Problems and Prospects of Rice Exports from India

P. Kanaka Durga[1]

Introduction

India is the second largest producer of rice in the world. India, a country which was finding it difficult to improve the foodgrain supplies even to the level of minimum requirement, could succeed in achieving a record growth in production at a rate higher than the population growth. It has successfully prevented the occurrence of famine in the country despite domestic production sharply declining in years of drought but also succeeded in increasing both economic as well as physical access to food (Tyagi, 1990).

Though India is the second largest producer of rice in the world it had never been among the important rice exporting countries of the world. The rapid increase in production, buffer stocks, and the growing demand for basmati rice in the international market made India an important rice exporting country of the world.

In light of this background an attempt has been made in this paper to analyse problems and prospects of rice exports from India. This paper is divided into two sections. Section 1 deals with the rice production and export scenario of India and the world, while section 2 deals with the problems and prospects of India's rice exports.

I. Rice Production and Export Scenario in the World and India

1.1. Rice Production: India is the second largest producer of rice in the world with a share of 22 per cent in total world production. Rice production in the world has gone up from an average of 265 million tonnes during 1961-70 to 650 million tonnes in 2007 exhibiting a three fold increase. Similarly, rice production in India has also registered an increase of almost three fold from an average of 55 million tonnes during 1961-70 to 141 million tonnes in 2007. The share of India's production in total world rice production almost remained at 22 per cent throughout the period (Table 1).

[1]Faculty, MANAGE, Hyderabad

Table 1. Rice Production in the World and India (Million Tonnes)

Period	World	India	Share (%)
1961-70	264.53	54.94	21
1971-80	352.34	68.90	20
1981-90	466.41	92.84	20
1991-00	559.85	121.67	22
2001-05	598.34	128.56	21
2006	644.12	139.14	22
2007	650.19	141.13	22

Source: World Rice Statistics, IRRI, Various Issues

1.2 Exports: The total exports in value terms from India have increased from Rs 255137 crores in 2002 to 640172 crores in 2007 registering a three fold increase within five years. During the same period agricultural exports have increased from Rs 34654 crores to Rs 77770 crores which is only a two fold increase. As a result the share of agricultural exports in total exports have gone down from 14 per cent in 2002 to 12 per cent in 2007 (Table 2).

Table 2. Exports from India (Rs in Crores)

	Total Exports	Total Agricultural Exports	Share (%)
2002	255137.28	34653.94	13.6
2003	293366.75	37266.52	12.7
2004	375339.53	41602.65	11.1
2005	456417.86	49216.96	10.8
2006	571779.28	62411.42	10.9
2007	640172.14	77769.71	12.1

Source: Ministry of Agriculture, GOI.

Rice exports are not only important agricultural exports from India but also account for a considerable share in the thin world rice market. In the year 2007, of the 650 million tonnes of rice production in the world only about 30 million tonnes is traded in the world market which constitutes less than five per cent of world production. Of this 30 million tonnes the bulk of rice exports originated from Asian countries which are exporting 23 million tonnes, which means 77 per cent of world rice exports, during 2008 (Table 3).

Table 3. Rice Exports by Continent (Million Tonnes)

Period	World	Asia	South America	North America	Africa
1960-69	7.50	4.70	0.30	1.50	0.50
1970-79	9.20	5.50	0.50	2.10	0.30
1980-89	11.90	7.90	0.60	2.50	0.10
1990-99	19.30	14.10	1.30	2.70	0.30
2000	24.45	18.65	1.65	2.54	0.72
2001	27.87	22.29	1.06	3.30	0.48
2002	27.58	21.51	1.23	3.87	0.59
2003	27.25	21.45	1.50	3.09	0.84
2004	28.93	21.98	1.68	3.88	1.12
2005	29.12	22.20	2.14	3.31	0.98
2006	31.84	25.38	1.88	3.03	1.22
2007	29.66	23.37	1.95	3.30	0.77
2008	29.00	23.00	2.00	3.00	0.00

Source: World Rice Statistics, IRRI, various issues

The major exporters of rice in the world are Thailand, Vietnam, Pakistan, USA, India and China. Thailand continued to be the largest exporter throughout the period with the share of 31 per cent in the year 2008 (Tables 4 & 5).

Table 4. Rice Exports of Major Rice Exporting Countries (Million tonnes)

Year	World	China	India	Myanmar	Pakistan	Thailand	Vietnam	USA
1960-69	7.5	1.0	0.0	1.1	0.1	1.4	0.1	1.4
1970-79	9.2	1.5	0.1	0.5	0.7	1.8	0.0	2.0
1980-89	11.9	0.7	0.4	0.5	1.0	4.2	0.4	2.4
1990-99	19.3	1.5	2.1	0.2	1.6	5.5	2.7	2.6
2000	24.5	1.8	1.9	0.7	2.4	7.5	3.5	2.5
2001	27.9	2.0	6.7	1.0	1.6	7.2	3.2	3.3
2002	27.6	2.6	4.4	0.4	2.0	7.6	3.8	3.8
2003	27.2	0.9	3.2	0.1	2.0	10.1	4.3	3.1
2004	28.9	0.7	4.7	0.2	3.0	7.3	5.2	3.9
2005	29.1	1.2	4.5	0.0	3.6	7.4	4.7	3.3
2006	31.8	1.3	6.3	0.0	2.7	9.6	4.5	3.0
2007	29.7	1.0	3.4	0.5	3.0	10.0	4.6	3.3
2008	29.0	1.3	2.5	0.5	4.0	9.0	5.2	3.1

Source: World Rice Statistics, IRRI, various issues

Table 5. Share of Major Rice Exporting Countries in World Rice Exports (%)

Year	China	India	Myanmar	Pakistan	Thailand	Vietnam	USA
1960-69	13.6	0.1	14.8	1.8	19.0	1.0	19.4
1970-79	15.8	1.2	5.5	7.6	19.8	0.1	22.3
1980-89	5.9	3.3	4.6	8.6	35.6	3.1	20.4
1990-99	7.9	11.1	1.2	8.2	28.3	14.1	13.7
2000	7.6	7.9	2.7	9.9	30.8	14.4	10.4
2001	7.0	23.9	3.6	5.8	26.0	11.6	11.8
2002	9.4	16.0	1.4	7.1	27.4	13.8	13.9
2003	3.2	11.6	0.5	7.3	37.2	15.8	11.3
2004	2.3	16.2	0.7	10.5	25.1	17.9	13.4
2005	4.2	15.6	0.2	12.3	25.3	16.2	11.4
2006	4.2	19.8	0.1	8.5	30.0	14.2	9.5
2007	3.3	11.4	1.8	10.1	33.7	15.7	11.1
2008	4.5	8.6	1.7	13.8	31.1	18.0	10.7

Though Pakistan and USA have exhibited sustained rise in rice exports, India's share has fluctuated. This means that share of India's rice exports is highly unstable due to the fact that India is the net exporter of rice in the world by entering occasionally whenever it has surpluses (Kanaka Durga, 1999).

India's rice exports are almost negligible until the year 1990. After easing of domestic and external market controls rice exports have increased from the country. At times India's rice exports have gone up more than six million tonnes contributing to 24 per cent of world rice exports (Table 5). When we compare the unit value realization of various exporting countries it is clear that the unit value realization of rice exports are fluctuating very widely for all rice exporting countries more so from India. The unit value realization of India's rice varies from US $ 93 per tonne (1994) to US $ 569 per tonne (1992). (Table 6)

Table 6. Unit Value Realisation of Rice Exports at Current Prices(US $ per tonne)

Year	China	India	Myanmar	Pakistan	Thailand	Vietnam	USA
1990	142	363	301	187	272	291	366
1991	195	520	214	257	245	123	358
1992	163	569	184	527	287	262	270
1993	175	561	74	227	276	160	275
1994	167	93	324	137	262	184	334
1995	213	385	292	277	370	174	380

1996	146	426	1392	290	383	257	448
1997	74	195	64	241	339	231	294
1998	346	548	462	309	314	224	457
1999	229	501	65	292	298	304	332
2000	313	339	48	221	218	189	329
2001	179	106	111	325	218	193	218
2002	152	274	246	235	216	191	202
2003	562	282	423	283	180	168	334
2004	355	315	165	207	371	184	303
2005	185	311	794	260	316	299	390
2006	305	247	558	427	270	282	424

Composition of Rice Exports

India exports both basmati and non basmati rice. Nearly two-third of Basmati rice produced in India is exported partly because of low domestic consumption and partly due to good export price in the international markets. Major growing states of basmati rice in India are Haryana, Punjab, Western U. P. and Uttarakhand. The major competing countries for India's basmati are America (texamati), Pakistan (basmati) and Thailand (Siamathi). The export of basmati rice during 1991-92 was 2.66 lakh tonnes, which increased to 11.82 lakh tonnes by 2007 registering more than a five fold increase within 16 years (Table 7).

Table 7 . Composition of India's Rice Trade

Year	Basmati Rice		Non-Basmati Rice		Total	
	Quantity 000 Tonnes	Value in Rs. Crore	Quantity 000 Tonnes	Value in Rs. Crore	Quantity 000 Tonnes	Value in Rs. Crore
1991	266	499	412	256	679	756
1992	325	801	256	175	580	976
1993	527	1061	566	225	1092	1287
1994	442	865	449	340	891	12016
1995	373	850	4541	3717	4914	4568
1996	523	1248	1989	1924	2512	3172
1997	593	1686	1796	1685	2389	3371
1998	597	1877	4366	4404	4964	6281
1999	638	1780	1258	1346	1896	3126
2000	852	2166	682	777	1534	2943

2001	666	1839	1532	1324	2198	3163
2002	709	2058	4259	3773	4968	5831
2003	772	1993	2640	2175	3412	4168
2004	1163	2824	3615	3945	4778	6769
2005	1167	3043	2922	3178	4088	6221
2006	1046	2793	3702	4243	4748	7035
2007	1182	4335	5314	7396	6496	11731

Source: Statistics at Glance – Various Issues

Non-Basmati Rice

The non basmati rice is subjected to the restrictions of the government due to food security concerns. The export of non basmati has increased from 4.11 lakh tonnes in 1991 to 53 lakh tonnes in 2007 registering an increase of 13 fold in 16 years. Competing countries in the international markets for India for the exports of non-basmati rice are Thailand, Vietnam, Burma, China, USA and Pakistan. However, the export of non-basmati rice has been fluctuating over the years due to weather conditions affecting the production of non-basmati rice in the importing countries (Table 7).

Destination wise India's Rice Exports

The Gulf region remains the major market for Indian basmati rice and inside Gulf, Saudi Arabia accounts for the major chunk of basmati imports from India. India's major markets for basmati rice exports have been Saudi Arabia, Australia, Austria, Belgium, Bahrain, France, Germany, U.K., Denmark, U.S.A., Canada, Belgium , Kuwait, Italy, Oman, Yemen, Netherlands, Jordan, Indonesia etc. In fact, Saudi Arabia traditionally has been the largest market for Indian basmati rice.

Table 8. Destination Wise Value of Rice Exports from India (Rs. crores)

Country	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08(P)
Bangladesh	2251	366	298	81	565	904	837	562	489	2647
France	28	34	58	26	36	34	39	28	14	20
Kuwait	100	141	239	209	182	152	266	265	335	472
Saudi Arabia	1523	1270	1309	1245	1098	1236	1893	1872	1432	2452
Singapore	26	30	33	51	92	39	38	66	56	68
South Africa	541	161	67	242	709	218	516	492	456	356

U.A.E.	155	149	113	82	141	237	368	437	542	1517
U.K.	168	172	306	196	2019	223	284	228	229	321
U.S.A.	21	73	135	102	150	106	101	137	150	212
Republic of Yemen	42	57	33	49	48	69	152	141	171	232
Others	1424	671	340	886	2602	949	2273	2948	3159	3434
Total	6281	3126	2932	3174	5831	4168	6769	7174	7036	11731

Source: RBI

Major destinations for India's non-basmati rice exports are Bangladesh, Australia, Bahrain, Ethiopia, Djibouti, France, Germany, U.K., Hong Kong, Korea, Sri Lanka, Maldives, Mauritius, Malaysia, Nigeria, Ivory coast, Indonesia, Nepal, Oman, Qatar, Russia, South Africa, Saudi Arabia, Somalia, Singapore, U.A.E. Y.A.R., etc (Table 8)

2 . Problems and Prospects of India's Rice Exports

2.1 Problems of India's Rice Exports : India's performance in the world rice market is affected due to stiff competition, external market and also unstable domestic policies of the government for rice. The prevailing tax structure, such as the states imposing Purchase Tax (on indirect export), Market Fees, Rural Development Fund, Administrative Charges etc are making rice exports less competitive. Until recently we had a restriction on minimum export price on basmati price.

Lack of proper infrastructural facilities is an equally important reason for poor performance. Exporters often face difficulties when they carry their stock to the sea port and if the stock is not loaded due to some reason exporters do not find a godown or proper place to store their stocks properly and safely at the sea port. Rice mills have not been fully modernized to ensure high milling recovery and reduce the percentage of broken rice*. Conventional mills are required to be modernized to get recovery of higher percentage of head rice.

Due to some reasons Basmati rice is facing the problem of less aroma in the recent years than what it used to be. In fact, basmati varieties are highly prone to lodging which affects the natural grain development. In such a situation both aroma and linear kernel elongation are affected. Post harvest handling of produce is another important aspect.

*The conventional rice mills are having Rubber Roll Sheller in which percentage of broken rice is more than the modern rice mills that are having under Runner Sheller. Head rice obtained from milling of conventional mills becomes costly due to recovery of higher percentage of broken rice.

Generally, farmers are harvesting the crop at different moisture levels and keeping the produce at higher moisture level for a longer period which impairs the intensity of the aroma.

Adulteration is another major constraint which is preventing high price and demand in the international market. Taking advantage of physical resemblance, traders are mixing different proportions of non basmati rice, basmati like rice and inferior basmati rice with superior rice. Lack of well equipped and extended processing industries makes it difficult to maintain grain quality in order to meet the international standards.

2.2 Prospects of Rice Exports and Suggestions

Nearly 90 per cent of the rice traded internationally is of non basmati variety. Predominantly, they are long grain indica varieties from Thailand, USA, China and Vietnam. The world market demand is for six basic grades of rice viz., high quality long grain, medium quality long grain, short grain aromatic basmati and glutinous rice. In the recent years, the export of non basmati from India has picked up considerably. There is a growing market for Basmati due to its superfine quality and aroma and as a result it has high premium value in the national and international markets. This change in situation of rice demand has prompted the major rice exporting countries like Thailand and the US to breed high yielding varieties of typical basmati quality "Siamathi" from Thailand and "Texamathi" from the US.

In order to boost rice exports from the country, besides basmati there is need to look at other sources of aromatic short grain varieties with similar starch content characteristics, grown in different states of the country. Katarni rice is grown in Bihar, Randhunipagal and Bhadshahbhog are grown in West Bengal. Each of these varieties has localized preference and is fetching a higher price in the local markets. Some of these even possess more aroma than the typical basmati varieties. However their demand preference could not spread elsewhere. Market for this variety can be tapped.

Constraints in increasing rice exports could be overcome by:

1. Production of quality seed and ensuring its availability to farmers at subsidized rates.

2. Low cost production technology may be developed to reduce the cost of production and making Indian rice more competitive in the international markets.

3. Identify and promote contiguous zones for cultivation of export quality rice on the level of special economic zones

4. Quality of rice may be maintained keeping in view the requirements of the international markets.
5. Breeding programme may be initiated to develop high yielding export quality rice both for basmati and non-basmati rice to enable the exporters to compete in the world market.
6. Production, procurement and processing of basmati rice may be organized in a systematic manner for maintaining its quality for export purposes.
7. Conventional rice mills may be modernized to ensure high milling recovery of head rice and effective availability of by-products for better and profitable utilization both for industrial and feed purposes.
8. Market Intelligence wing may be set up to keep watch over the requirement of various rice importing countries so that Research & Development may be strengthened accordingly to produce quality rice for export purposes.
9. Export friendly trade policies may be adopted with improvement of infrastructure facilities for promoting export.
10. Sufficient export facilities may be made available to the exporters at Sea Port.

Rice export constitutes a considerable share in the national exports. India is likely to be a major exporter and its influence on the global rice trade will be significant. Keeping in view the importance of rice in the national export items, concerted efforts are required to be made to further promote the export of rice. There is a good scope for India to take advantage of the new trade opportunities for promoting the export of rice. This can be achieved if production is made as per the requirements of international markets by increased investment in Research and Development coupled with export friendly trade policies.

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