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Agriculture-Led Growth: The Key to Achieving India's $5 Trillion Economy

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Abstract

With a 263.1 million workforce in the agricultural sector, which is 49.6% of the overall workforce as per the 2011 census, agriculture is the backbone of our economy. However, its share of the GDP is only 18.29% (Report, 2020)*. By 2030, India's population is projected to be approximately 1.515 billion., with an increase in demand for food grains to 345 million, compared to its demand of 291.95 million tonnes in 2019* (Ajay Barman, 2017)*. Presently India is the fifth largest economy and certainly moving fast to achieve its goal of a $5 trillion economy by 2025* (Industry, 2018)*. In the agriculture sector with nearly 50% of the overall workforce, the agricultural sector has a vital role in providing food security, rural employment generation and reduction in poverty for inclusive and sustainable growth* (Pawlak, 2020)*. The study focuses on theoretical literature to highlight salient features of Indian agriculture. The research analyses the share of agriculture and allied sector to the GDP and export of Agri products. The paper also focuses on the problems faced in the agriculture sector and explores potential solutions. The research aims to lay out possible strategies for making Agriculture a trillion-dollar economy. The paper explores the potential of cooperative societies in farming and mechanization. The paper argues that the mechanization of crucial activities, institutionalization of cooperative farming, and promotion of private players in the agriculture sector may improve farmer's income and make agriculture profitable. The paper emphasizes for development of Agro-based industries and accelerates commercialization. This indicates a massive potential for value-addition and processing of farm products, which may lead to many opportunities for investment (both domestic and foreign investment) and growth. Unleashing the potential of agriculture, therefore, assumes priority in realizing the target of a five trillion-dollar economy. This paper summarizes the growth potential and policy reforms in agriculture to help achieve the target of a five trillion-dollar economy.*

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1. Introduction

The backbone of the Indian economy is Agriculture and our country's nerves are still in its soil. India's population is predicted to reach 1.515 billion by 2030, with economic growth driving expansion and diversity of the consumer basket (Pathak H, 2022). Agriculture will be critical in ensuring food security, creating jobs, and reducing poverty in order to achieve sustainable and equitable growth (Development, 2010). The future agricultural development strategy should emphasise an integrated approach to crop production and animal husbandry (Udayakumar Sekaran, 2021). On August 15, 2019, the Hon'ble Prime Minister of India presented his goal for India to become the world's third biggest economy, with a five trillion dollar aim by 2024-25 (Times, 2023). According to the Economic Survey 2019-20, India's aim for this target may be met by encouraging wealth development (CEA, Economic Survey of India, 2023). Based on the economy's sectoral mix, a working committee tasked with developing the roadmap has suggested a target of $3 trillion for the services sector, and $1 trillion for the industrial and agriculture sectors, respectively. Agriculture accounts 18.29% to the GVA with a total workforce of 45.6% (CEA, Economic Survey of India, 2023). Because of the workforce's reliance on agriculture, agriculture is a vital industry for fostering equitable economic growth (UN, THE ROLE OF AGRICULTURE IN THE DEVELOPMENT OF LEAST-DEVELOPED COUNTRIES AND THEIR INTEGRATION INTO THE WORLD ECONOMY, 2002). Reflections on the past indicate that the agriculture sector has turned from food deficiency to a food-self-sufficient economy that is a net exporter of a number of agricultural commodities (UN, The future of food and agriculture – Trends and challenges, 2017). Recently, Indian agriculture has begun to commercialise, which can improve direct and indirect links between the farming and the non-farming sectors (YR Meena, 2022). Such connections would produce revenue and job prospects both within and outside of agriculture, resulting in a boost to overall economic growth. The structural transformation and speed commercialization can be achieved with the development of Agro- based industry. 22.7% of total gross value added from manufacturing sector are value-added and processed eatables, textiles, clothes, and leather products (Rana, 2021). Agriculture, as a source of raw materials, makes a significant contribution to the expansion of agro-based industrial goods (Shingie Dubey, 2018). The significant potentiality of value-addition and processing of farm goods will attract a plethora of domestic and foreign investment which will lead to growth of sector (UN, Globalization and the traditional role of agriculture, 2003). Further, the greater usage of inputs such as seeds, fertilisers, pesticides, machinery and services used in farming, may make the agro-input industry an appealing investment opportunity for the business sector (Sun Ling Wang, 2015). Unleashing agriculture's potential thus takes precedence in achieving the five trillion dollar economic aim.

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2. Strengths of Indian Agriculture

2.1 Source of livelihood: Agriculture is the principal source of income for over half of India's people, employing around 45.6% of the entire workforce and contributing 18.29% of the country's GDP (Singh, 2022). The conventional expectation about worker distribution is that it will shift from agriculture to industry and services, as labour productivity in the latter two categories is significantly greater than in agriculture (Hurst, 2007) (Dorward, 2013). Consistent with this previous pattern, PLFS statistics reveal a decrease in the absolute number and share of agricultural workers employed between 2018-19 and 2017-18 (Singh, 2022). However, this process was reversed the following year, when there was a significant increase in agriculture employment and an increase in agriculture's share of the total workforce. As a result, the proportion of industry and services in overall employment fell. Though a total number of jobs generated by industry and services has continued to rise, even in 2019-20, this includes three months with the effect of Covid19 on economic activity. According to these figures, 59.9% of all women employees in the nation were engaged in agriculture, 16.6% in industry, and 23.5% in the service sector in 2019-20. In the case of male employees, 40% worked in agriculture, 27% in industry, and one-third in the service sector.

Table: : Percent distribution of workers over sectors and gender and industry type: 2017–20

Year	Sex	Rural			Urban			Total		
		Agri	Industry	Service	Agri	Industry	Service	Agri	Industry	Service
2017-18	Male	55.0	23.1	22.0	5.4	36.0	58.6	40.2	26.9	32.8
	Female	73.2	13.7	13.1	9.1	30.1	60.8	57.0	17.8	25.2
	Total	**59.4**	**20.8**	**19.8**	**6.1**	**34.8**	**59.1**	**44.1**	**24.8**	**31.0**
2018-19	Male	53.2	23.6	23.2	4.9	35.3	59.8	38.3	27.2	34.5
	Female	71.1	15.3	13.6	7.8	29.2	63.0	55.3	18.7	25.9
	Total	**57.8**	**21.4**	**20.7**	**5.5**	**34.1**	**60.4**	**42.5**	**25.2**	**32.4**
2019-20	Male	55.4	23.0	21.6	5.0	34.2	60.8	40.0	26.4	33.6
	Female	75.7	13.1	11.2	8.2	28.0	63.8	59.9	16.6	23.5
	Total	**61.5**	**20.0**	**18.5**	**5.7**	**32.8**	**61.5**	**45.6**	**23.7**	**30.8**

Source: NSO- PLFS data and population data, Govt. of India

2.2 Large Agricultural Land: According to 2017-18 land utilisation data, the country's total geographical area is 328.7 million hectares (Agriculture, 2017). The net sown area is claimed to be 139.4 million hectares, or 42.4% of the entire geographical area, whereas the gross area of crops grown is 200.2 million hectares, or 43.6% of the total geographical area (Report, 2020). There are also 68.6 million hectares of overall irrigated land. This remained same for the subsequent years. India is the world's second largest producer of fruits and vegetables, sugarcane, wheat, rice, and cotton, and it is the world's second largest agricultural landholder after the United States (Welfare M. o., 2022) (UN, Food and Agriculture Organisation of United Nations, 2020).

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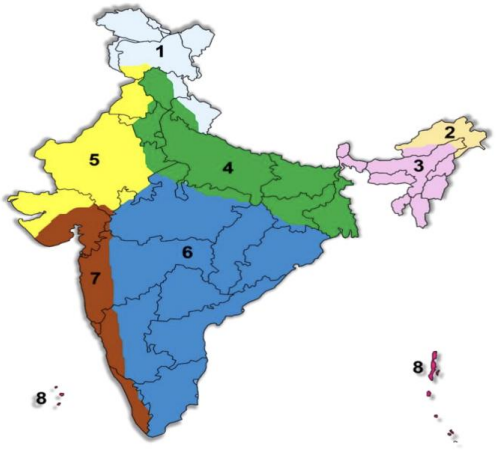
Table: Area, production and yield of major crops

Crops	Area (Lakh hectare)			Production (Million Tonnes)			Yield (kg/ hectare)		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Rice	437.7	441.6	437.8	112.8	116.5	118.4	2576	2638	2705
Wheat	296.5	298.2	314.5	99.9	103.6	107.6	3368	3533	3421
Nutri/ Coarse cereals	242.9	221.5	240.2	47	43.1	47.5	1934	1944	1976
Pulses	298.1	291.6	283.4	25.4	22.1	23.2	853	757	817
Food Grains	**1275**	**1248**	**1276**	**285**	**285.2**	**296.6**	**2235**	**2286**	**2325**
Oil Seeds	245.1	247.9	270.4	31.5	31.5	33.4	1284	1271	1236
Sugar Cane	47.4	50.6	45.7	379.9	405.4	355.7	80198	80105	77893
Cotton	125.9	126.1	133.7	32.8	28	35.5	443	378	451
Jute & Mesta	7.4	7	6.8	10	9.8	9.9	2435	2508	2641

Source: Department of Agriculture, Cooperation and Farmers Welfare, Govt. of India

2.3 Diversity in Cultivation: India's physiography and flora are diverse, as are its 15 different agroclimatic zones (MA Siddiqui, 2019). It is estimated that there are about 18,000 plant species across this wide range, with approximately twenty-five crop species being grown (N Sivaraj, 2018). There are 647 different varieties of fruits, 521 different kinds of leafy vegetables, 145 different kinds of tubers and roots, 118 different kinds of seeds and nuts, etc (Renuka P. Chopde, International Journal of Advanced Research in Science, Communication and Technology). New crops and varieties have been brought in India from ancient times. India's agricultural diversity currently includes indigenous species, wild relatives, and other globally adapted crops (Arora, 1991). India is a major agricultural player among the world, with the biggest cow herd and the highest production of milk, spices, and pulses. (IBEF, India Brand Equity Foundation, 2023).

Figure : Phytogeographic regions of India rich in crop diversity



Source: National Bureau of Plant Genetic Resources

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Table: Region wise crops cultivating patterns

Region	Crop
Western Himalayas	• Barley, wheat, maize, buckwheat, amaranth, pros millet, finger millet • French bean, soybean, lentil, black gram, peas • Pumpkin, cucumber, Allium species, ginger, Brassica • Pome, stone, soft and nut fruits • Medicinal plants
Eastern Himalayas	• Barley, maize, buckwheat, amaranth, foxtail millet, finger millet • French bean, soybean, cowpea, black gram, peas, scarlet bean • Pumpkin, cucumber, Allium species, ginger, chayote, tree tomato, Brassica • Pome and stone fruits
North-Eastern Region	• Rice, maize, sorghum, finger millet, foxtail millet, job's tears • French bean, soybean, pigeon pea (perennial), black gram, rice bean, winged bean • Pumpkin, chayote, cucumber, okra, eggplant, chilli/Capsicum species, pointed gourd, ash gourd • Taros, yams • Citrus - Lime/lemon/orange/grape fruit, banana • Tea, tree cotton, jute, kenaf, Mesta, large cardamom, ginger, long pepper, sugarcane
Gangetic plains	• Rice, sorghum, barnyard millet, little millet/Panicum species • Chickpea, cowpea, mung bean • Okra, eggplant, bottle gourd, Cucumis spp., Luffa spp. • Jack fruit, mango, lemon/lime, orange, jujube, Indian gooseberry/ Emblica spp., jamun, melons • Linseed, Niger, sesame, Brassica • Sugarcane, mulberry
Indus plains	• Durum wheat, pearl millet • Moth bean, cluster bean, chickpea, black gram • Okra, Cucumis species • Jujube, Khirni/ Mimusops sp., phalsa/ Grewia sp. • Sesame, Taramira, Eruca sp • Cotton
Eastern peninsular region/Eastern	• Rice, sorghum, finger millet, pearl millet, fox tail millet, little millet, prosomillet, kodo millet • Black gram, green gram, cowpea, horse gram, Mucuna spp., pigeon

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Ghats / Deccan plateau	pea, Dolichos bean, rice bean • Taro, yam, elephant-foot yam • Banana, mango, lemon/lime, jackfruit • Niger, Brassicae, sesame • Ginger, turmeric, chilli/Capsicum spp., kenaf, sugarcane, coconut, cotton
Western peninsular region/Western Ghats	• Rice, sorghum, finger millet, small millet/Panicum spp. • Black gram, green gram, cowpea, pigeon pea, Dolichos bean, hrose gram, sword bean • Okra, eggplant, cucumber, chilli/Capsicum spp. • Taros, yams, elephant-foot yam • Jackfruit, banana, lime/lemon, orange, jamun/Syzygium spp. • Sugarcane, black pepper, turmeric, ginger, coconut, areca nut, cotton
The Islands regions	• Coconut, bread fruit, chilli, taros, yams, Xanthosoma spp.

Source: National Bureau of Plant Genetic Resources

2.4 Three crops a Year: In India, there are basically three farming seasons: Kharif, Rabi, and Zaid. Kharif and Rabi are the two main crops that rely on the season, while Zaid is a season in the summer season that falls between Rabi and Kharif. Every crop has a specific cultivation method that may be recognised based on the cropping season (Wagle, 2021).

Table: Cropping Seasons and crops grown in states of India

Season	Time		Examples of crops	Features	States
	Sown	Harvested			
Kharif	June- July	September-October	Rice, Maize, jowar, bajra, tur, moong, urad, cotton, jute, groundnut, soybean, tea and coffee	They require a lot of water hence are also called monsoon crops.	Assam, West Bengal, coastal regions of Odisha, Andhra Pradesh, Telangana, Tamil Nadu, Kerala and Maharashtra
Rabi	October-December	April- June	Wheat, barley, gram, peas, mustard	Need cold weather for growth hence called winter crops.	Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Uttar Pradesh
Zaid	March	July	Seasonal fruits, vegetables, fodder crops	Requires warm & dry weather for growth and a longer day-length for flowering	North and north western states

Source: Ministry of Agriculture and Farmers welfare, Government of India

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2.5 Organic Farming: With 2.30 million hectares of total organic agricultural area and a labour force of 27,59,660 farmers, 1703 processors, and 745 dealers, India accounts for one-third of the world's total organic producers (Welfare D. o., 2022). Organic agricultural land has witnessed a significant expansion in recent years. In the 2020-2021 fiscal year, India exported $1.04 billion in organic food (IBEF, India Brand Equity Foundation, 2023).

Table: Indian Organic Agriculture Statistics from 2011- 2021

Source: As per IFOAM FIBL The world of Organic Agriculture, Statistics and emerging trends

2.6 Medicinal plants: There are around 6,000 - 7,000 plants with medicinal qualities. India has a long history of employing medicinal plants in traditional medical therapies like Ayurveda, Siddha, and Homoeopathy (Samal, 2016) (MM Pandey, 2013). These medicinal herbs are also employed in a variety of Indian practises (Division, 2021).

Sl. No	Year	Area Under Organic Cultivation		Number of Farmers		Organic Production (MT)		Biofertilizer Production		Total Organic Manure Production (MT)
		NPOP	PGS-India	NPOP	PGS-India	NPOP	PGS- India	Liquid (in KL)	Career Based (MT)	
1	2011-12	5550405	0		0		0	40324.21		34863600
2	2012-13	5211141	0		0		0	46836.82		41157700
3	2013-14	4719816	6064.14		5809		23612.42	2922.38	53838.3	22941500
4	2014-15	5690000	9249.39		11118		1079	4054.56	80696.45	22986200
5	2015-16	5710384	19281.91		19355		6321660.53	6240.92	88029.3	25478600
6	2016-17	4452987	96291.6		173846		8760810.96	7526.33	109020.11	28029900
7	2017-18	3566538	6455.29		84618		17132676.09	9033.06	121066.54	33872000
8	2018-19	3428639	124989.9		166571		989255.06	22555.27	70417.77	41100974
9	2019-20	3669801	222369.55		365253		2047535.9	30105.94	79446.61	60594104
10	2020-21	4339185	7568.3	1599010	12074	3496800.34	3399520.21	42239.94	192329.29	42940832

There is an export of 960 varieties of medicinal plants to a yearly consumption of greater than 100 metric tonnes for 178 plants (IBEF, HIGH DEMAND FOR MEDICINAL PLANTS IN INDIA, 2020).

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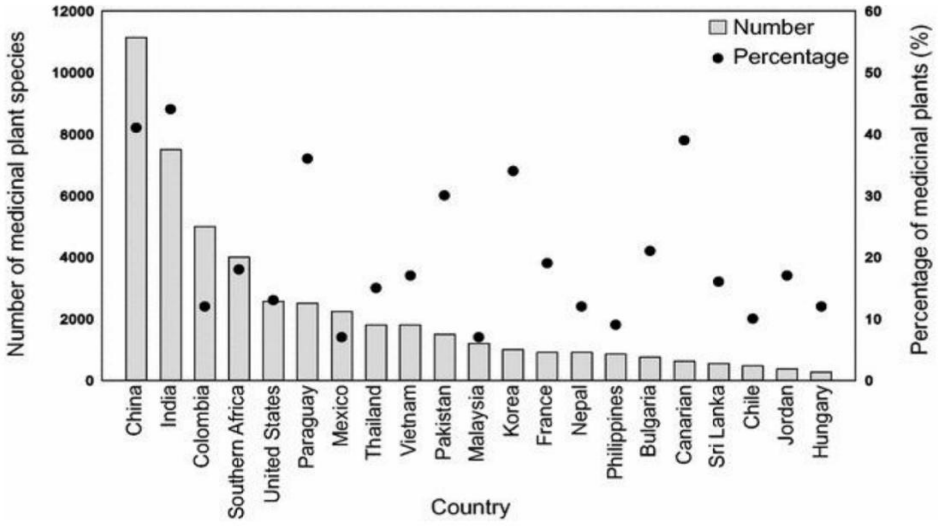
Figure: Number and percentage of medicinal plant species in different countries.



Source: Data sources from (Rafieian-Kopaei, 2013) (Hamilton, 2003) (Marcy J, 2005) (Chen, 2016)

Note: The light bars indicate the number of medicinal plant species, and the dark dots indicate the percentage of medicinal plants compared with the total number of plant species.

2.7 Agro based industries: Agro-based businesses are those that employ plant and animal-based agricultural output as their basic material. The agricultural production is processed, added value, and then sold in the market as a useable product (David P. Anderson, 2009) (Daniel Prager, 2020). Textile and sugar industries, edible oil industries, coffee and tea industries, rubber industries, and so on are examples of agro-based businesses. Despite vast agricultural area, three harvest seasons, and many crop varieties, the agro-based economy employs just 3% of the workers in this sector (UN, The future of food and agriculture – Trends and challenges, 2017). This means that there is a lot of room for expansion in this industry.

Table: Contribution of agro based Industries to GDP at 2004-05 Prices (Rs. Crore)

S. No	Description	2011-12	2012-13	2013-14	2014-15
	GDP at Factor Cost of Which	41,58,676	45,16,071	49,18,533	52,47,530
1	GDP- Agriculture	5,88,757	5,92,110	6,47,305	6,82,016
2	GDP- Manufacturing	6,56,302	7,30,435	7,95,152	8,54,098
3	GDP- FPI	60,378	58,752	67,508	82,063
(Growth rate % of agro based industries in India)					
1	GDP at Facto Cost	6.7	8.6	8.9	6.7
2	GDP- Agriculture	-.01	0.6	9.3	5.4
3	GDP- Manufacturing	4.3	11.3	8.9	7.4
4	GDP- FPI	5.3	-2.7	14.9	21.6
Share of FPI in GDP (%)					
1	GDP FPI as a share of GDP in Agriculture	10.3	9.9	10.4	12.0
2	GDP FPI as a share of GDP in Manufacturing	9.2	8.0	8.5	9.6

Source: National Accounts Statistics 2016

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3. Contribution of Agriculture and Allied Sector to GDP

At current prices in 1950-51, agriculture, industrial, and service sectors contributed 52%, 15%, and 33% of the Indian economy, respectively (H Pathak, 2022). Agriculture and allied sectors' contributions have declined to 15% throughout the years, while industrial and services sectors' contributions have climbed to 27% and 58%, respectively (ANIL KUMAR SINGH, 2020) (Report, 2020). Crops, cattle, forestry, fishing, and aquaculture are examples of agriculture and related industries. Crops alone account for 60.2% of overall GDP from agriculture and 9.63% of national GDP. In comparison to the global average, India's agriculture sector makes substantially more (15.4%), while the contributions of industry and services are lower (27% and 58%, respectively) (CEA, Economic Survey of India, 2023).

Table: Contribution of Agriculture and Allied Sector to GDP

Sector	Agriculture GDP	National GDP
Crops	60.2	9.27
Live Stocks	26.1	4.03
Forestry and Logging	8.1	1.24
Fishers and Aquaculture	5.6	0.86
Agriculture Sector	100	15.4

Source: National Statistical Office, Ministry of Statistics and Programme Implementation, Govt. of India

4. Import and Export of Agricultural Products

Agriculture has become a major source of foreign exchange gains from the export on raw materials and finished commodities (Commerce, 2018). However, India keeps depending on imports for meeting its domestic demand for certain food items, particularly edible oils (Misra, 2009). Over the past three decades, exports have gradually outpaced imports, leading to a rising trade surplus (Industries, 2005). In fiscal years 2017-18 and 2020-21, India had a large trade surplus (CEA, Economic Survey, 2022). Although 2013-14 saw the highest net export value, export growth has lagged behind the rise in imports since then, creating the export-to-import ratio to drop (Debesh Roy, 2022). The industry's exports have increased dramatically in the recent year (CEA, Economic Survey of India, 2023). In fiscal year 22, marine product exports totalled $7.77 billion, rice (Basmati and Non-Basmati) exports totalled $6.98 billion, buffalo meat exports amounted to $3.30 billion, sugar exports totalled $4.60 billion, tea exports totalled 750.93 million, and coffee exports totalled $1,020.80 million (Commerce, 2018). This stresses the significance of having good export marketing strategies.

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Table: Agricultural Exports from India (US $ billion)

[Value in Rs. Crores, Quantity in Tonnes**]**

S. No	Commodity	2016-17		2017-18		2018-19		2019-20	
		Quantity	**Value**	**Quantity**	**Value**	**Quantity**	**Value**	**Quantity**	**Value**
1	Rice- Basmati	3985.2	21512.9	4056.9	26870.7	4414.6	32804.3	4454.8	31026.3
2	Rice (other than basmati)	6770.8	16929.9	8818.5	23437.2	7648.0	21171.2	5056.3	14400.3
3	Spices	1014.5	19111.3	1096.3	20084.9	1133.9	23217.8	1193.4	25642.0
4	Buffalo Meat	1323.6	26161.4	1350.3	26035.2	1233.4	25091.4	1152.3	22661.1
5	Sugar	2522.0	8659.5	1757.9	5225.6	3989.7	9523.1	5798.5	13981.6
6	Cotton Raw included waste	996.1	10907.3	1101.5	12200.1	1143.1	14627.6	657.8	7539.5
7	Oil Meals	2632.3	5410.1	3570.8	7043.2	4493.3	10557.5	2655.8	5861.4
8	Castor Oil	599.2	4521.5	697.1	6730.0	619.4	6170.1	593.9	6323.8
9	Fresh Vegetables	3404.1	5790.7	2448.0	5297.7	3192.5	5679.1	1930.5	4617.3
10	Misc Processed items	0.0	3053.8	0.0	3559.0	0.0	4613.4	0.0	4586.8
Total Agri & Allied Exports		**226651.9**		**251564.0**		**274571.3**		**252976.1**	

Source: Department of Commerce, Govt. of India

Table: Agricultural Imports of India (US $ billion)

[Value in Rs. Crores, Quantity in Tonnes**]**

S. No	**Commodity**	**2016-17**		**2017-18**		**2018-19**		**2019-20**	
		Quantity	**Value**	**Quantity**	**Value**	**Quantity**	**Value**	**Quantity**	**Value**
1	Vegetable Oils	14009.9	73047.7	15361.0	74995.9	15019.3	69023.8	14722.1	68558.2
2	Fresh Fruits	1040.2	11241.0	994.7	12524.6	1124.2	13931.7	993.7	14137.1
3	Pulses	6609.0	28523.9	5607.5	18748.6	2527.9	8035.3	2898.1	10221.4
4	Cashew	774.3	9027.1	654.0	9134.3	839.6	11162.3	941.4	9026.3
5	Spices	240.4	5757.8	222.3	6385.3	240.6	7932.7	320.9	10186.9
6	Sugar	2146.2	6868.6	2403.0	6035.8	1490.6	3175.4	1117.7	2473.2
7	Alcoholic Beverages		3581.1		3876.1		4678.7		4643.5
8	Cotton Raw included waste	498.7	6337.4	469.1	6306.8	299.3	4383.4	744.3	9371.2
9	Other Oil Seeds	117.2	394.8	127.4	364.6	220.5	745.4	410.9	1527.8
10	Misc Processed items		2116.2		2249.7		2560.2		2635.9
Total Agri & Allied Exports			**164680.6**		**152061.2**		**137019.4**		**147445.8**

Source: Department of Commerce, Govt. of India

5. Problems need attention

The agriculture business in India is confronting a number of natural and man-made challenges that must be addressed quickly. Addressing these challenges is vital for Indian agriculture were to realise its full potential. These critical issues must be solved as quickly as possible: a shortage of high-quality seeds, agricultural marketing, insufficient storage and processing facilities, insufficient transportation, and a lack of money.

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6. Measures for achieving trillion-dollar economy

There are several approaches that may be taken to achieve a trillion-dollar agricultural economy in India. Increasing agricultural productivity: Agriculture can be improved more productive as well as effective by investing in research and development, providing farmers with modern technology, and improving market access. Increasing exports: Promoting export-oriented agriculture has the potential to increase the agricultural sector's earning potential and assist it in reaching the trillion-dollar threshold. Strengthening agricultural value chains will help ensure that farmers are paid fairly for their products and that food is delivered to consumers in an effective and timely way. Promoting the expansion of agro-processing businesses: Encouraging the rise of agro-processing companies may help to increase the worth of agricultural items while also establishing new revenue streams. Promoting public-private partnerships: Collaborating with the commercial sector and engaging with civil society organisations can help to find fresh solutions to the agriculture industry's problems. Small farmers play a vital role in Indian agriculture, and they should be supported by policies and initiatives that increase their access to markets, financing, and other resources. The sources and prospects for agricultural growth are diversification, land reforms, investment, export promotion, rural economic revival, rural infrastructure and market improvements, public-private partnerships, and policy adjustments to unlock agriculture's potential.

7. Conclusion

Framers should be treated like businessmen, not peasants. Have a stable export-import regime for agricultural products. Stop the current on-and-off regime, which affects both farmers and overseas buyers. We have abundant land and labour force, so proper utilization of the land and labour in agricultural sector is the need. India has the three cropping seasons and diversified cultivation, planned farming will give significant results. There is a huge demand for the organic products in the market, incentivising and providing proper infrastructure will give huge returns. The Medicinal plant cultivation will also give tremendous returns in the export market. Agro-based industries employs plant and animal-based agricultural output as their basic material. The agricultural production is processed, added value, and then sold in the market as a useable product. Despite vast agricultural area, three harvest seasons, and many crop varieties, the agro-based economy employs just 3% of the workers in this sector. This means that there is a lot of room for expansion in this industry.

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