

Indian Agribusiness Rejuvenating Agricultural Growth in Globalised Era

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Indian agribusiness covering wide spectrum of activities is driving towards boom and is in its growth stage attracting investments primary in production, processing and distribution areas. In the present globalisation scenario, there is a major shift from 'agriculture' to 'agribusiness' that includes both farm and non-farm based activities. It is being viewed as an essential pathway to revitalise and rejuvenate Indian agriculture sector. The main highlight of the study is to analyse the performances of Indian agriculture in the globalisation era, analyse agribusiness in India from the perspective of globalisation and examine the nascent areas of Agribusiness in India. Findings reveal that India is the world's largest producer of fruits, vegetables, marine products, dairy etc therefore it need to focus more on these commodities in fresh as well as in the processed form. The country has a vast rural population and rural markets are fast growing opening up the opportunities for value addition, retailing, packaging, exporting etc.

Key Words: Globalisation, Agriculture, Agribusiness, Farm Based Activity, Non- Farm Activity.

Introduction

Agriculture in India has a multi-functional role to play in the changing global scenario of the new millennium. With the advent of globalisation modern agriculture system is evolving with higher potentials for delivering socio-cultural, economic and environmental benefits, including ecosystem service and enhancement of rural livelihood, in addition to providing food and other primary commodities. In the present day of LPG agriculture is managed by comparatively better skilled manpower and a shift from 'agriculture' to 'agribusinesses' is being viewed as an essential pathway to revitalise and rejuvenate Indian agriculture sector. Agribusiness is a broad concept that covers all aspects of agricultural production, processing and distribution. It is the sum total of all procedures involved in the manufacture and distribution of farm supplies, production operations on the farm and the storage, processing and distribution of farm commodities and items made from them. Agribusiness includes various stakeholders like input suppliers, credit suppliers, farmers, agro processors, wholesale and retail traders, exporters and importers, consumers, agricultural entrepreneurs all dealing in agricultural and allied activities. The factors influencing agribusiness are the trends in the domestic and global economy, competitions, consumer taste and preferences, customs and values of the society, infrastructural facilities, science and technological changes and the governmental rules and regulations. The broad scope of Agribusiness incorporates management of agricultural input, its processing and output management. Input management covers the management of seeds, feed, pesticides, fertilizers etc. Agricultural infrastructure include irrigation, power, and machinery, primary production includes production of fruits, vegetables, forestry, livestock, dairy etc. Agribusiness also adds value through processing of agricultural products in the form of processed food, beverages, agrichemicals etc. Above all it encompasses agricultural marketing (storage, distribution, grading, packaging, labeling, branding), agricultural services (finance, insurance, advertising, information dissemination) and agricultural sciences (agro climate studies, bio technology, disaster management etc) that open new vistas for socio economic growth and development in the field of agriculture and allied sectors in the country.

(Figure: 1 Concept of Agribusiness – annexure 1)

Indian Agro sector has witnessed a substantial change from traditional farming to better planned, managed, professional and scientific agricultural practices that are more quality, growth and value oriented. It is moving through a transition phase from basic farming activities to a more modern and hi tech agribusiness. Traditional agriculture mainly focused on production of agricultural commodities, processing it and making them available for final consumption. In agribusiness the

scope of these basic processes are further widened and covers broader areas like supply of production inputs, undertaking research and educational activities, moving on to the production process, carrying out various marketing activities like storage, processing, packaging, transportation etc to market it and finally making it available for final consumption.

(Figure: 2 Transformation of Traditional Agriculture to Agribusiness - Annexure 1)

Objectives of the Present Study

The study has following objectives:

- Analyse the performances of Indian agriculture in the globalisation era
- Analyse agribusiness in India from the perspective of globalisation
- Examine the nascent areas of Agribusiness in India

Methodology

The present study is predominantly based on secondary source of statistics, which is primarily collected from various research studies of similar nature. Secondary information both from published and unpublished sources were used like books, periodicals and articles etc pertaining to agribusiness and globalisation, online publications in the web sites, annual reports of Central Statistical Organisation, Agricultural Departments, RBI, data from government, non government, national and international organisations, associations etc were used.

Results and Discussions

• Indian Agriculture in the Globalisation Era

At the time of Independence, Indian economy was basically a backward agrarian economy. During the planning period, Indian agriculture has passed through various phases experiencing a lot of policies and measures for raising productivity and contributing to growth. However, the share of agriculture has been consistently declining due to the developments of the secondary and service sectors of the economy.

Table: 1 indicates the percentage share of Indian GDP at 2004-05 prices. In the total GDP at factor cost the aggregate of agriculture, forestry and fishing had 19% share during the year 2004-05, later on it decreased to 15.8% and further to 14.7% in the years 2008-09 and 2009-10 respectively. In the agriculture and allied activities 12.4% share was that of agriculture alone, forestry and logging had a share of 1.4 % and fishing, 0.71% in the year 2009-10. Industry had a percentage share in GDP of 28.1% and service sector had a major share of 57.2% during the years 2009-10. This shows that the percentage share of agriculture in Indian GDP has been decreasing and that of service sector is on a rising trend.

(Table: 1 Percentage Share of GDP at 2004-05 Prices- Annexure 2)

Fig: 3 shows the comparative performance of growth of GDP and Agricultural GDP from 1992-93 to 2010-11. When the national GDP showed a rising trend agricultural GDP was going through its ups and downs. During the years 1995-96, 1997-98 it was on negative figure. Later it recovered and in 2002-03 there was a sharp decline and it dropped to extreme negatives. In 2003-04 agricultural GDP increased and it was above the overall national GDP. In 2010-11 agricultural GDP stood at 7% and total GDP at 8.4%.

(Fig: 3 Comparative Performance of Growth of GDP and Agricultural GDP- Annexure1)

Horticulture Crops - India's Position in World Agriculture

Horticulture includes wide variety of crops like, vegetables, fruits, root and tuber crops, flowers, aromatic and medicinal plants, spices and plantation crops etc. it is increasingly realised that horticulture is a best option to improve livelihood security and nutritional security through value addition. India is one among the largest producers of vegetables and fruits in the world. As on 2010-11, horticulture crops occupied an area of 21.3 million hectares, producing 231.1 million tones of horticulture crops.

Table: 2 depicts the major world producers of fruits and vegetables in 2010-11. China is the largest producers of fruits, but in terms of productivity Indonesia and USA tops the list with 22.4 tonne per hectare and 22.2 tonne per hectare. India is the

second largest producers of fruits in the world and in terms of productivity per hectare they are only in the eighth position. In the case of vegetable production Italy, Indonesia and Philippines tops the chart. India has a productivity of 17.3 t/ha and is in the ninth position in terms of productivity of vegetables. India's production is high but need to get higher benefits by getting higher yield per hectare.

(Table: 2 Major World Producers of Fruits and Vegetables 2010-11- Annexure 2)

Table: 3 indicate the total agricultural imports and exports in relation to total national imports and exports. In the year 2005-06 the percentage of imports in agriculture to the total national imports was 3.26 percent. In 2007-08 and 2008-09 it decreased to 2.95 percent and 2.71 percent respectively. Later in the year 2009-10 it increased to 4.31 percent and slightly dropped to 3.50 percent in the coming year. In the case of export the percentage of export of agriculture to the total national export showed a more or less stable condition. The percentage of export was around 10 percent over a period of years extending from 2005-06 to 2010-11; there was an increase of 12.05 percentages in the year 2007-08.

(Table: 3 Total Agriculture Vis a Vis Total National Import/Export- Annexure 2)

Table: 4 Shows that India's major agricultural exports includes cotton, marine products, oil meals, Basmathi rice, sugar, meat preparation etc.

(Table: 5 India's Major Agricultural Exports during 2010-11- Annexure 2)

Table: 5 depicts India's major imports like vegetable oil, wood products, pulses, fruits and nuts, cashew nuts, spices etc.

(Table: 5 India's Major Agricultural Imports during 2010-11- Annexure 2)

Fig: 4 indicates the Indian agricultural exports and imports as a percentage of agricultural GDP has been increasing from 11.1 percent in 2005-06 to 13.7 percent in 2009-10 but slightly dropped to 12.7 percent during the year 2010-11.

(Fig: 4 Trend in Trade of agricultural commodities- Annexure 1)

Table: 6 shows India's world ranking in the production of various agricultural commodities. India ranks first in the case of millet, pulses, buffalo meat and milk, mango, banana papaya etc. India is placed in the second position in world in production of rice, wheat, sugarcane, sheep meat, fresh vegetables, potatoes etc. It is in the third rank in case of commodities like beans green and apple and fourth position in case of citrus fruits, oranges etc.

(Table: 6 India's World Ranking in Major Agricultural Commodities- Annexure 2)

Nascent Areas and Scope for Agribusiness in India

(i) Input Management

- Livestock feed, fodder
- Agricultural machineries and equipments
- Soil, water, seed, organic and inorganic manure
- Fertilizers, pesticides, herbicides, insecticides, etc.

(ii) Agri infrastructure

- Transport and communication services
- Power, irrigation, diesel
- Cool chain infrastructure, cold storages devices
- Storage, warehousing, packing, packaging infrastructure
- Agri-clinics and service centres

(iii) Agro based Production

- Production of high-yield varieties of seeds

- Producing high quality planting material
- Micro- propagation methods through tissue culture
- Plant nurseries, orchards, plantations and organic farming
- Dryland agriculture, hill agriculture
- Floriculture, Horticulture
- Pisciculture, Fisheries, Aquaculture, Apiculture etc.
- Microbial cultures and production of vermicompost
- Commercial crops like soya bean, mustard, ground nuts etc
- Animal husbandry, Livestock management, Dairy farming.

(iv) Agri Processing

- Processing of vegetables, fruits including dehydration, canning, aseptic packaging, processing of spices, bleached dry ginger and spices' powder.
- Processing of food grains like wheat, rice, maize etc preparation of powders through mills.
- Processing of fruits- jams, squash, juice, soft drinks, canned fruits
- Preparation of oil from vegetables, coconut, mustard
- Processing of sugarcane for preparation of sugar grains, candies, various jaggery products
- Processing of dairy products- curd, butter, milk powder, ghee
- Processing for poultry products and livestock products, livestock wastes

(v) Trade and Others

- Contract farming, Cooperative farming
- Retailing of agricultural and agro based products
- Value chain management and marketing logistics
- Capacity building, including human resource development in agribusiness

(vi) Agri Marketing and Agri Services

- Agricultural finance
- Transportation and Information dissemination
- Insurance coverage for agricultural risk
- Storage and warehousing
- Supply and cold chain management
- Sorting, grading, standardisation, packaging, labeling, advertising etc
- Marketing logistics and value added marketing
- Training and development

(vii) Agri Science and Technology

- Agro climate studies
- Disaster Management
- Research and Development
- Agriculture Engineering
- Technologies related to pre harvest and post harvest
- Bio-technology, gene mapping, cloning etc

(viii) Agri Management

- Input management
- Finance Management
- Production management
- Human Resource Management
- Farm management
- Agricultural Marketing Management
- Customer Relationship Management
- Information and Communication Technology
- Agricultural Management Information System
- Supply Chain Management
- Risk Management

Conclusion

Globalisation in agribusiness entails both opportunities and challenges, the contrasting scenarios reflects achievements on one hand and unfolds poor development indicators on the other hand. Indian agriculture was mainly dependent on imports for feeding their large population but with the globalisation and impacts of structural reforms agriculture has attained new dimensions through agribusiness which is making huge strides in reaching its potential development. Globalisation has given new impetus in the development of agriculture sector in India transforming it to agribusiness that has unprecedented level of corporate interest. Agribusiness has a lot of opportunities in the country; India is the world's largest producer of fruits, vegetables, marine products, dairy etc. The country has a vast rural population and rural markets are fast growing opening up the opportunities for value addition, retailing, packaging, exporting etc

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APPENDICES

Annexure- 1

Figure: 1 Concept of Agribusiness

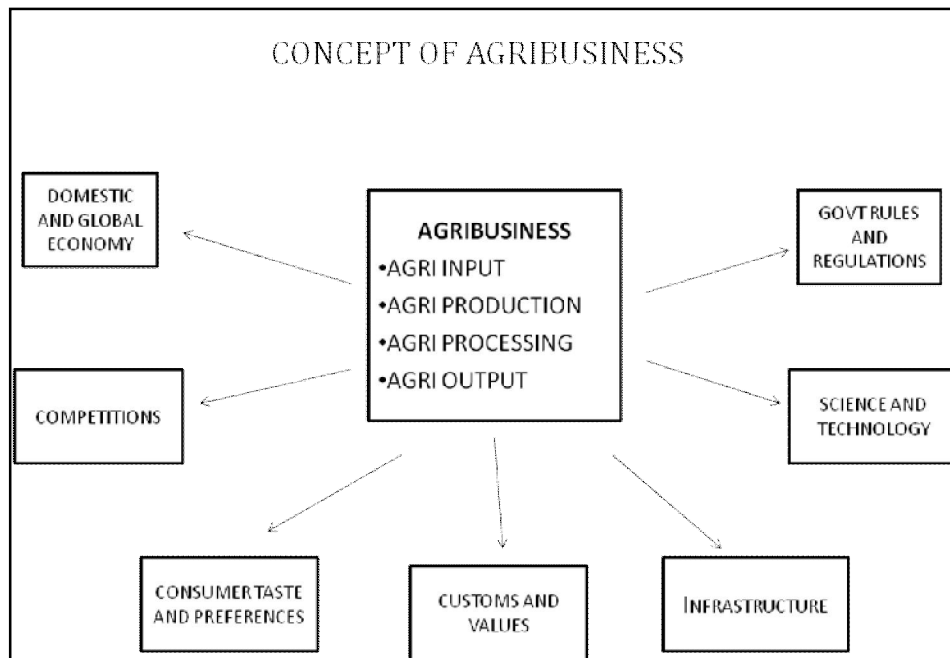
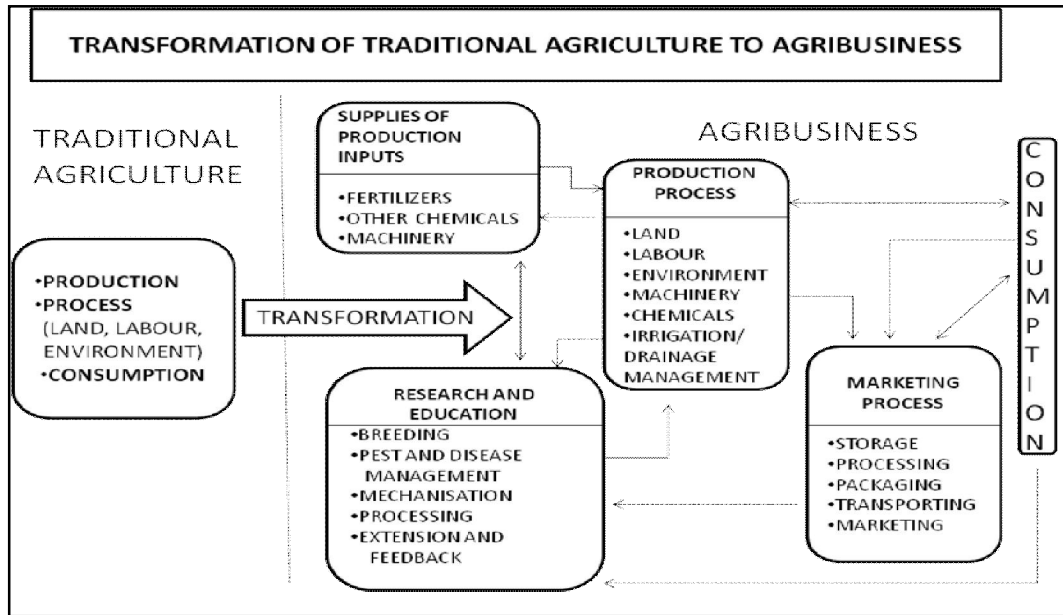
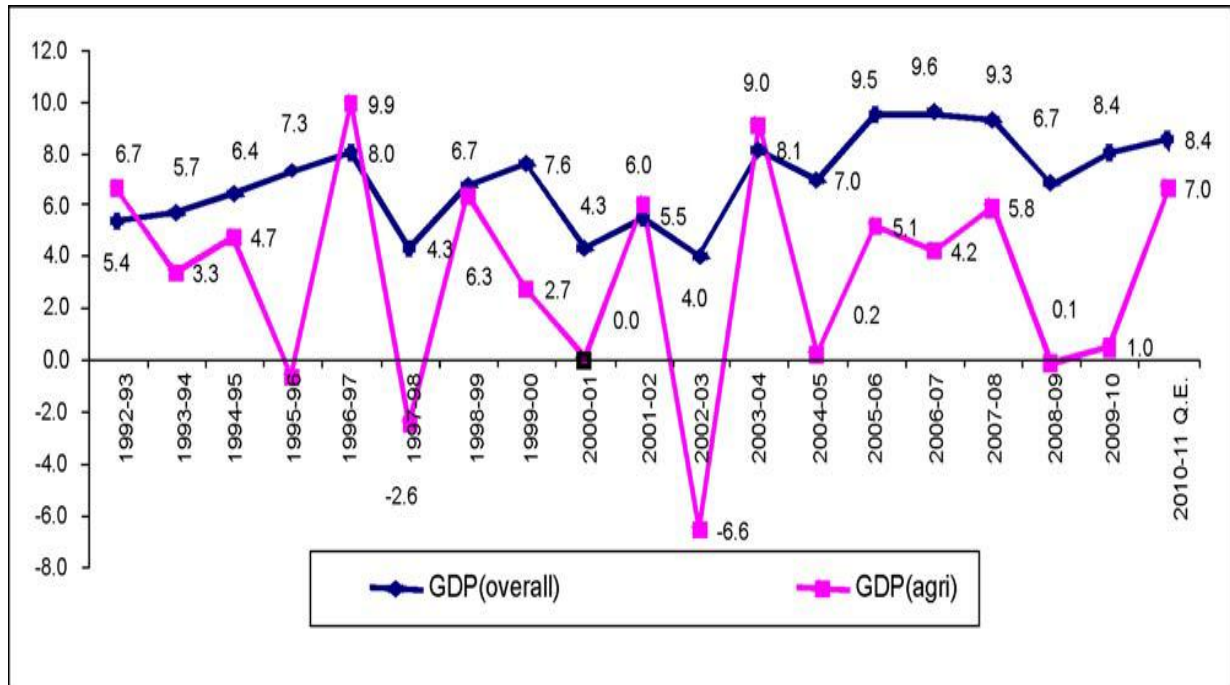


Figure: 2 Transformation of Traditional Agriculture to Agribusiness



Reardon *et.al*, 2008

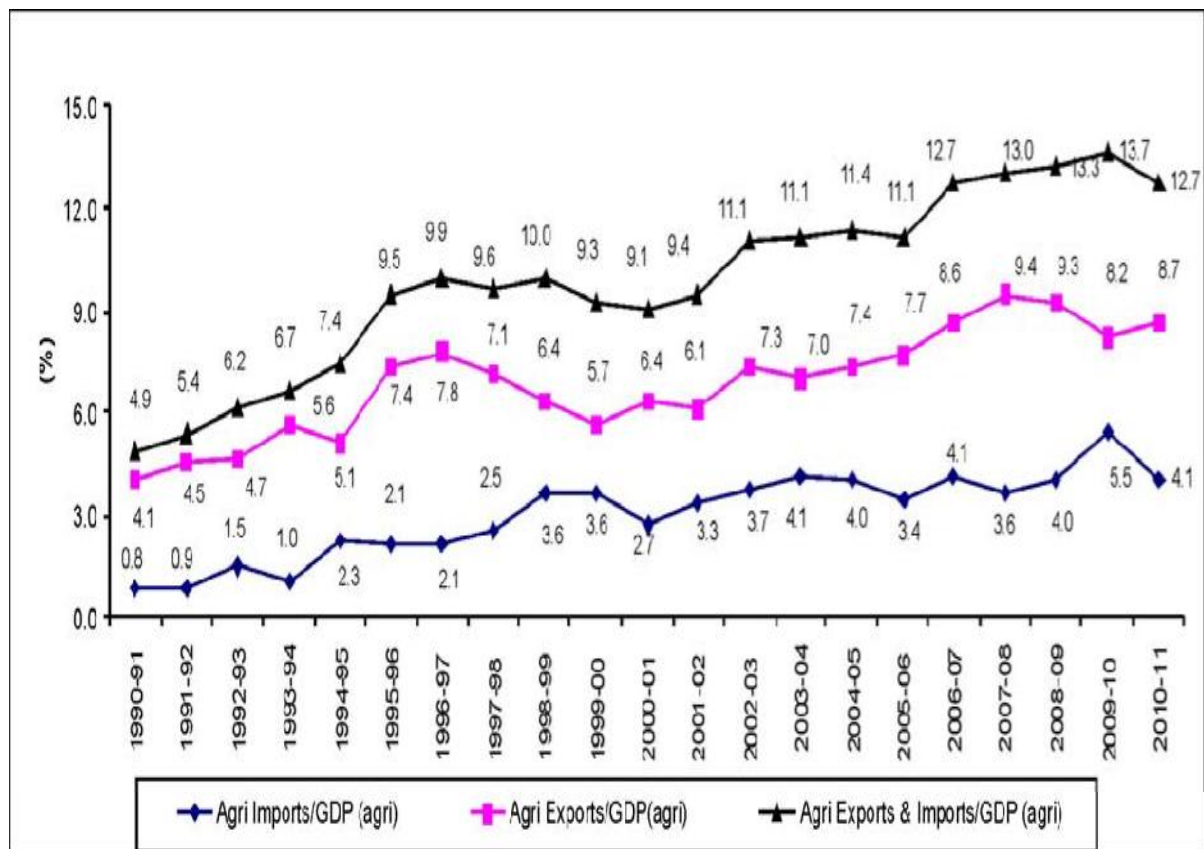
Fig: 3 Comparative Performance of Growth of GDP and Agricultural GDP



Source: CSO.

Note: Figures are at 2004-05 prices.

Fig: 4 Trend in Trade of agricultural commodities



Source: CSO, DGCI&S.

Annexure-2

Table: 1 Percentage Share of GDP at 2004-05 Prices (Rs in Crore)

Sl. No	Industry	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (Q)	2011-12 (R)
I.	Agriculture, Forestry, Fishing	19.0	18.3	17.4	16.8	15.8	14.7	14.5	14.0
	Agriculture	16.0	15.5	14.7	14.3	13.4	12.4	12.3	
	Forestry and Logging	2.1	1.9	1.8	1.7	1.6	1.5	1.4	
	Fishing	0.9	0.9	0.9	0.8	0.8	0.8	0.7	
II	Industry	27.9	28.0	28.7	28.7	28.1	28.1	27.8	27.0
III	Services	53.0	53.7	54.0	54.4	56.1	57.2	57.7	59.0
	GDP at Factor Cost	100	100	100	100	100	100	100	100

Source: Central Statistics Office, Govt. of India. Q- Quick Estimates R-Revised Estimates

Table: 2 Major World Producers of Fruits and Vegetables 2010-11
(Area: 000' ha, Production: 000't, Productivity: t/ha)

Country	Fruits			Country	Vegetables		
	Area	Production	Productivity		Area	Production	Productivity
China	11402.07	122184.94	10.7	China	21047.20	473062.94	22.5
India	6383.00	74878.00	11.7	India	8495.00	146554.00	17.3
Brazil	2441.43	39286.78	16.1	USA	1123.80	35293.56	31.4
USA	1145.48	25383.92	22.2	Turkey	1089.82	25831.19	23.7
Italy	1227.35	16907.90	13.2	Iran	711.86	18678.49	26.2
Mexico	1212.39	15255.60	12.6	Russia	759.10	13233.45	17.4
Indonesia	662.80	14867.76	22.4	Egypt	758.38	19516.40	25.7
Spain	1562.16	15184.42	9.7	Italy	536.80	13499.28	25.1
Philippines	1155.87	16181.73	14.0	Spain	340.60	12679.70	37.2
Turkey	1092.62	13945.60	12.8	Mexico	656.12	12125.39	18.5
Others	26751.92	245223.76	9.2	Others	18458.40	242049.77	13.1
World	55087.08	599300.41	10.9	World	53977.07	1012524.17	18.8

Source: 1. Indian Horticulture Database, 2011, National Horticulture Board, 2011, Ministry of Agriculture, Govt. of India (www.nhb.gov.in).

2. FAO Website, March, 2011.

Table: 3 Total Agriculture Vis a Vis Total National Import/Export (Value: million Rs)

Year	Import			Export		
	Agriculture	Total National	% Agriculture	Agriculture	Total National	% Agriculture
	Value	Value	to Total	Value	Value	to Total
2005-06	214992.20	6604089.00	3.26	492169.60	4564178.60	10.78
2006-07	296378.60	8405063.10	3.53	624114.20	5717792.80	10.92
2007-08	299062.40	10123117.00	2.95	790397.20	6558635.20	12.05
2008-09	371830.30	13744355.50	2.71	859516.70	8407550.60	10.22
2009-10	595283.40	13637355.50	4.31	893413.30	8455336.40	10.57
2010-11*	561962.00	16053146.30	3.50	1201854.80	11481695.6	10.47

Note: * Provisional

Source: Agricultural Statistics at a Glance. 2011. Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

Table: 4 India's Major Agricultural Exports during 2010-11

Export Commodities	Value in Crore (Rs)
Cotton, raw including waste	12981
Marine Products	11548
Oil Meals	10846
Rice Basmathi	10582
Sugar	10339
Meat and Preparations	8776
Spices	7870
Paper / Wood Products	7763

Source: DGCI&S

Table: 5 India's Major Agricultural Imports during 2010-11

Import Commodities	Value in Crore (Rs)
Vegetable Oils	29442
Wood Products	7251
Pulses	6980
Fruits and Nuts (Excluding Cashew Nuts)	3684
Sugar	2787
Cashew Nuts	2480
Spices	1359
Cotton	604
Milk and Cream	492

Jute, Raw	273
Wheat	236

Source: DGCI&S

Table: 6 India's World Ranking in Major Agricultural Commodities

Commodity	Rank
Millet, pulses, Buffalo Milk, Buffalo Meat, Banana, Mango, Mangosteen, Guava, Papaya, Bean's Dry,	1
Rice and Paddy, wheat, sugarcane, jute, tea, Indigenous Goat Meat, Tomatoes, Onion Dry, Vegetables Fresh, Potatoes, Cauliflower and Brocoli, Cabbage,	2
Apple, Bean's Green	3
Citrus Fruits, Orange,	4
Indigenous Sheep Meat	5
Pineapple	7
Sweet Potatoes	8

Source: FAOSTAT, 2011

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