Agribusiness Strategies to Promote Exports: An Analysis of Growth and Instability

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Abstract

Agriculture has been a way of life and continues to be one of the most important livelihoods of the people in India. Agriculture has been playing the role of a catalyst for our economy as it generates employment, national income, foreign exchange, food for people etc. This paper analyses the performance of agricultural exports of India during the period 1991-92 to 2013-14. The paper concludes that exports of principal agricultural commodities have shown variations over the years. The favorable condition in terms of export growth of agricultural commodities lies in the commodities having high growth rate and low instability. Spices, rice, meat and preparations and fruits and vegetables are the commodities which fall in the category of high growth and low instability in terms of earnings, such commodities are termed as key performers. Coffee, tea, oil cakes, tobacco, cashew and kernals, marine products and miscellaneous products are the commodities which fall in the category of low growth. The commodities with low growth and high instability need to be checked in order to transform such commodities in to key performing commodities.

Keywords: Agriculture, Compounded Annual Growth Rate, Instability.

1. INTRODUCTION

Agriculture sector is considered as an important ingredient particularly in the initial stages of economic development of a developing country. Most of the people in India give more priority to agriculture because it provides both food and livelihood to more than half of its population (Sahoo and Sethi, 2012). Sustained development can be assured through the fulfillment of basic needs of employment, food and shelter, for which agriculture plays a pivotal role. Agricultural development is a necessity to improve productivity, generate employment, and provide a source of income to poor segments of population (Sangeet et al., 2013). Agriculture exports provide a significant contribution to the foreign exchange earnings. Primary products and agricultural commodities are the major sources of foreign exchange for developing countries (Chand and Tewari, 1991). An examination of the trends in agricultural trade for the post-liberalisation period for India shows that agricultural imports have grown at almost double the rate of agricultural exports. However, due to the initial higher levels, agricultural exports continue to be higher than agricultural imports by one and a half time for 2003-04. The share of India's agricultural exports in world agricultural exports is higher than the similar share of India's total exports in world total exports (Sathe and Deshpande, 2006). India is the first in the world in the production of milk, pulses, jute and jute-like fibers; second in rice, wheat, sugarcane, groundnut, vegetables, fruits and cotton production; and is a leading producer of spices and plantation crops as well as livestock, fisheries and poultry. In the past few years, Indian agriculture has done remarkably well in terms of output growth. The 11th Five Year Plan (2007-12) witnessed an average annual growth of 3.6 per cent in the gross domestic product (GDP) from agriculture and allied sector (Siddaraju, 2013). Fresh and processed fruits

and vegetables are potential commodities which can be exported in the world market. The determinants impacting export growth apart from domestic production and distribution are prices of Indian exports relative to world prices, exchange rates and inflation rate in the countries competing with India and taxes and subsidies on exports. More emphasis needs to be given for raising the production and exports of those commodities that have potential for export (Goyal, Pandey and Singh, 2000).

Less Developed Countries (LDCs) has a comparative advantage in the production of agricultural products. The export of agricultural products can compensate the import of capital goods and other manufactured products in order to ensure sustainable growth in LDCs. In effect, the market for developed countries (DCs) will expand and the trade in agricultural products will be of mutual benefit to both DCs and LDCs (Pal, 1992). Agricultural development is a necessity to improve productivity, generate employment, and provide a source of income to poor segments of population. The products like rice and maize, cotton, meat, guar gum, and cotton have replaced traditional agricultural exports. Agricultural exports (including marine) grew by 5.1 per cent in 2013-14 over 2012-13 to US$ 37,292 million, of which exports of marine products alone increased by 44.8 per cent over the same period. Since the opening up of exports of rice in 2011, there has been a surge in its share in total exports from US$ 2575 million in 2010-11 to US$ 7742 million in 2013-14. Exports of total dairy, poultry, meat, and marine products have doubled their share in agriculture exports between 2008-09 and 2013-14 (Economic survey, 2013-14).

In the light of these facts, the present study is an attempt i) to analyse the issues of growth and instability of India's principal agricultural exports ii) to identify the agricultural commodities

having potential of export iii) to suggest the agribusiness strategies to enhance the agricultural exports of India.

2. DATA AND METHODOLOGY

The study broadly covers the period from 1991-92 to 2013-14 and the time series secondary data was collected from different published sources of Government Agencies; Economic survey, Government of India, Ministry of finance, New Delhi, Handbook of statistics on Indian Economy, Reserve Bank of India, Mumbai.

2.1 Compounded Growth Rates

The compound growth rates indexes are calculated by using the following type of function:

$$Y_i = a\,(b_i)^t$$

$$\text{Log } Y_i = \log a + t \log (b_i)$$

where,

Y_i = export value/volume/unit price of ith item,

t = time variable.

Annual compound growth rate (r) was computed as:

$$r = [\text{anti log } (b_i) - 1]*100.$$

2.2 Measurement of Instability

When, production and employment in a certain line of activity show irregular changes during a year (apart from seasonal variations) or over a period of years that are considered as a form of economic instability (Lundberg, 1968). Coppock (1977) argued that instability means “excessive departure from some normal level”.

The instability index has been measured as:

$$I = \frac{1}{\log \bar{x}} \times \sqrt{\frac{\sum_{t=1}^{n} \log x^2{}_i - \frac{\left(\sum_{i=1}^{n} \log x_i\right)^2}{n} - \log \beta^2 \sum_{i=1}^{n} t_i{}^2}{n-2}} \times 100$$

This instability index has two advantages. Firstly, this is scale independent and can be used for cross comparisons. Secondly, the bias entering the instability measure due to an element of growth gets minimized.

3. RESULTS AND DISCUSSION

3.1 Composition of India's Exports:

The exportable products are classified in to six main categories namely agricultural and allied products, ores and minerals, manufactured goods, mineral fuels and lubricants, others and total exports. The relative contribution of exports for each group at different intervals of time period is presented in Table 1 (see appendix).

It was found that the share of manufactured goods was highest in total exports followed by agricultural products. The share of agriculture and allied products in total exports was 18.68 per cent in 1991-92, which increased up to a maximum of 20.4 per cent in 1996-97and then started declining over the years, it was accounted 13.80 per cent in 2013-14. In case of manufactured goods, the share was 74.23 per cent in 1991-92 and with little fluctuations it reached to maximum 79.93 per cent in 1999-2000 and subsequently declined to 63.67 per cent in 2013-14.The share of mineral fuels and lubricants to total exports was 2.36 per cent in 1991-92, with declining trend it reached to a minimum of 0.42 per cent in 1998-99 and then increasing trend was observed and reached to maximum of 20.69 per cent in 2013-14.

3.2 Share of Principal Agricultural Exports to Total Agricultural Exports

Share of principal agricultural exports (commodity wise) in total agricultural exports is shown in Table 2 (see appendix). Among the various agricultural commodities the share of marine products was highest i.e. 17.5 per cent in 1991-92. It reached maximum of 22.3 per cent in 2000-01, thereafter apart from little fluctuations declining trend has been seen and it reached to 11.7 per cent in 2013-14. Tea ranked second in respect of its share in total agriculture exports, which was 14.7 per cent in 1991-92, it declined to a minimum level i.e. 1.9 per cent in 2013-14. This could be attributed to the fact that Indian tea is facing a tough competition from Sri Lanka and rise in the cost of production. The share of oil cakes in total agricultural exports was 11.2 per cent in 1991-92, it reached to the highest level of 17.9 per cent in 1993-94. Thereafter it declined to 6.2 per cent in 2000-01, which finally, with mixed trend, stood at 6.5 per cent in 2013-14.

The share of rice in total agricultural exports was 9.2 per cent in 1991-92, it increased to the highest level of 23.2 per cent in 1998-99 in total agricultural export and then it sharply declined to 10.3 per cent in 2000-01 and then finally settling at 17.9 per cent in 2013-14. The share of cashew in total agricultural exports was 8.2 per cent in 1991-92, which increased to 9.8 per cent in 1999-2000 and then it started declining and finally stood at 2 per cent in 2013-14. Spices, sugar, raw cotton, rice, meat and preparations, fruits and vegetables are the commodities whose share in total agriculture and allied products have increased in 2013- 14 as compared to 1991-92. The share of tea, coffee, oil cakes, tobacco, cashew kernals and marine products has decreased as compared to 1991-92.

3.3 Growth and Instability of Composition of Indian Exports

Table 3 (see appendix) shows the annual compound growth rates and instability indexes of six principal groups for the period 1991-92 to 2013-14. The annual compound growth rates for agricultural and allied products for the period 1991-92 to 2013-14 was 11.58 per cent with instability of 2.67 per cent. Ores and minerals grew at good rate i.e. 15.24 per cent but the instability was found to be on the higher side i.e. 5.86 per cent. Manufactured goods recorded annual compound growth rate of 13.95 per cent with low instability i.e. 1.24 per cent. Mineral fuels and lubricants recorded highest annual compound growth rate of 32.6 per cent but the instability was on the higher side i.e. 8.04 per cent. Others recorded very high instability i.e.23.49 per cent. The instability in exports discourages investment in the production of commodities, limits the economic horizon and destroys the sense of continuity, which is necessary for planning production (Chand and Tewari, 1991). The values of instability indices help the policymakers for formulating product-by – product export promotion and investment policies.

3.4 Growth and Instability of Principal Agricultural Exports of India

Table 4 (see appendix) presents the detailed analysis of growth and instability of principal agricultural exports. In terms of quantity, Raw cotton recorded highest growth rate of 18.95 per cent, but at the same time instability index was also highest i.e. 26.25 per cent from 1991-92 to 2013-14. Cashew Kernals were ranked second in terms of growth rate i.e. 12.37 per cent but instability index was also found to be second highest i.e. 24.91 per cent. Spices grew at good rate of 9.77 per cent with low instability i.e. 2.95 per cent. The commodities which accounted for high instability index include sugar, tobacco and oil cakes.

In terms of earnings, raw cotton recorded highest growth rate i.e. 22.47 per cent with high instability of 25.95 per cent. Meat and preparations were ranked second in terms of growth rate i.e. 17.85 per cent with instability of 6.97 per cent. Sugar accounted to growth rate of 16.81 per cent but the instability index was found to be highest i.e. 26.5 per cent for the years 1991-92 to 2013-14. The other commodities which recorded high growth rate include spices fruits & vegetables, rice and tobacco.

In terms of price, oil cakes recorded maximum growth i.e. 5.25 per cent. Sugar was ranked second with growth rate of 4.42 per cent. Raw cotton, Cashew Kernals and tobacco recorded maximum degree of instability i.e. 121.32 per cent, 104.57 per cent and 93.93 per cent respectively.

3.5 Classification of Principle Agricultural Exports Commodities on the basis of Growth and Instability

For analytical purposes, the agricultural commodities have been classified into a four-fold typology for the period 1991-92 to 2013-14.

(a) High Growth/High Instability (HG/HI) products whose growth rate and instability are greater than the averages.

(b) High Growth/Low Instability (HG/LI) products whose growth rate is higher than the average but instability was lower.

(c) Low Growth/High Instability (LG/HI) products with growth rate below and instability greater than the averages.

(d) Low Growth/Low Instability (LG/LI) products with growth rate and instability below the averages.

Table 5 (a), 5(b) and 5 (c) [see appendix] shows the agricultural commodities which fall under above mentioned classification. The rationale behind this classification suggested above lies in the imperatives that should guide policy-making in the fields of export promotion. On the basis of this classification the Government of India has to decide which are the commodities that need to be provided with the export promotion measures and how the commodities having high instability are to be taken care of. Table 5 (a) shows that tobacco, cashew kernals, sugar and raw cotton are the commodities which are having high growth and high instability. Coffee, tea and oil cakes fall under the category of low growth and low instability. The commodities having high growth and low instability are spices and rice. Table 5 (b) shows that the commodities with low growth and low instability are coffee, tea, oil cakes, tobacco, cashew kernals, marine products, misc. products. Spices, rice, Meat and prep., and fruits and vegetables are the commodities with high growth and low instability. The high growth and high instability commodities include sugar and raw cotton. Table 5 (c) shows that tea is the commodity which is having low growth and low instability. Tobacco and cashew kernals fall under the category of low growth and high instability. Coffee and spices are having high growth and low instability. Raw cotton and rice are high growth and high instability commodities.

4 CONCLUSION AND POLICY IMPLICATIONS

The summary of above discussion provides that India's exports of principal groups and principal agricultural products have shown variations over the period of time. The annual compound growth rates for agricultural and allied products were less than the total export growth. Mineral fuels and lubricants and others have higher growth rate and higher instability as compared to total exports. Instability for agricultural and allied products, manufactured goods and

total exports has declined whereas for ores and minerals, mineral fuels and lubricants and others have increased during 1991-92 to 2013-14.

In terms of export earnings of principal agricultural exports, commodities which have shown decent growth rate and low instability include Spices, Rice, Meat & preparations and fruits & vegetables. These commodities can be termed as the key performers. The commodities which are having high growth and high instability include sugar and raw cotton. The commodities which are having low growth are coffee, tea, oil cakes, tobacco, cashew kernals, marine products and miscellaneous products. The low growth in these commodities is area of concern for the policy makers. Appropriate actions need to be taken so that such low growth commodities can be transformed in to key performing commodities. The policy makers must encourage exporters with export promotion schemes such as providing different export awards, marketing facilities, organizing buyer and seller interactions between Indian exporters and overseas buyers in the key markets.

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APPENDIX

Table 1: Composition of India's Exports (Value in US $ Million)

Year	Agricultural and allied products	Ores and minerals	Manufactured Goods	Mineral fuels and lubricants	Others	Total
1991-92	3338	823	13262	422	22	17865
	(18.68)	(4.61)	(74.23)	(2.36)	(0.12)	
1992-93	3265	626	14099	525	20	18537
	(17.61)	(3.38)	(76.06)	(2.83)	(0.11)	
1993-94	4151	756	16803	495	33	22238
	(18.67)	(3.40)	(75.56)	(2.22)	(0.15)	
1994-95	4367	808	20602	513	40	26330
	(16.59)	(3.07)	(78.25)	(1.95)	(0.15)	
1995-96	6320	915	23984	526	52	31797
	(19.88)	(2.88)	(75.43)	(1.65)	(0.16)	
1996-97	6828	897	24938	516	65	33470
	(20.40)	(2.68)	(74.51)	(1.54)	(0.19)	
1997-98	6840	824	26860	376	107	35006
	(19.54)	(2.35)	(76.73)	(1.07)	(0.31)	
1998-99	6205	672	26092	141	105	33218
	(18.68)	(2.02)	(78.55)	(0.42)	(0.32)	
1999-2000	5773	693	29431	784	141	36822
	(15.68)	(1.88)	(79.93)	(2.13)	(0.38)	
2000-01	6256	906	35181	1931	286	44560
	(14.04)	(2.03)	(78.95)	(4.33)	(0.64)	
2001-02	6146	993	33792	2183	712	43827
	(14.02)	(2.27)	(77.10)	(4.98)	(1.62)	
2002-03	6962	1568	41070	2707	412	52719
	(13.21)	(2.97)	(77.90)	(5.13)	(0.78)	
2003-04	7889.4	2495.7	49103	3734.4	620.5	63843
	(12.36)	(3.91)	(76.91)	(5.85)	(0.97)	
2004-05	8809	4568	62023	7140	996	83536
	(10.55)	(5.47)	(74.25)	(8.55)	(1.19)	
2005-06	10549	5361	74200	11867	1115	103092
	(10.23)	(5.20)	(71.97)	(11.51)	(1.08)	
2006-07	13029.8	6035.6	86729.6	18904.5	1661.9	126361.4
	(10.31)	(4.78)	(68.64)	(14.96)	(1.32)	
2007-08	18878.5	8168.5	104904.6	29030.3	1922.5	162904.4
	(11.59)	(5.01)	(64.40)	(17.82)	(1.18)	
2008-09	17768	7917	127646	27523	4441	185295
	(9.59)	(4.27)	(68.89)	(14.85)	(2.40)	
2009-10	17962.65	8699	120167	28800	2522.35	178151
	(10.08)	(4.88)	(67.45)	(16.17)	(1.42)	
2010-11	24448	8581	173263	42280	2564	251136
	(9.73)	(3.42)	(68.99)	(16.84)	(1.02)	
2011-12	37618	8546	201237	57015	1548	305964
	(12.29)	(2.79)	(65.77)	(18.63)	(0.51)	
2012-13	41017	5678	190237	62042	1427	300401
	(13.65)	(1.89)	(63.33)	(20.65)	(0.48)	
2013-14	43128	5757	199033	64679	13	312610
	(13.80)	(1.84)	(63.67)	(20.69)	(0.00)	

Source: Reserve Bank of India (Mumbai), Handbook of statistics on Indian Economy, various issues.

Figures in parentheses show the percentage share

Table 2: Share of Principal Agricultural Exports to Total Agricultural Exports (Value in US $ Million)

Year	Coffee	Tea	Oil Cakes	Tobacco	Cashew Kernals	Spices	Sugar
1991-92	135	491	374	153	274	160	64
	(4)	(14.7)	(11.2)	(4.6)	(8.2)	(4.8)	(1.9)
1992-93	130	337	534	164	258	136	122
	(4)	(10.3)	(16.4)	(5)	(7.9)	(4.2)	(3.7)
1993-94	174	338	741	147	334	181	57
	(4.2)	(8.10	(17.9)	(3.5)	(8)	(4.4)	(1.4)
1994-95	335	311	573	81	397	195	20
	(7.7)	(7.1)	(13.1)	(1.9)	(9.1)	(4.5)	(0.5)
1995-96	449	350	702	134	370	237	151
	(7.1)	(5.5)	(11.1)	(2.1)	(5.9)	(3.8)	(2.4)
1996-97	402	292	985	213	363	339	304
	(5.9)	(4.3)	(14.4)	(3.1)	(5.3)	(5)	(4.5)
1997-98	456	505	924	288	379	379	69
	(6.7)	(7.4)	(13.5)	(4.2)	(5.5)	(5.5)	(1)
1998-99	411	538	462	181	387	388	6
	(6.6)	(8.7)	(7.4)	(2.9)	(6.2)	(6.3)	(0.1)
1999-2000	331	412	378	233	568	408	9
	(5.7)	(7.1)	(6.5)	(4)	(9.8)	(7.1)	(0.2)
2000-01	259	433	448	191	412	354	112
	(4.1)	(6.9)	(6.2)	(3.1)	(6.6)	(5.7)	(1.8)
2001-02	230	360	474	169	346	314	374
	(3.7)	(5.9)	(7.7)	(2.7)	(5.6)	(5.1)	(6.1)
2002-03	205	341	382	211	424	342	375
	(2.9)	(4.9)	(5.5)	(3)	(6.1)	(4.9)	(5.4)
2003-04	236.3	356.2	728.6	238.5	371	336	268.8
	(3)	(4.5)	(9.2)	(3)	(4.7)	(4.3)	(3.4)
2004-05	238	410	707	279	554	419	34
	(2.7)	(4.7)	(8)	(3.2)	(6.3)	(4.8)	(0.4)
2005-06	359	391	1101	300	586	478	135
	(3.4)	(3.7)	(10.4)	(2.8)	(5.6)	(4.5)	(1.3)
2006-07	435.1	435.4	1216.4	372.4	553.8	697.9	720.4
	(3.3)	(3.3)	(9.3)	(2.9)	(4.3)	(5.4)	(5.5)
2007-08	645	505.2	2022.1	479.9	555.1	1044.2	1406.6
	(3.4)	(2.7)	(10.7)	(2.5)	(2.9)	(5.5)	(7.5)
2008-09	491	585	2233	753	637	1378	985
	(2.8)	(3.3)	(12.6)	(4.2)	(3.6)	(7.8)	(5.5)
2009-10	428	621	1651	916	596	1298	27
	(2.4)	(3.5)	(9.2)	(5.1)	(3.3)	(7.2)	(0.2)
2010-11	662	736	2438	875	627	1768	1246
	(2.7)	(3)	(10)	(3.6)	(2.6)	(7.2)	(5.1)
2011-12	953	848	2420	836	928	2750	1881
	(2.5)	(2.3)	(6.4)	(2.2)	(2.5)	(7.3)	(5)
2012-13	866	867	3036	924	753	2824	1617
	(2.1)	(2.1)	(7.4)	(2.3)	(1.8)	(6.9)	(3.9)
2013-14	793	799	2816	1014	849	2642	1202
	(1.8)	(1.9)	(6.5)	(2.4)	(2)	(6.1)	(2.8)

Table 2: (Contd…): Share of Principal Agricultural Exports to Total Agricultural Exports (Value in US $ Million)

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Year	Raw Cotton	Rice	Marine Products	Meat & Prep	Fruits and Veg.	Mis. Processed foods	Total
1991-92	124	306	585	94	143	124	3338
	(3.7)	(9.2)	(17.5)	(2.8)	(4.3)	(3.7)	
1992-93	63	337	602	89	126	129	3265
	(1.9)	(10.3)	(18.4)	(2.7)	(3.9)	(4)	
1993-94	209	410	814	78	156	150	4151
	(5)	(9.9)	(19.6)	(1.9)	(3.8)	(3.6)	
1994-95	45	884	1126	128	193	90	4367
	(1)	(20.2)	(25.8)	(2.9)	(4.4)	(2.1)	
1995-96	61	1366	1011	627	802	745	6320
	(1)	(21.6)	(16)	(9.9)	(12.7)	(11.8)	
1996-97	444	894	1129	200	233	274	6828
	(6.5)	(13.1)	(16.5)	(2.9)	(3.4)	(4)	
1997-98	221	907	1207	217	287	142	6840
	(3.2)	(13.3)	(17.6)	(3.2)	(4.2)	(2.1)	
1998-99	49	1439	1038	187	221	130	6205
	(0.8)	(23.2)	(16.7)	(3)	(3.6)	(2.1)	
1999-2000	18	721	1183	189	288	154	5773
	(0.3)	(12.5)	(20.5)	(3.3)	(5)	(2.7)	
2000-01	49	644	1394	322	352	239	6256
	(0.8)	(10.3)	(22.3)	(5.1)	(5.6)	(3.8)	
2001-02	9	666	1236	250	327	259	6146
	(0.1)	(10.8)	(20.1)	(4.1)	(5.3)	(4.2)	
2002-03	10	1205	1432	284	350	307	6962
	(0.1)	(17.3)	(20.6)	(4.1)	(5)	(4.4)	
2003-04	205	907	1328.8	373	513.1	305.3	7889.4
	(2.6)	(11.5)	(16.8)	(4.7)	(6.5)	(3.9)	
2004-05	94	1507	1440	424	599	284	8809
	(1.1)	(17.1)	(16.3)	(4.8)	(6.8)	(3.2)	
2005-06	656	1405	1589	621	624	359	10549
	(6.2)	(13.3)	(15.1)	(5.9)	(5.9)	(3.4)	
2006-07	1349.8	1554.9	1768.2	732.4	968.6	405.8	13029.8
	(10.4)	(11.9)	(13.6)	(5.6)	(7.4)	(3.1)	
2007-08	2201.9	2918.7	1720.5	931.2	1006.7	530.3	18878.5
	(11.7)	(15.5)	(9.1)	(4.9)	(5.3)	(2.8)	
2008-09	623	2428	1536	1168	1229	691	17768
	(3.5)	(13.7)	(8.6)	(6.6)	(6.9)	(3.9)	
2009-10	2010	2373	2087	1325	1343	686	17962.65
	(11.2)	(13.2)	(11.6)	(7.4)	(7.5)	(3.8)	
2010-11	2910	2545	2623	1971	1397	806	24448
	(11.9)	(10.4)	(10.7)	(8.1)	(5.7)	(3.3)	
2011-12	4328	4940	3444	2921	1579	1139	37618
	(11.5)	(13.1)	(9.2)	(7.8)	(4.2)	(3)	
2012-13	3727	6223	3463	3290	1651	1274	41017
	(9.1)	(15.2)	(8.4)	(8)	(4)	(3.1)	
2013-14	3678	7735	5061	4504	2072	1560	43128
	(8.5)	(17.9)	(11.7)	(10.4)	(4.8)	(3.6)	

Source: Reserve Bank of India (Mumbai), Handbook of statistics on Indian Economy, various issues

Figures in parentheses show the percentage share

Table 3: Growth and Instability of Composition of Indian Exports

Sr. no	Commodity	Earnings	
		Growth	Instability
1	Agriculture and allied products	11.58	2.67
2	Ores and minerals	15.24	5.86
3	Manufactured goods	13.95	1.24
4	Mineral fuels and lubricants	32.6	8.04
5	Others	20.81	23.49
6	Total	14.95	1.5

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Table 4: Growth and Instability of Principal Agricultural Exports of India

Sr. No.	Commodity	Quantity		Earning		Price	
		Growth	Instability	Growth	Instability	Growth	Instability
1	Coffee	3.2	2.7	6.3	6.4	3.02	47.03
2	Tea	1.88	2.6	3.72	3.62	1.8	13.24
3	Oil Cakes	3.33	11.37	8.76	6.25	5.25	-
4	Tobacco	9.08	13.59	10.5	5.46	1.3	93.93
5	Cashew Kernals	12.37	24.91	4.73	2.37	-6.79	104.57
6	Spices	9.88	2.95	13.92	4.99	3.67	4.74
7	Sugar	11.86	20.79	16.81	26.5	4.42	-
8	Raw Cotton	18.95	26.25	22.47	25.95	2.9	121.32
9	Rice	9.43	7.11	12.09	5.44	2.42	-
10	Marine Products	-	-	7.46	2.67	-	-
11	Meat & Prep.	-	-	17.85	6.97	-	-
12	Fruits and Veg.	-	-	12.74	5.3	-	-
13	Mis. Processed foods	-	-	11	7.57	-	-

Note: **'-'** represents the non availability of data or could not be calculated.

Table 5(a). Classification of Quantity (Q) of Agricultural Products by Growth Performance and Instability: 1991-92 to 2013-14

	Instability	
Growth	**High (HI)**	**Low (LI)**
Low (LG)	--------	Coffee, Tea Oil Cakes
High Growth	Tobacco Cashew Kernals Sugar Raw cotton	Spices Rice

Table 5(b). Classification of Earning (E) of Agricultural Products by Growth Performance and Instability: 1991-92 to 2013-14

	Instability	
Growth	**High (HI)**	**Low (LI)**
Low (LG)	--------	Coffee Tea Oil Cakes Tobacco Cashew kernals Marine products Misc. products
High Growth	Sugar Raw cotton	Spices Rice Meat & prep. Fruits & vegetables

Table 5(c). Classification of Price (P) of Agricultural Products by Growth Performance and Instability: 1991-92 to 2013-14

	Instability		
Growth	**High (HI)**	**Low (LI)**	**Low (LI)**
Low (LG)	Tobacco Cashew Kernals	Tea	
High Growth	Rice Raw Cotton	Coffee Spices	