

AN OVERVIEW OF AGRICULTURE SECTOR IN INDIA

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ABSTRACT

India is principally an agricultural country. Agriculture, with its allied sectors, is unquestionably the largest livelihood provider in India. Most of the industries also depend upon the sector for their raw materials. Steady investments in technology development, irrigation infrastructure, emphasis on modern agricultural practices and provision of agricultural credit and subsidies are the major factors contributed to agriculture growth. Agriculture provides livelihood to majority of population and thus remains linchpin of Indian economy. Though agriculture sector's contribution to national GDP has declined to 13.9% in 2011-12 due to relatively higher growth experienced in industries and services sectors, agriculture remains the principal source of livelihood for more than 58% of country's population. The paper focuses on the overview of Indian agriculture sector especially the challenges and opportunities.

Key Words: Agriculture sector, Indian economy

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INTRODUCTION

India is principally an agricultural country. Agriculture, with its allied sectors, is unquestionably the largest livelihood provider in India. Most of the industries also depend upon the sector for their raw materials. Steady investments in technology development, irrigation infrastructure, emphasis on modern agricultural practices and provision of agricultural credit and subsidies are the major factors contributed to agriculture growth.

Agriculture provides livelihood to majority of population and thus remains linchpin of Indian economy. Though agriculture sector's contribution to national GDP has declined to 13.9% in 2011-12 due to relatively higher growth experienced in industries and services sectors, agriculture remains the principal source of livelihood for more than 58% of country's population. Indian economy is growing and to sustain this growth agriculture sector has to perform well. How to produce more of agriculture produce with limited natural resources in sustainable manner for ensuring food and nutritional security and increasing income of farmers, are major challenges before the Nation. The paper focuses on the overview of Indian agriculture sector especially the challenges and opportunities

1. STATUS OF AGRICULTURE SECTOR IN INDIA

1.1 The structure of GDP of the Indian economy. The major sector levels of GDP is presented in Table-I.

Table - 1: Sectors of GDP in India (In percentage)

	Year	Agriculture	Industry	Service	Total
2005-06	20.92	25.33	53.77	100	
2006-07	19.96	26.04	54.00	100	
2007-08	19.26	26.26	54.48	100	
2008-09	18.05	25.75	56.20	100	
2009-10	16.93	25.77	57.30	100	
2010-11	14.52	26.72	58.76	100	

Source: Economic Survey, Various Issues, Ministry of Finance, New Delhi 2012

1.2 Exports and Imports of Agriculture in India are given as under.

Table - 2: Exports and Imports of Agriculture in India Year Exports (per cent) Imports (per cent)

2005-06	10.78	3.26
2006-07	10.92	3.53

2007-08	12.05	2.95
2008-09	10.23	2.74
2009-10	11.14	2.61
2010-11	12.55	2.78

Source: DGCI&S, Ministry of Commerce, Kolkata, 2012.

1.3 Summary of Expenditure during Eleventh Five Year Plan and 1st year i.e. 2012-13 of Twelfth Five Year Plan 1.17 For Eleventh Five Year Plan, Department of Agriculture & Cooperation (DAC) had proposed an outlay of Rs. 51052.12 crore keeping in view the thrust areas identified for the Eleventh Plan. Though Planning Commission approved Plan outlay of Rs.66577 crore including 25000 crore for Rashtriya Krishi Vikas Yojana for DAC for the Eleventh Plan, year-wise allocation and expenditure is as under:-

Table - 3:

(Rupees in crore)

Sl. No.	Year	BE	RE	Expenditure
1	2007-08	5560.00	6927.94	7058.50
2	2008-09	10105.67	9865.68	9530.30
3	2009-10	11307.07	10965.23	10870.15
4	2010-11	15042.00	17254.00	17052.59
5	2011-12	17122.87	16515.05	16554.33
	Total	59137.61	61527.90	61065.87*

1.4 Annual Plan 2013-14

- The scheme-wise break-up of proposed outlay of 26,164.24 crore under Central Sector Schemes, Centrally Sponsored Schemes and State Plan Scheme is placed at Annexure – 2.1. Out of proposed outlay of Rs.26,164.24 crore, 10 per cent of Central Plan has been earmarked for the North Eastern States, 16.2 per cent to Scheduled Caste Sub Plan (SCSP), 8 per cent to Tribal Sub Plan (TSP), as per the standing guidelines. The Planning Commission is yet to finalize the Twelfth Five Year Plan.
- The proposed Plan outlay of Department of Agriculture & Cooperation for the Annual Plan 2013-14 is Rs. 26,164.24 crores inclusive of State Plan Scheme. The

details of the proposed outlay for the Annual Plan 2013-14, scheme-wise is given in Annexure 2.1

- As against the proposed outlay of Rs. 26,164.24 crore for the Annual Plan 2013-14, Planning Commission conveyed its approval to an outlay of Rs. 21,609 crore (Rs. 11,655 crore for Central Plan and Rs. 9954 crore for State Plan – Rashtriya Krishi Vikas Yojana). The scheme-wise break-up of approved outlay of 21,609 crore under Central Sector Schemes, Centrally Sponsored Schemes and State Plan Scheme is placed at Annexure – V & VI. Out of approved outlay of Rs. 21,609 crore, 10 per cent of approved Central Plan has been earmarked for the North Eastern States, 16.2 per cent to Scheduled Caste Sub Plan (SCSP) and 8 per cent to Tribal Sub Plan (TSP), as per the standing guidelines. Planning Commission has also informed tentatively allocation for XII Five Year Plan of Department of Agriculture & Cooperation in the tune of Rs. 1,34,746 crore (Rs. 71,500 crore for Central Plan and Rs.63,246 crore for State Plan - Rashtriya Krishi Vikas Yojana) Annexure - VII.

2.GOVERNMENT INITIATIVES

2.1 Steps taken by government

The government has taken several steps to revitalise agriculture sector and improve the conditions of farming community on sustainable basis by increasing investment, improving farm practices, rural infrastructure, delivery of credit, technology and other inputs. Some of the major initiatives taken by the Government of India include:

- The Government of India plans to set up two spice parks at Sitarganj and Sahaspur in Uttarakhand with the help of Spice Board of India, said Mr Anand Sharma, Union Minister for Commerce and Industry, Government of India. It has also opened fifth spice park at Mattupetty Sivaganga in Tamil Nadu (TN) for processing turmeric and chilli
- The government has allowed 100 per cent FDI under the automatic route in storage and warehousing including cold storages. 100 per cent FDI is also permitted for development of seeds.
- The Cabinet Committee on Economic Affairs (CCEA) has approved the implementation of the National Mission on Oilseeds and Oil Palm (NMOOP) during the 12th Plan with financial allocation of Rs 3507 crore (US\$ 559.51 million). This

would help in enhancing production of oilseeds by 6.58 MT and also bring additional area of 125,000 hectares under oil palm cultivation.

- The government has launched an initiative to spend US\$ 65.1 million to promote 60,000 pulses villages in rain fed areas for increasing crop productivity and strengthening market linkages.
- The Government of India has set a target of 259 MT of foodgrains production in 2013-14. It is implementing various crop development programmes/ schemes for achieving production targets of various crops
 - Flagship and Major Programmes of Department of Agriculture
 - Rashtriya Krishi Vikas Yojana (RKVY)
 - Extending Green Revolution to the Eastern States
 - Pulses and Oilseeds villages
 - Other Sub-Schemes announced under RKVY.
 - National Food Security Mission (NFSM)
 - Accelerated Pulses Production Programme
 - Initiation of Management Information System (MIS)
 - National Horticulture Mission
 - Horticulture Mission for North East and Himalayan States (HMNEH)
 - National Mission on Micro Irrigation (NMMI)
 - Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM)
 - Support to State Extension Programmes for Extension Reforms

2.2 Under the union budget 2013-14,

- The total outlay of Rs 27,049 crore (US\$ 4.31 billion) is proposed for the Ministry of Agriculture. The government has allocated US\$ 145.8 billion for agriculture credit, an increase of US\$ 26.04 billion compared to FY13
- Allocation to the Rashtriya Krishi Vikas Yojana (RKVY) has been increased to US\$ 2.1 billion, an increase of about nine per cent from the previous fiscal.
- National Food Security Mission, a scheme to bridge yields gap of major crops, has been provided US\$ 468.7 million.

3. PROBLEMS FACED BY AGRICULTURE SECTOR IN INDIA

- **Prices of the agricultural commodities are more volatile**— Prices of the agricultural commodities are more volatile than those of the non-farm

commodities due to their low price elasticity and income elasticity and inherently unstable agricultural production due to risk and exogenous shocks.

- **The workforce in agriculture and allied activities has come down**— The workforce in agriculture and allied activities has come down by 11 per cent during the last decade, signalling rise in secondary and tertiary sectors, self-employment and regular jobs,.
- "The number of people depending upon agriculture and allied activities for their livelihood has come down from over 60 per cent to 49 per cent between 1999-2000 and 2011-12,"
- **Rural employment pattern has undergone massive change**— Rural employment pattern has undergone massive change and these changes are likely to continue in future as they are driven by high level of public and private investments in rural areas and also trickle down impact of investments in agriculture itself.
- **Shift from dependence on farm related jobs** — The shift from dependence on farm related jobs towards acquiring other skills and engaging in self-employment, trade and services should be encouraged as it would help intensify financial inclusion in rural areas and contribute to national growth.
- **Rudimentary Infrastructure and Policies leads to slow agricultural growth:** Slow agricultural growth is a matter of concern as most of India's population is dependent on rural employment for a living current agricultural practices are neither economically sustainable and India's yields for many commodities are low.
- **The average size of land holding is small:** The average size of land holdings is less than 20,000m² and subjects to fragmentation due to land ceiling acts and, in some cases family disputes.
- **Poor Socio-economic conditions of farmers:** Illiterary the root cause of farmers tackled vigorously, though the government is taking the initiative by adopting policies like universal education, a highly centralized heurocracy with low accountability and inefficient use of public funds limit their impact on poverty.
- **Use of technology is inadequate:** Adoption of modern agricultural practices and use of technology is inadequate hampered by ignorance, high costs & impracticality in the case of small land holdings.

- **No proper management of irrigation:** There are a few major problems with surface irrigation, Irrigation facilities are inadequate and there is no effective system management for how much water is stored, how much is used for irrigation or what value can be added to this water.

4. THAT WAS THEN, THIS IS NOW

4.1 Measures for developing the agricultural sector in India.

- **Multiple Cropping:** Multiple cropping aims at maximizing production per unit of land and per unit of time by taking three or four crops in a year. By adopting multiple cropping, there are two advantages of getting increased returns & economy of farm resources.
- **Expansion of Irrigation facilities:** Irrigation facilities have increased manifold over time several, minor, medium and major irrigation projects have been launched in the country.
- **Use of HYV Seeds:** HYV Seeds have absolutely revolutionized Indian agriculture by increasing yield per acre.
- **Plant Protection:** Considerable efforts have been made to protect the crops from the insects & pests.
- **Scientific Methods of Cultivation:** In the planning period, stress has been laid on the scientific methods of cultivation. It has been emphasized to adopt superior agricultural technology in respect of crop rotation, use of proper manure, selection of crops etc.
- **Use of Mechanization :** Mechanization is another note worthy step employed to develop agriculture small farmers are assisted with cheap credit facilities through co-operative societies and other modern equipments.
- **More use of Chemical Fertilizers :** Several steps have been taken to encourage the use of cow dung as manure rather than as fuel.

AGRO-ECOLOGICAL INTENSIFICATION OF FOOD PRODUCTION:

- Profitable and sustainable crop rotations
- Choosing quality seed of a well-adapted high-yielding variety or hybrid that also meets market demands
- Planting at the right time to maximize the attainable yield by capturing light, water and nutrients
- Maximize the capture and efficient utilization of available water

- Integrated soil and nutrient management, including conservation agriculture, balanced and more efficient use of fertilizers, as well as utilization of available biological and organic sources
- Integrated pest management, including the use of functional biodiversity, biological control and the judicious use of pesticides
- Harvesting at the right time
- Optimize recycling and use of biomass and agricultural by-products
- Where suitable, enhance crop-tree-livestock interactions

4.2 Opportunities

Growth Drivers

- Population and income growth Demand-side drivers
- Increasing exports
- Favourable demographics
- Growth drivers Hybrid and genetically
- Credit modified seeds
- Mechanisation
- Irrigational facilities
- Growing institutional
- Increasing MSPs
- Introduction of new Green Revolution in Supply-side drivers Policy support schemes Eastern India.
- Opening up of exports of wheat and rice Notes: MSP - Minimum Support Price

Current State of Indian agriculture Industry: 50% of total land is cultivated as against 11% in the world. There are 20 agro climatic regions and nearly 46 out of 60 soil types in the country.

The Indian food processing Industry: The food processing industry has an important role to play in linking the farmers to the final consumers in the domestic as well as international markets. In the next 10 years food production is expected to double.

The Food Supply Chain diversity Population: The diversity should be used to advantage to become the “Halal Food Hub”, the “Organic Food Hum”, “The Vegetarian Food Hub”, “The Sea Food Hub” among others.

Government Initiatives to promote Food Exports: The Govt. of India has accorded high priority to the establishment of cold chains and encourages major initiatives in this sector.

There is no restriction on import of cold storage equipment or establishing cold storage in India.

4.3 GLIMPSES OF SERIOUS CONCERN OF GOVT

- CCI commissions study on agriculture sector
- 11 per cent dip in workforce engaged in agriculture sector: Assocham
- SunEdison launches solar water pump for agriculture sector
- S Varadaraj of Godrej Agrovet wins 'CA CFO Award' in agricultural sector by ICAI.
- Nagpur to host Krishi Vasant farm exhibition in February
- Better days ahead for Indian economy: Prakash P Hinduja
- Need more investments in agricultural education, research: KS Khokhar
- Coir industry should get adequate credit facilities: Pranab Mukherjee
- PM for scaling up growth in agriculture sector
- Parkash Singh Badal bats for adopting nanotechnology in agriculture sector
- Agricultural growth more effective in poverty eradication: Sharad Pawar
- India may achieve 2nd highest foodgrain output this kharif.

5. SUGGESTIONS

- Indian industries should show greater enthusiasm in agri businesses and be more active to market the country's farm produce.
- Issues concerning agriculture-infrastructure is one of the most prominent challenges that need to be addressed by the government. About 40% of primary produce like grains, fruits and vegetables is lost before it reaches the market, due to lack of proper handling, cleaning, sorting, grading and packaging facilities at the village level
- Due to such inefficiencies in the supply chain, it has been estimated that the price received by the farmers is only in the range of 25-60% of what the consumer pays. Strengthening supply chain can benefit the consumers and producers by 20-25%, the report said.
- Agricultural growth, particularly in staple crops, is among the best routes for achieving these and other development goals in developing countries.
- The world's agriculture and food systems must become more productive, more resource-efficient, more resilient, and less wasteful.

- We must transform agriculture in a broad but also multi-faceted manner across multiple agricultural subsectors to respond to the diversity of farmers' environments, objectives, constraints and incentives.
- There are multiple technology choices and paths for agriculture. Those resources must be exploited.
- Meaningful, sustained change requires more public investments in agriculture, particularly investments in infrastructure, research and human resources development to improve performance and ensure equitable distribution of benefits

6. REFERENCES:

The Economic Survey 2012-13, Agricultural and Processed Food Products Export Development Authority (APEDA), The Union Budget 2013-14, Press Releases, Media Reports.