

Share of Agriculture in National Income of India



Economics

KEYWORDS : national income, Agricultural share, NNPFC , NFIA, Engel Effect, Rybczynsky Effect, Clark Effect

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ABSTRACT

Agricultural share in national income of India declined. It declined from 28.97 per cent in 1990-91 to 16.74 per cent in 2011-12. It shows that NEP failed to stop the declining trend of share of agriculture in national income of India. It signifies that dependency of the Indian economy is switching over from agriculture to non-agricultural sectors.

Introduction

Agriculture shares 51.00 per cent in total employment, 12.28 per cent of national export, 13.98 per cent of NDP at factor cost and 16.74 per cent of national income of India in 2012. It shows that agricultural sector plays an important role in Indian economy. The present study will try to show the declining share of agriculture in national income of India.

Literature review

Agriculture forms a large share of national output and employment in early stage of development (Timmer, 1988). At all levels of development, technical progress appears to have been faster in agriculture than manufacturing (Martina and Mitra, 2001). No agriculture has been able to sustain a rapid transition out of underdevelopment without raising productivity in its agriculture (Timmer and Akkus, 2008). A dynamic agriculture raises labour productivity in rural economy and pulls up wages (Timmer and Akkus, 2008). A rise in agricultural productivity leads to transfer of labour force from agriculture to other sector of the economy (Gollin, 2002). The agricultural sector contributes to economic growth, but that economic growth reduces the role of agriculture in terms of GDP (Haggblade, 2005). Agriculture being a subject to diminishing returns, is not able to sustain an increasing level of production and income (Kaldor, 1967). **The present literature review shows that no study has been carried out to know the share of agriculture in national income of India at constant price 2004-05 after the liberalization. The New Economic Policy implemented after 1990-91 failed to stop the declining trend of share of agriculture in national income of India.**

Objective

The objective of the present paper is to know share of agriculture in national income of India.

Methodology

To get the national income (NNP_{FC}) one has to add NDP_{FC} with NFIA. NNP_{FC} data have been collected from RBI, Government of India. NFIA has been estimated by adding contributions from three sectors namely agriculture, industry and services. It consists of (i) net compensation of employees and (ii) net income from property and entrepreneurship (interest, rent, dividend and profit) including reinvested earning of foreign companies. The term net stands for receipts of current income by residents abroad minus disbursement of current income to non-residents in India. The current price estimates of exports are deflated by unit value index of imports and imports by unit value index of exports with base year 2004-05. To get the national income (NNP_{FC}) one has to add NDP_{FC} with NFIA.

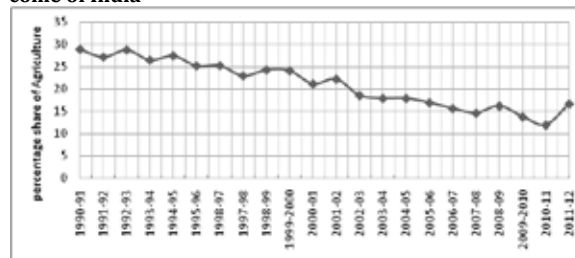
Analysis: Declining agricultural share in national Income

The share of agriculture in national income of India has been declining over the period as shown as in table-1, table-1 and figure-1. It declined from 28.97 per cent in 1990-91 to 16.74 per cent in 2011-12. Agricultural sector contributed Rs. 3484 billion in 1990-91 and Rs. 7618 billion in 2011-12. It shows that the contribution of agriculture in national income increased 118.65 per cent in 22 years (1990-2012) and 5.39 per cent per annum. **It shows that contribution is increasing but percentage**

share of agriculture in national income is declining. It signifies that the share of other sectors in the economy is rising.

The reason of declining share of agriculture can be cited as below. **First**, relatively low income elasticity of demand for food, with ceteris paribus, causes the price of food to decline (Engel Effect). Due to low income elasticity of demand for agricultural products and high income elasticity of demand for manufacturing and services, the demand for agricultural products declines when income rises (Fisher and Clark). **Second**, Relative commodity price constant, changing relative factor supplies away from land and labour towards capital and skills increases output in sectors that use capital and skills intensely and reduce output in sectors that use other factors intensely (Rybczynsky Effect). **Third**, productivity growth rates in agriculture are lower than in manufacturing (Technical Effect and Clark Effect). **Fourth**, changes in demand pattern causes declining share of agriculture (Fisher and Clark Effect). **Fifth**, fixed factor of production in agriculture has limited the growth of agriculture. **Sixth**, IRS (Increasing Returns to Scale) in manufacturing and DRS (Decreasing Returns to Scale) in agriculture cases a declining share of agriculture in national income. **Seventh**, labour saving technology in industry and labour intensive technique in agriculture causes agricultural share in national output to fall.

Figure-1: Percentage share of Agriculture in National Income of India



Significance of declining share of agriculture can be as shown as below. **First**, Indian economy is rising. **Second**, dependency of Indian economy on agriculture is decreasing.

Conclusion

Indian economy was liberalized in 1991. New Economic Policy (NEP) as a structural change was implanted since then. Economic growth took place. Agricultural share in national income of India declined. It declined from 28.97 per cent in 1990-91 to 16.74 per cent in 2011-12. It shows that NEP failed to stop the declining trend of share of agriculture in national income of India. It signifies that dependency of the Indian economy is switching over from agriculture to non-agricultural sectors.

Table-1: Sectoral Composition of National Income (Rs. Billion) of India at constant price 2004-05

year	National Income of India			
	Agriculture (a)	Industry (b)	Services ©	NNP _{FC} (a+b+c)
1990-91	3484.12	2705.58	5833.4	12023.1
1991-92	3303.36	2757.44	6058	12118.8
1992-93	3682.36	2801.37	6284.77	12768.5
1993-94	3598.94	3071.52	6870.74	13541.2
1994-95	3967.09	3288.26	7154.35	14409.7
1995-96	3910.02	3748.4	7816.38	15474.8
1998-97	4243.37	4015.36	8498.87	16757.6
1997-98	4020.24	4035.02	9396.34	17451.6
1998-99	4535.43	4062.68	10014.39	18612.5
1999-2000	4840.12	4414.91	10757.47	20012.5
2000-01	4403.11	4942.33	11403.16	20748.6
2001-02	4884.24	4921.36	12101.8	21907.4
2002-03	4247.22	5296.7	13239.68	22783.6
2003-04	4436.1	5391.31	14833.49	24660.9
2004-05	4726.32	5096.41	16469.27	26292
2005-06	4895.24	5292.74	18584.82	28772.8
2006-07	4950.27	5622.68	20918.55	31491.5
2007-08	5063.6	5476.8	23977.9	34518.3
2008-09	5964.59	4748.97	25930.34	36643.9
2009-2010	5481.65	5523.99	28590.86	39596.5
2010-11	5125.21	5361.97	32200.02	42687.2
2011-12	7618.6	3529.5	34348.4	45496.5

Source: (1) DGCI&S, Ministry of Commerce, Kolkata
(2) RBI, Government of India
(3) Economic Survey

Table-2: Percentage Share of Agriculture in National Income of India at constant Price 2004-05

year	National Income of India			
	Agriculture (a)	Industry (b)	Services ©	NNP _{FC} (a+b+c)
1990-91	28.97855	22.50318	48.51827	100
1991-92	27.25814	22.75341	49.98845	100
1992-93	28.83941	21.9397	49.2209	100
1993-94	26.5777	22.68278	50.73952	100
1994-95	27.53069	22.81977	49.64954	100
1995-96	25.26701	24.22261	50.51038	100
1998-97	25.32206	23.96143	50.71651	100
1997-98	23.03651	23.1212	53.84228	100
1998-99	24.36766	21.8277	53.80465	100
1999-2000	24.18548	22.06076	53.75375	100
2000-01	21.22124	23.82006	54.9587	100
2001-02	22.29493	22.46437	55.24069	100
2002-03	18.64157	23.24786	58.11057	100
2003-04	17.98839	21.86177	60.14983	100
2004-05	17.97627	19.38388	62.63985	100
2005-06	17.01343	18.39494	64.59163	100
2006-07	15.71938	17.8546	66.42602	100
2007-08	14.66932	15.86637	69.46431	100
2008-09	16.27717	12.95978	70.76305	100
2009-2010	13.84377	13.9507	72.20552	100
2010-11	12.00643	12.56107	75.43249	100
2011-12	16.74546	7.75774	75.4968	100

Source: (1) DGCI&S, Ministry of Commerce, Kolkata
(2) RBI, Government of India
(3) Economic Survey

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