

GROWTH AND COMPOSITION OF INDIAN AGRICULTURAL EXPORTS DURING REFORM ERA

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ABSTRACT

Emerging world demand for Indian agricultural commodities offers great opportunity. Indian agricultural exports have increased manifolds. However, the contribution of agricultural export in the total export of the country has decline. Present study explores the growth performance of India's agricultural exports from 1991-92 to 2009-10, using compound annual growth rate and percentage share in total export of India as well as Gross Domestic Product. An in depth composition and structure analysis of the agricultural export is undertaken. The study also examines the changing dynamics of the contribution of individual group of commodities in the basket of agricultural export.

Keywords: Agriculture, Export, Growth, Composition, Stability, Reform era

INTRODUCTION

Indian agriculture has greatly contributed to foreign trade even in its traditional form. Indian Agricultural products have been facing stiff competition from Asian countries for quite some times. Due to globalisation and liberalised regime, this competition is likely to increase further and new initiatives in agriculture development shall have to meet the emerging challenges. The performance of agriculture after integration with the world markets is linked to the success of exports. In its bid to increase overall exports, the government of India has decided to achieve this objective by giving a push to production and export of agricultural commodities. Agriculture has been a source of foreign exchange for India in the past. Most of the export earnings of agriculture came from the conventional items such as tea, cashew and spices.

India's share in the world agricultural exports is very low in many items. Until the beginning of the early seventies India has been an importer of a number of agricultural commodities. With the exception of a few commodities like rice, cotton, tea, coffee, oilseeds, oil cakes, tobacco and spices, the share of agricultural export of India in total world trade was very insignificant. The share is particularly low in the world trade of fish, meat, chicken, vegetables and fruits. India has made substantial strides in the total world production of

many commodities. However, its share in the export market is relatively very small. The pertinent questions of marketable surplus and export surplus are ailing the export potentials of Indian agricultural products. Nevertheless, the country has made phenomenal efforts in enhancing the agricultural exports.

LITERATURE REVIEW

Nageshwara et al (2009) India is amongst top ten producers in the world for rice, buffalo milk, wheat, cow milk, fresh vegetables, sugar cane, potatoes, groundnut, pepper mint and buffalo meat. The technological developments, macro-economic reforms and Uruguay Round Agreement have contributed to the changes in agricultural trade. The progress of agriculture has made a lot of changes in the net trading position of India. **Burange L. G. & Sheetal J. Chaddha (2008)** evaluate the structure of comparative advantage in India and the change in the scene over a 10-year period from 1996 to 2005. India enjoys a comparative advantage in the exports of goods for which standard technology is required for the production is shifting to developing economies like India as shown by absence of Revealed Comparative Advantage in imports of these goods. **Shinoj P et al (2008)** examine the comparative advantage of India in agricultural export vis-a-vis Asia in the post reform era. From 1991 to 2004, ten major agricultural commodities group are studied. India has been able to maintain comparative advantage in commodities like cashew and oil meals, but tea, coffee, spices, marine products have been negatively affected. **Kehar Singh et al (2003)** study the prospects of agricultural exports of India using composite index approach. The study is based on the analysis time series data of export value and export quantum from 1980 to 2001. The study reveals that – coffee green, coffee extract, groundnuts, shelled milled paddy, rice, pepper, potatoes have bright prospects, bananas, beef and veal, buffalo meat, cake of rape seed, cotton waste, ghee from cow milk, hen eggs, infant food, lentils, oil of castor beans, oranges, sesame seed, tobacco leaves and walnuts shelled have also been visualized to have positive prospects. **Prakash et al (1995)** examine the impact of new economic policy on agricultural exports. They look at the current trends in foreign trade of India, contribution of agricultural exports in total exports, the share of India in the global production and export of agricultural commodities, the changing compositions of major exportable commodities over time, major steps of liberalisation in agricultural export import policy, to identify the newly emerging agricultural commodities having vast potential for steady exports and to suggest a strategy for realizing full export potential of agricultural commodities.

The reviewed literature reveals that many of studies pertaining to Indian agriculture have focused on a specific products like Deshmukh (2009a), Yadav et al (2009), Sen S and S Raju (2006) on horticulture products, Deshmukh (2009b), Mattoo et al (2007), Mittal (2007) on mangoes, Kumar N R, et al (2009) study the performance, competitiveness, major destinations and determinants of cucumber and gherkin export from India. Goyal and Gupta (2009) examine the status and growth in fruits and vegetables exports, Shinoj P et al (2009) study the export of fish and fishery products, Jha Brajesh (2002) has assessed the export competitiveness of Indian tobacco. Jha D (2000), Qamar Ahsan (2000) cover all the agricultural products but only pertaining to state of Bihar. None of the reviewed literature is examining the changing composition and growth performance of the Indian agricultural export from 1991-92 to 2009-10.

OBJECTIVE OF THE STUDY

1. To study the growth and performance of agricultural export of India.
2. To study the structure and composition of agricultural export of India.

METHODOLOGY

The study is based on the time series data from 1991-92 to 2009-10 of value of export (Million US \$) as per 2 digit Harmonised System (HS) classification. The data were collected from electronic data base of Ministry of Commerce, Government of India, Commodity Trade Statistics (COMTRADE) of United Nations, Food and Agricultural Organization's TRADESTAT and Foreign Trade and Balance of payment published by Centre for Monitoring Indian Economy.

For the analysis of composition of agricultural exports appropriate statistical tools like percentage share, average values, and Compound Annual Growth Rate (CAGR) are used. For the purpose of analysis of structure and composition entire study period is divided into two halves i.e., 1991 to 1999 and 2000 to 2009.

FINDINGS AND RESULTS**Growth and Performance**

Presently Indian agriculture sector contributes nearly 17 per cent to the Gross Domestic Product (GDP) and two third of its population is still engaged in agriculture. The GDP from agriculture has experienced a total growth of 69.8 per cent from 1991-92 to 2008-09 and CAGR of 3.0 per cent from 1991-92 to 2008-09. The trend growth rate of agricultural output in India is marginally ahead of the population growth. Therefore, it is necessary that the growth rate of agricultural sector needs greater acceleration. The increase in the growth rate of agricultural sector is necessary not only for food grain production but also to generate enough surpluses for export.

The share of agricultural exports in India's GDP (both in total GDP and GDP originated in agriculture) would indicate three major aspects, viz, (a) The degree of openness or outward-orientation of the agricultural sector with regard to the export activity; (b) The nature of agricultural trade strategies adopted in the country; and (c) Supply capacity of the agricultural sector as regards exports. After a marginal rise in the shares of agricultural exports in total GDP and in GDP originated through the agricultural sector during the seventies, both the shares were on the decline in the eighties. However, since the beginning of the nineties there is a perceptible rise in these shares.

In case of share of agricultural exports in GDP originated from agriculture sector the rise was from 2.4 per cent in 1991-92 to 6.1 per cent in 1997-98. Later in next two years there was a decline to 5.7 per cent, thereafter, it gradually increased from 6.4 per cent in 2000-01 to 14 per cent in 2007-08. From these observations, it can be inferred that the degree of openness or outward orientation of the agricultural sector, with regard to exports, has increased in recent times, albeit a marginal decline occurred in 1999-00. It reflects the effects of the liberalisation of agricultural exports and improvement in the supply capacity of the economy in recent times. Further the data reveals that agricultural sector is less outward-oriented than the economy as a whole. This is evident from the share of total exports to national GDP as

against the share of agricultural export to national GDP. The share of nonagricultural commodities export in national GDP increased from 3.3 per cent in 1991-92, to 16.9 per cent in 2009-10, whereas the agricultural export increased to 1.9 per cent during 18 years from 1991-92 to 2009-10. During the study period the gap between agricultural exports and nonagricultural exports has increased. Agricultural exports experienced very slow rise compared to the total exports. India's exports have increased since the reforms in 1991. In the post-reform period the annual rate of growth of exports was around 10 per cent and India's share in world exports increased from 0.5 per cent in the first half of the 1990s to 0.7 per cent in 2000-01. Growth of exports has significantly contributed in relatively high growth rates of GDP in the post reform period states Balasubramanyam (2003).

Table 1. Share of Agriculture and Non-agriculture export in total Exports of India

Year	Total Exports (Million USD)	Agriculture and allied products Export (Million USD)	Percentage Share of Agricultural Export	Percentage Share of Non-agricultural Export	Ratio of Agricultural export to Non-agricultural export
1	2	3	4	5	6
1991-92	17865.4	3202.5	17.9	82.1	1:5
1992-93	18537.2	3135.8	16.9	83.1	1:5
1993-94	22238.3	4027.5	18.1	81.9	1:5
1994-95	26330.5	4226.1	16.1	83.9	1:5
1995-96	31794.9	6081.9	19.1	80.9	1:4
1996-97	33469.7	6862.7	20.5	79.5	1:4
1997-98	35006.4	6626.2	18.9	81.1	1:4
1998-99	33218.7	6034.5	18.2	81.8	1:4
1999-00	36822.4	5608	15.2	84.8	1:6
2000-01	44560.3	5973.2	13.4	86.6	1:6
2001-02	43826.7	5901.2	13.5	86.5	1:6
2002-03	52719.4	6710	12.7	87.3	1:7
2003-04	63842.6	7533.1	11.8	88.2	1:7
2004-05	83535.9	8474.7	10.1	89.9	1:9
2005-06	103090.5	10213.8	9.9	90.1	1:9
2006-07	126361.5	12683.5	10.0	90	1:9
2007-08	159006.7	19398.8	12.2	87.8	1:7
2008-09	173865.3	17774.5	10.2	89.8	1.8
2009-10	184770.0	19572.4	10.6	89.4	1.8

Source: Directorate General of Commercial Intelligence and Statistics, Government of India

Table 1 shows that the share of agricultural exports in the total exports was 17.9 per cent in 1991-92, which has increased to nearly 3 per cent by the year 1996-97, there after the share was continuously declining and it reduced to 9.9 per cent in 2006-07. Between the year

2006-07 and 2007-08 there was an increase of 2.3 per cent. With a fall in 2008-09 to 10.2 per cent it has seen a growth of 0.4 per cent in 2009-10.

The slow rise in agricultural export calls for the change in strategic approach of Indian agriculture in a big way to achieve higher levels of production in crops in which India has comparative advantage and generate surpluses for exports. The government's commitment towards agriculture is seen from the ambitious 4 per cent growth target set under the Eleventh Plan. In its quest for accelerated growth, India has to increase its agricultural growth rates of 2.0 per cent to the long term trend of around 4 % per annum.

Contribution of Indian agricultural export to the total export of India in 2009-10 stood at 9.4 per cent. There is an increase in the volume of agricultural export from 3130.08 million USD in 1991-92 to 16753.23 in 2009-10. The compound annual growth rate for these 18 years is 9.3 per cent. The commodity group wise analysis of for the study period presented in this section reveals the actual scenario of growth of each of the group. Commodity group wise Compound Annual Growth Rate (CAGR) for each of the group of commodities is presented in Table 4, for three periods viz 1991 to 1999, 2000 to 2009 and 1991 to 2009.

Table 2. Commodity wise Compound Annual Growth Rate of Agricultural Export

Sr. No	Commodities	Compound Annual Growth Rate		
		From 1991 to 1999	From 2000 to 2009	From 1991 to 2009
1	Cereals and Cereal Preparation	10.7	15.5	11.9
2	Fresh and processed Vegetables	-2.5	18.4	9.3
3	Fresh and processed Fruits	17.3	21.0	20.8
4	Pulses	22.5*	-1.8	10.6
5	Floriculture products	-8.7	9.8	0.5
6	Tea and coffee	2.7	4.6	2.8
7	Spices	11.2	12.8	12.1
8	Tobacco	4.1	15.9	9.6
9	Cotton	14.6	-16.1	44.9
10	Marine Products	7.8	3.8	6.5
11	Meat and meat Preparations	8.1	16.1	14.8
12	Dairy & poultry products	9.6#	18.5	16.9
13	Oil cakes, oil and oil seeds	5.7	13.1	9.9
14	Sugar and Molasses	-20	12.1	7.8
15	Total Agriculture Export of India	5.5	11.6	9.2

Note: * indicates CAGR from 1992 to 1999.

indicates CAGR from 1994 to 1999.

Source: Researcher's Calculation based on data collected from various issues of CMIE's publication on Foreign Trade and Balance of Payment.

Observations in table 2 reveal that highest CAGR value of 22.5 per cent was of pulses, followed by fresh and processed fruits, cereals and spices. For tea and coffee, tobacco,

marine products, meat and meat preparations, poultry and dairy products, oil, oil cakes and oil seeds the value was less than 10 per cent. The period from 1991 to 1999 had the negative CAGR values for commodities such as fresh and fresh processed vegetables, floriculture products, sugar and molasses. The CAGR of total agricultural export in this period is 5.5 per cent. All the commodities except vegetables, floriculture products, tobacco, sugar and molasses have performed better than the total agricultural export performance in this period.

A comparison of CAGR values of all the commodity groups between the two periods viz 1991 to 1999 and 2000 to 2009 shows that all the commodities except pulses, cotton, and marine higher value of CAGR for the second period. For the total agriculture export there is an improvement in the CAGR value from 5.5 in first period to 11.6 in second periods. The CAGR values for the entire study period i.e., from 1991 to 2009 reveals highest growth of 44.9 per cent is for cotton and lowest for tea and coffee.

The CAGR value for total agricultural export for the entire period under observation is 9.2 per cent, which is the result of better growth after year 2000. Commodities such as cereals and cereal preparations, fruits, pulses, spices, tobacco, cotton, meat and its preparations, dairy and poultry products have CAGR value greater than that of the total agricultural export. The growth in these commodities has positively affected the overall agricultural export growth of India.

Analysis of the composition of agricultural export of India

On the basis of analysis of structure and composition of agricultural exports of India can be broadly divided into the following categories. These categories are based on generis species. These categories include;

1. Cereals and cereal preparation
2. Fresh and processed vegetables
3. Fresh and processed Fruits
4. Pulses
5. Floriculture products
6. Tea and coffee
7. Spices
8. Tobacco
9. Cotton
10. Marine products
11. Meat and meat preparations
12. Poultry & dairy products
13. Oil cakes, oil and oil seeds, and
14. Sugar and molasses

Agriculture Export Composition From 1991 to 1999

An analysis of the composition of agricultural export of India from 1991 to 1999 for the above mentioned 14 commodity groups is presented in table 3, which includes the percentage share of each of these groups of commodities in the total agricultural export of India.

Table 3. Composition of India’ Agricultural Export (1991 to1999)
(Percentage)

Sr No	Commodity Groups	1991	1992	1993	1994	1995	1996	1997	1998	1999
1	2	3	4	5	6	7	8	9	10	11
1	Cereals and Cereal Preparation	12.4	11.9	11.6	11.3	28.3	20.1	15.5	27.7	15
2	Fresh and processed Vegetables	4.8	4.0	3.6	2.9	2.4	2.1	1.9	1.9	2.3
3	Fresh and processed Fruits	1.2	1.4	1.4	2.7	2.5	2.2	2.4	2.5	3.1
4	Pulses	0.0	0.5	0.6	0.7	0.7	0.6	1.4	1.2	1.8
5	Floriculture products	2.1	1.8	1.6	0.6	0.3	0.3	0.4	0.4	0.5
6	Tea and coffee	21.8	17.7	14.6	16.6	15.1	12.1	14.9	17.3	16.3
7	Spices	5.3	4.9	5.0	5.2	4.5	5.3	6.1	7.0	8.3
8	Tobacco	5.3	5.6	4.4	2.6	2.4	3.3	4.5	3.8	4.5
9	Cotton	4.3	2.7	5.0	2.3	1.1	5.9	4.6	1.7	0.5
10	Marine Products	20.4	20.8	22.2	28.4	20.7	18.5	19.8	19.6	23.5
11	Meat and meat Preparations	3.3	3.1	3.1	3.4	3.4	3.3	3.5	3.5	3.9
12	Dairy products and Poultry	0.0	0.0	0.0	0.3	0.3	0.5	0.5	0.5	0.5
13	Oil cakes, oil and oil seeds	16.5	20.3	24.4	22.3	19.9	21.3	21.9	15.9	16.0
14	Sugar and molasses	2.2	3.7	2.1	0.8	2.4	4.5	2.1	0.4	0.2
15	Total Agricultural Export	100	100	100	100	100	100	100	100	100

Source: Researcher’s Calculation based on data collected from various issues of CMIE’s publication on Foreign Trade and Balance of Payment.

In the year 1991 tea and coffee were the largest contributors followed by marine products, oil cakes, oil and seeds. Even the cereals and cereals preparations contributed 12.4 per cent. In the same year contribution of fresh fruits, floriculture products and sugar and molasses is less than 2.5 per cent. In 1992 the contribution from marine products and oil group was more than 20 per, the share of tea and coffee reduced to 17.7 and for cereals and cereals preparations there was a marginal decline. Tea and coffee, cereals and cereals preparations, marine products and oilcakes, oil and oilseeds earned large chunk of the total agricultural export till 1999. However it can be observed that the relative importance of tea and coffee has marginally declined. The contribution of poultry, dairy products and pulses remain insignificant.

Figure 1, shows the average composition of India’s agricultral export, from 1991 to 1994 in million USD. This is worked out by adding the commodity groupwise export earnings of four years from 1991 to 1994, then the sum is divided by 4 to arrive at the average value for

this period. Similarly, figure 2, shows the average composition of India’s agricultral export, from 1995 to 1999 in million USD. This is worked out by adding the commodity groupwise export earnings of five years from 1995 to 1999, then the sum is divided by 5 to arrive at the average value for this period. A comparsion of the performance of various commodities in figure 1 and 2 reveals that the earnings from the cereals has increased threefold to 1240.4 million USD from a mere 417.4 million USD. Earnings from fresh and processed vegetable grew by 45.4 million USD. Fresh and processed fruits experienced a growth of 136.9 million USD.

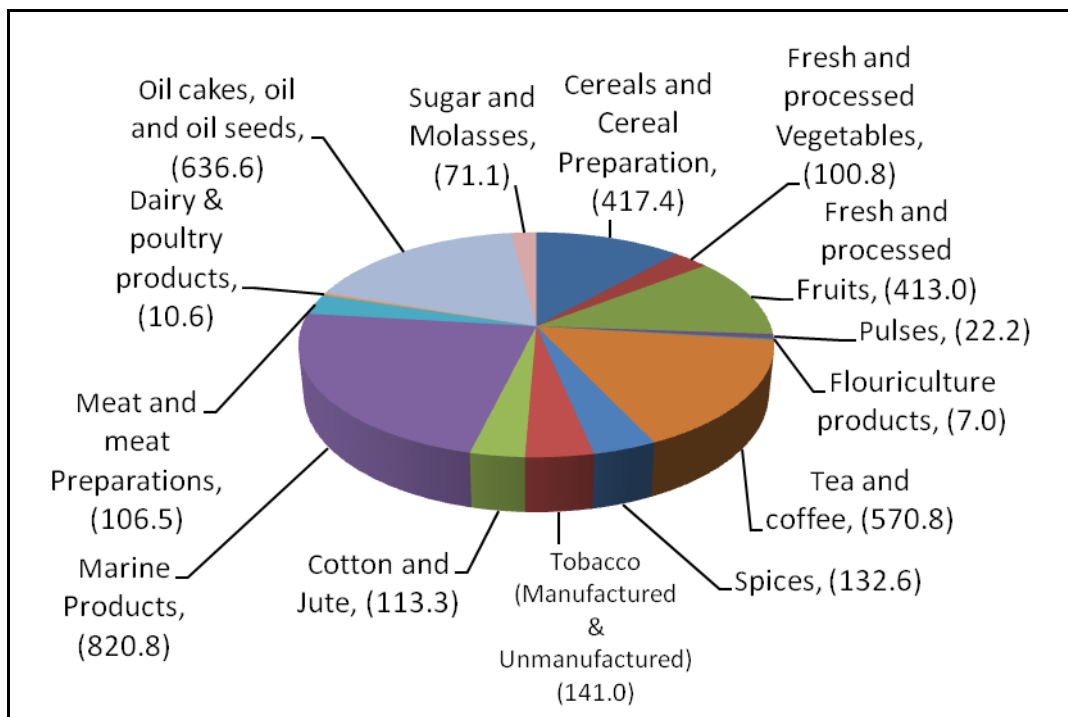


Figure 1. Share of Commodity Groups in total Agricultural exports (Average from 1991 to 1994) (Values in Million USD)

Pulses, flouriculture products, sugar, mollases and dairy products though occupy a negligible share in the agricultural export, saw a growth of 43 million USD and 15.3 million USD, 45.2 million USD and 14.6 million USD respectively. The average earning from tea and cofee is 256 million USD more in period 1995 to 1999 as compared to that of 570.8 million USD earned during 1991 to 1994. The average earning from spices increased by 134.9 million USD, whereas from tobacco it increased by 70.4 million USD. Marine products saw the largest rise of all the commodities from 820.8 million USD in figure 1 to 1128.8 in figure 2, where as oilcakes, oil and oil seeds earned 636.6 million USD. The average earnings from creals and cereals preperations, marine products, oil cakes, oil and oilseeds and tea and coffee was 68.8 per cent during 1991 to 1994 which rose to 69.8 per cent in 1995 to 1999.

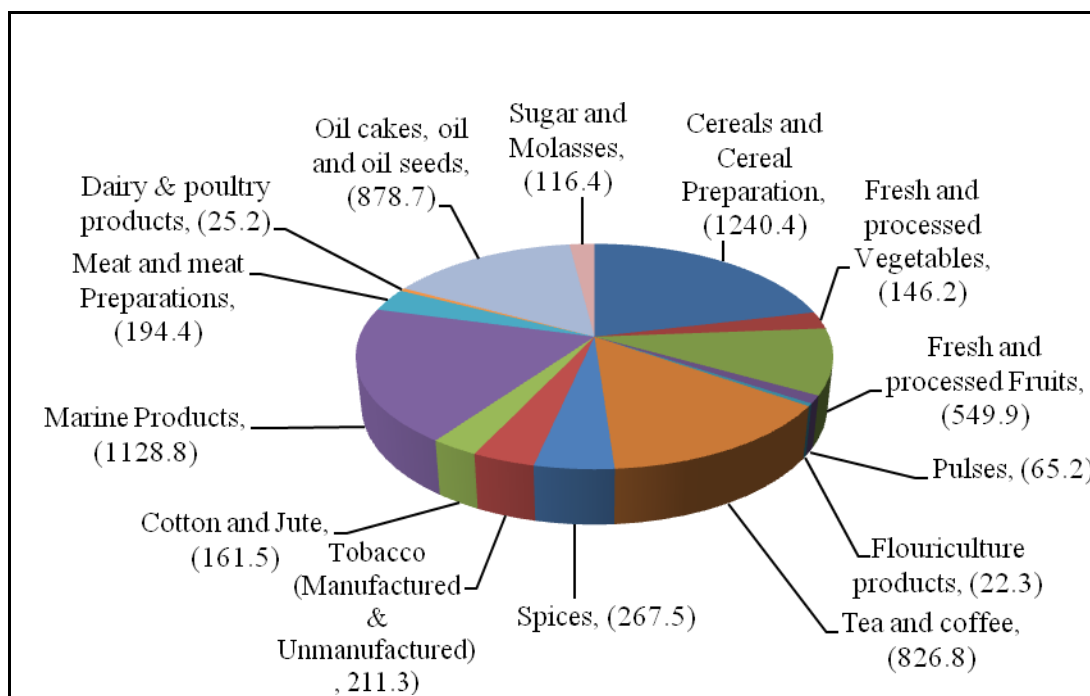


Figure 2: Share of Commodity Groups in total Agricultural exports (Average from 1995 to 1999) (Values in Million USD)

Composition Agriculture Export From 2000 to 2009

The share of four major groups of commodities i.e., cereals and cereals preparations, marine products, oil cakes, oil and oilseeds and tea and coffee has contributed as high as 79 per cent in 1994 but there has been a gradual decline to 52.3 per cent in 2009. Table 4 presents the composition of agricultural export from 2000 to 2009. From year 2000 to 2009 the share of cereals export has increased from 14.2 per cent to 17.2 per cent. Fruits and vegetables were below 4 per cent till 2008 have crosses this level in the year 2009. Maximum share of pulses was 2.7 in the year 2005. In 2004 dominance of cereals is visible. This group has earned 1884.18 million USD in 2003.

Table 4. Composition of India’ Agricultural Export (2000 to 2009) (Percentage)

Sr. No	Commodity Groups	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
1	2	3	4	5	6	7	8	9	10	11	12
1	Cereals and Cereal Preparation	14.8	19.5	27.5	23.5	27.9	18.8	15.8	22.4	22.3	17.2
2	Fresh and processed Vegetables	3.4	3.6	3.6	4.5	4.1	4.5	5.1	3.7	4.0	4.6

Table 4. Composition of India' Agricultural Export (2000 to 2009) (Contd...)
 (Percentage)

Sr. No	Commodity Groups	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
3	Fresh and processed Fruits	11.4	10.1	9.7	8.2	9.8	9.6	8.0	5.9	7.5	7.8
4	Pulses	2.1	1.4	1.2	1.0	1.7	2.7	1.5	0.8	0.7	0.5
5	Floriculture products	0.5	0.5	0.6	0.8	0.7	0.7	0.7	0.5	0.5	0.4
6	Tea and coffee	12.4	10.6	8.5	8.1	8.0	7.8	7.2	5.5	6.3	6.3
7	Spices	4.7	3.8	3.4	3.1	3.5	3.0	4.1	4.2	8.0	7.8
8	Tobacco	3.4	3.1	3.4	3.4	3.7	3.2	3.2	2.8	4.4	5.5
9	Cotton	1.0	0.2	0.2	3.0	1.2	7.0	11.6	12.9	3.6	12.0
10	Marine Products	25.2	21.7	22.8	18.7	18.8	16.9	15.1	10.0	8.9	12.5
11	Meat and meat Preparations	5.8	4.6	4.5	5.1	5.0	6.5	6.2	5.3	6.8	7.9
12	Dairy products and Poultry	0.8	1.3	1.0	1.2	1.8	2.4	1.4	1.9	2.0	1.2
13	Oil cakes, oil and oil seeds	12.4	12.4	7.3	15.4	12.9	14.9	13.6	15.7	19.2	16.3
14	Sugar and molasses	2.2	7.1	6.4	4.3	0.9	2.1	6.6	8.5	5.7	0.2
15	Total Agricultural Export	100	100	100	100	100	100	100	100	100	100

Source: Researcher's Calculation based on data collected from various issues of CMIE's publication on Foreign Trade and Balance of Payment.

Marine products earned 1411.8 million USD in the same year. Even the earning from oil group was above 1200 million USD. In 2006 floriculture reached above 1.1 per cent and rest of the period it was less than 1 per cent. Tea and coffee which were the major export earners in the earlier decade declined to 13.2 per cent in 2000 and further reduced to 6.3 per cent of the total agricultural export value in 2007.

There is a reduction in spices share from 7.2 per cent in 2000 to 5.4 per cent in 2005 which increased in next four years. Tobacco records a rise in its share in the agricultural export of India from 3.9 per cent in 2000 to 5.5 per cent in 2009. Cotton has registered an increase and its share stood at 12 per cent in 2009.

Meat and meat preparations do not show any particular trend but over all there is 2.1 per cent increase in the share from 2000 to 2009. The contribution of dairy products is marginal it has increased till 2005; thereafter it is on a decline till 2009. 16.5 per cent of the total earnings in 2000 came from oil cakes, oil and oil seeds which saw a reduction till 2002 and gradually it is increasing till 2008.

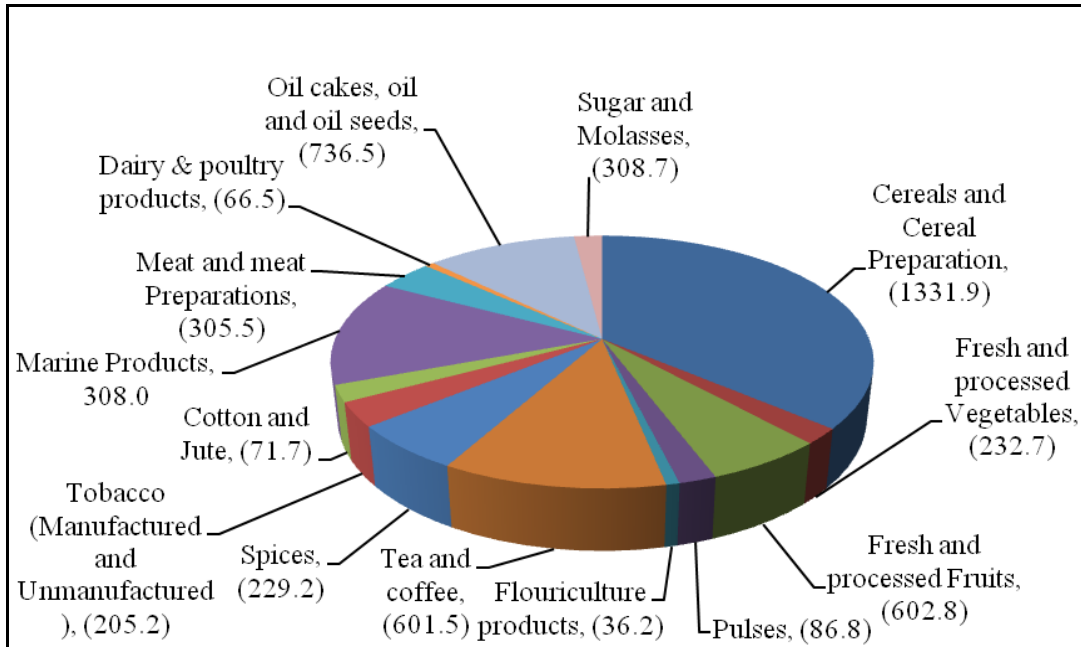


Figure 3. Share of Commodity Groups in total Agricultural exports (Average from 2000 to 2003) (Values in Million USD)

Figure 3, shows average composition of India’s agricultural export, from year 2000 to 2003. This is worked out by adding the commodity groupwise export earnings of four years from 2000 to 2003, then the sum is divided by the number of years i.e., 4 to arrive at the average value for this period. On the other hand, figure 4, shows the average composition of India’s agricultural export, from 2004 to 2009. This is worked out by adding the commodity groupwise export earnings of six years from 2004 to 2009, then the sum is divided by 6 to arrive at the average value for this period. A comparison of the average performance of various commodities in figure 3 and figure 4 show that the rise in the total agricultural export of India is 53 per cent. The commodities which performed better than the total agricultural export are cotton, fresh and processed vegetables, dairy and poultry products, meat and meat preparations, tobacco, spices and oil, oil seeds and oil cakes.

Cereals and cereals preparations emerged as highest foreign exchange earners with an increased earnings of 1400.95 Million USD, followed by cotton and oilcakes, oil and oil seeds. Dairy products experienced a rise from export value of 66.5 million USD to 236.6 million USD. The earning from the floriculture products increased but remained less than 100 Million USD. Export earning from the fresh and processed vegetables have shown significant growth of 322.8 million USD. This value has doubled during the reference period.

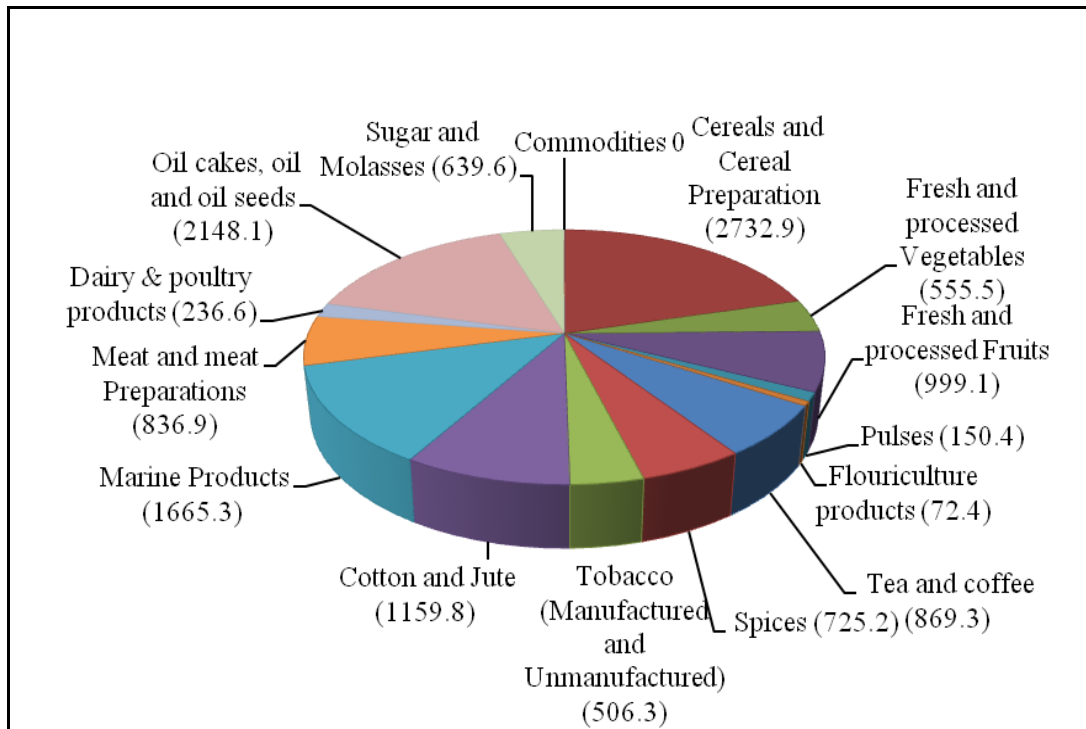


Figure 4. Share of Commodity Groups in total Agricultural exports (Average from 2004 to 2009 (Values in Million USD))

Export earning form fresh and processed fruits and tea and coffee, pulses, floriculture, sugar and molasses is slightly higher in figure 3 as compared to that of figure 4. The average performance of these groups have experince a rise less than the total agricultrual export. There is a variation in the performence but the average performance of all the commodity groups has improved in the later period as compared to that of 2000 to 2003.

CONCLUSION

The buoyancy in exports of agricultural products is clearly visible. Agriculture export had been occupying the place of pride in the export basket of India. Even though, there is an increase in the absolute quantum of agricultural exports, there is consistent decline in the percentage share of primary products in total export from 17.9 per cent to 10 per cent during the study period. This is an indicator of slow rise in agricultural export in comparison to national exports. There is considerable increase in the agricultural export since the onset of globalization and liberalization. The ratio of Indian agricultural export to that of nonagricultural export has increased during the study period. Growth of percentage share of each of the commodity groups indicates improvement for all except tea and coffee which has negative growth. Indian agriculture sector as well as world agriculture are in the midst of tumultuous changes brought about by a number of internal and external factors.

FUTURE SCOPE OF THE STUDY

The internal factors such as advent of new technology in the form of farm input, information technology empowering the farmers and other scientific discoveries are exerting influence in the way farmers carry out their day to day operations. The establishment of WTO and clauses relating to agriculture in Uruguay Round of negotiations of WTO has elevated a local farmer to a global farmer. It is worthwhile to undertake a detailed analysis of the response of Indian agricultural exports to the reforms and domestic policy changes and export growth. It is important to emphasize that the latter is determined not only by internal but also the external factor. Among external factors the most important is the growing world demand.

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