in 1999, Swarna Jayanti Gram Swarojgar Yojana in 1999,

Antyodaya Anna Yojana (AAY) in 2000, Janani Suraksha Yojana (JSY) in 2005, Aam Admi Bima Yojana (AABY) in 2007, National Rural Livelihood Mission in 2011, Sansad Adarsh Gram Yojana (SAGY) in 2014, Aajeevika Grameen Express Yojana (AGEY) in 2017.

In the last 75 years of the Indian economy, more than 50 programmes were introduced for the agriculture and rural sector. In this scenario, it really becomes appropriate to study the current status of Indian agriculture which carries the highest portion of the Indian labour force. This study is an attempt in this direction.

Population and Agricultural Workers:

According to Census 1951, there were 69.9 million (71.9%) cultivators out of 97.2 total agricultural workers. They were cultivating their own lands. And, only 27.3 (28.1%) million were agricultural labours out of the total workers. After implementing so many programmes and policies for agriculture and rural development, the total number of agricultural workers improved to 263.1 million but the proportion of cultivators reduced to 45% (118.8 million) whereas the agricultural labours improved to 55% (144.3 million) in Census 2011. Census 2021 is yet to publish. These numbers may widen more.

Table 1.1: Population and Agricultural Workers [in Million(percentage)]

Year	Total	Rural	Total Workers	Agricultural Workers			
	-	Populati		Cultiva	Agri	Total	
	tion	on		tors	Labourers		
1951	361.1	298.6	139.5	68.9	27.3	97.2	
		(82.7)		(71.9)	(28.1)	(69.7)	
1961	439.2	360.3	188.7	99.6	31.5 (24)	131.1(6	
		(82)		(76)		9.5)	
1971	548.2	439	180.4	78.2	47.5	125.7(6	
		(80.1)		(62.2)	(37.8)	9.7)	
1981	683.3	525.6	244.6	92.5	55.5	148	
		(76.9)		(62.5)	(37.5)	(60.5)	
1991	846.4	630.6	314.1	110.7(74.6	185.3	
		(74.5)		59.7)	(40.3)	(59)	
2001	1028.7	742.6	402.2	127.3(106.8(45.	234.1(5	
		(72.2)		54.4)	6)	8.2)	
2011	1210.9	833.7	481.9	118.8(144.3(54.	263.1(5	
		(68.9)		45.1)	9)	4.6)	

Source: Registrar General of India

Share of Agriculture Sector in Gross Value Added:

If we compare the contribution of the agriculture sector in the Gross Value Added (GVA) at basic prices for recent 12-13 years, it is observed that the contribution of the agriculture sector and industrial sector has declined marginally. Whereas the contribution of the service sector has improved significantly. In the year 2004-05, Agriculture, forestry and fishing contributions were 19.5% in GVA and it reached 17.2% in the year 2017-18. The contribution of the service sector was 48.4% in the year 2004-05 and it reached 53.5% in the year 2017-18. At present more than 50% of the GVA is contributed by the service sector and less than 20% of the contribution is led by the agriculture sector in India. The growth rate of GVA at constant prices for the agriculture sector was 4.8% in the year 2005-06. It became negative in the year 2008-09, 2009-10 and 2014-15. Fluctuated in the rest of the years and it was around 5% in the year 2017-18. The industrial growth rate was 9.6% in the year 2005-06. It also fluctuated in the decade and reached 5.9% in the year 2017-18. The service sector growth rate was 9.1% in the year 2005-06. It was the only sector that had fewer fluctuations compared to other sectors during the decade. The growth rate of the service sector in the year 2017-18 was recorded at 8.1% and it stood highest amongst the others.

Table 1.2 Sectoral Share in GVA and Sectoral Growth Rate (Figures in percentage)

Year	Agriculture Sector		Industry Sector		Service Sector	
	Share in GVA	Growth Rate	Share in GVA	Growth Rate	Share in GVA	Growth Rate
2004- 05	19.5	4.5	32.1	8.8	48.4	8.0
2005- 06	19.2	4.8	32.2	9.6	48.6	9.1
2006- 07	18.3	2.9	33.8	13.2	47.9	7.0
2007- 08	18.3	5.5	33.7	8.0	48	7.8
2008- 09	17.9	-0.2	33.2	4.0	48.9	6.5
2009- 10	17.8	-0.9	33.2	8.8	49	8.7
2010- 11	18.4	8.8	33.2	7.9	48.5	7.8
2011- 12	18.5	6.4	32.5	3.6	49	5.9
2012- 13	18.2	1.5	31.8	3.3	50	8.3
2013- 14	18.6	5.6	30.8	3.8	50.6	7.7
2014- 15	18.2	-0.2	30	7.0	51.8	9.8
2015- 16	17.7	0.6	29.8	9.6	52.5	9.4
2016- 17	17.9	6.3	29.3	7.7	52.8	8.4
2017- 18	17.2	5.0	29.3	5.9	53.5	8.1

Source: Central Statistics Office

Production Trend in Major Crops, Fisheries and Livestock:

Now we look into the trend of the production of major crops fisheries and livestock to understand the status of agriculture at present, The trend of rice and wheat production in India looks symmetrical. The correlation between both is 0.952 and highly significant at 0.01 level. It reflects that both are symmetrically changed over time of period. It was a period between years 1999 to 2005 when the actual rainfall was less than the normal rainfall so the production of wheat and rice shows a declining trend during the period. Production of rice is always at high than the production of wheat. But the gap between the production of rice and wheat is narrowed recently. The gap between the production of rice and wheat is more up to the year 2008-09 but it is much narrowed down after 2009-10.

Table 1.3: All India Production of Major Crops, Fisheries and Livestock Product (Cotton in million bales; Eggs in Billion no's; Fish '000 tonnes & all others in million tonnes)

Year	Rice	Wheat	Sugarcane	Cotton	Milk	Eggs	Fish
1985- 86	63.83	47.05	170.65	8.73	44	16.1	2876
1986- 87	60.56	44.32	186.09	6.91	46.1	17.3	2942
1987- 88	56.86	46.17	196.74	6.38	46.7	17.8	2959
1988- 89	70.49	54.11	203.04	8.74	48.4	18.9	3152
1989- 90	73.57	49.85	225.57	11.42	51.4	20.2	3677

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1990- 91	74.29	55.14	241.05	9.84	53.9	21.1	3836
1991- 92	74.68	55.69	254	9.71	55.7	21.9	4157
1992- 93	72.86	57.21	228.03	11.4	58	22.9	4365
1993- 94	80.3	59.84	229.66	10.74	60.6	24.2	4644
1994- 95	81.81	65.77	275.54	11.89	63.8	25.9	4789
1995- 96	86.98	62.1	281.1	12.86	66.2	27.2	4949
1996- 97	81.73	69.35	277.56	14.23	69.1	27.5	5348
1997- 98	82.54	66.35	279.54	10.85	72.1	28.7	5388
1998- 99	86.08	71.29	288.72	12.29	75.4	29.5	5298
1999- 00	89.68	76.37	299.32	11.53	78.3	30.4	5675
2000- 01	84.98	69.35	295.96	9.52	80.6	36.6	5656
2001- 02	93.34	72.77	297.21	10	84.4	38.7	5956
2002- 03	71.82	65.76	287.38	8.62	86.2	39.8	6200
2003- 04	88.53	72.16	233.86	13.73	88.1	40.4	6399
2004- 05	83.13	68.64	237.09	16.43	92.5	45.2	6305
2005- 06	91.79	69.35	281.17	18.5	97.1	46.2	6572
2006- 07	93.36	75.81	355.52	22.63	102.6	50.7	6869
2007- 08	96.69	78.57	348.19	25.88	107.9	53.6	7127
2008- 09	99.18	80.68	285.03	22.28	112.2	55.6	7616
2009- 10	89.09	80.8	292.3	24.02	116.4	60.3	7998
2010- 11	95.98	86.87	342.38	33	121.8		8231
2011- 12	105.3	94.88	361.04	35.2	127.9	66.5	8666
2012- 13	105.2	93.51	341.2	34.22	132.4		9040
2013- 14	106.7	95.85	352.14	35.9	137.7	74.8	9572
2014- 15	105.5	86.53	362.33	34.8	146.3	78.5	1016 4
2015- 16	104.3	93.5	352.16	30.15	155.5	82.9	1079 6

Sources: Directorate of Economics & Statistics, DAC&FW, Department of Animal Husbandry Dairying & Fisheries

If we look at the production of cotton, up to 2004-05 it was less than 15 million bales. But after 2004-05 it was increasing very rapidly. Except the year 2008-09, the production of cotton is rapidly increasing than any other crop. In the last 10 years, the production of cotton has increased very rapidly than the previous two decades. The rate of growth of cotton production is very high than any other crop during the years 2004-05 to 2013-14. Commercial crop sugarcane also showed an increasing trend in the last three decades. By its biological features, sugarcane is known as grass than crop. It is always high in production than any other crop production in India. There is a very steep fall in sugarcane production from 2003 to 2005 and 2008 to 2010. It was a period of scarce monsoon rain. India stands at the first position (as per 2014 data) in the world in the production of milk contributing 18.3% of the world's production. India stands in the third position (as per 2014

data) in the production of eggs after China and USA. If we look at the trend of Milk, Eggs and Fish there isn't any major business cycle structure like in the production of rice, wheat, sugarcane and cotton. A major reason is, all these products are not dependent on monsoons but on some other non-natural factors.

Conclusions:

After implementing more than fifty programmes/policies for agriculture and rural development the agricultural share in the GVA stands at the bottom as compared to other sectors. Moreover, the rate of growth of the agriculture sector is also on the lower side as compared to other sectors in India. As mentioned earlier, the number of agricultural workers in the total worker is declining significantly and it can be an alarming situation in near future. There can be a huge scarcity of agricultural labour and it may harm the agricultural yield. It is also found that the number of self-cultivators is declining significantly and the engagement of agricultural labours increasing. On the one side the engagement of agricultural labours increasing and on the other side scarcity of agricultural labour may lead to disturbances in the agricultural sector. Continuous improvement in the production of Eggs, Milk and Fisheries is welcoming side but it covers a limited part of the Indian region. Rest agricultural products are facing uncertain business cyclical fluctuations.

Most of the agricultural and rural development programmes were a kind of 'big push' to concerned sectors. It was top to a bottom approach adopted in most of the policies. There were homogeneous policy guidelines for the heterogeneous agricultural labours with the expectation of homogenous results. Even after 75 years of planning and implementing more than 50 programmes for agriculture and rural development policymakers really need to pay serious attention towards the agriculture sector and rural India.

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