

PROSPECTS, PROBLEMS AND RISKS IN BANANA EXPORT FROM INDIA

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Abstract: *Banana is a soft, easily perishable product produced on a large scale, criss-cross the nation needs to be exported immediately after harvest, through export centres spread across the nation. In this study, Friedman Ranking Technique was used to identify the problems and risks involved in the export of banana from India. Nominal Protection coefficient was used to identify the competitiveness of Indian banana in the international market. The major problems faced by exporters of banana were Block Spot, Bruising, Chemical Residue, Chilling Injury and Skin defects due to rubbing. The major risks faced by the banana exporters were credit and cargo risk. The Nominal Protection Coefficient indicates that the export of banana from India has high prospects. The Government of India has to take necessary steps to increase the export of banana from India.*

Key Words: APEDA, NHB, FAO, NPC, Friedman Ranking Technique.

1. INTRODUCTION:

Banana is one of the most nutritious fruit in the world and it can provide 15 million calories from the produce of an acre. All the parts of the banana plant such as rhizome, pseudo stem, leaves, flower, bud, young suckers and raw banana have domestic and industrial utility. Due to its various constituents of minerals and vitamins, banana has therapeutic values for the treatment of many disease.

2. REVIEW OF LITERATURE:

Vigneswara (1990) in his study “Ginger Production Problems and Prospects”, found that India’s ginger export faced stiff competition from China, Taiwan, Thailand and South Korea. There was a high demand for ginger in the international market. India exports the major part of its production to countries like Saudi Arabia, Yemen republics, U.S.A, U.A.E and U.K. Ginger from Jamaica and Sierra Leone was considered to be superior in trade circles on account of better flavour and bright appearance. Chacko Jose (1994) in his study on “Production and Export of Cardamom in India”, indicated that India was the world’s largest producer of cardamom until 1979-80 and its position diminished in the subsequent years due to a number of factors. There has been occasional small hikes and frequent sharp slumps in production. The fluctuations in the production of cardamom over the years were mainly attributed to the vagaries of nature over which there can be no control. Due to the low production of cardamom, the exports have suffered. Mani and Chacko (1996) in their study on “Trends in the Export of Cardamom: Problems and Prospects”, examined the trends in export of cardamom in India during the period from 1979-80 to 1993-94 and concluded that even though the share of Kerala state in the total exports of cardamom remained as high as 70.55 percent over the years, the percentage of export to total production in Kerala state alarmingly came down from 69.27 percent in 1979-80 to mere 8.04 percent in 1993-94. Ashalatha and Devaraja (2006) in their study on “Opportunity for Contract farming in Banana – A Case study at TamilNadu State”, reported that there is a potential for contract farming in Trichy, Coimbatore, Tirunelveli and Tuticorin Districts. They pointed out the wide gap in technology adoption and suggested that it can be abridged by providing the technical services to the farmer through contract farming and recommended for promoting the corporate and contract farming through Government Policy.

3. STATEMENT OF THE PROBLEM:

India is the largest producer of banana with 26.65 percent of the world production in 2017. The international trade of banana in 2017 was 11.5 billion US\$. But, India’s banana export in 2017 was 48.89 million US\$ which is around 0.4 percent, and not even one percent. Since the global market for banana is large, the Indian banana exporters can exploit the same and get significant profit, if they properly tap the international banana market and follow the right approach. It is important to study the problems and risk involved in the banana export from India.

3.1. Objectives of the study:

- To identify the major quality-related and export-centric problems faced by banana exporters in exporting of quality banana.
- To identify the major risks involved in the export of banana from India.
- To assess the export market opportunities and competitiveness of Indian banana.

4. DATA AND METHODOLOGY:

To achieve the objectives of the study, both primary and secondary data were used. A field survey technique was employed to collect the primary data from all the banana exporters of Tamil Nadu, through a well-structured questionnaire. The secondary data were collected from the records of National Horticultural Board of India (NHB), Agricultural and Processed Food Export Development Authority (APEDA), and Food and Agricultural Organisation of the United Nations (FAO), as well as from Internet web sources.

4.1. Friedman Ranking Technique:

This technique was used to rank the various problems in the quality of banana exported. In this method, the respondents were asked to rank the problems in the quality of banana exported. This technique was also used to rank the type of risk involved in banana export. The order of merit given by the respondents was converted into mean rank scores. These mean rank scores for all the factors were arranged in the order of their ranks and the inferences were drawn.

4.2. Nominal Protection Coefficient (NPC) :

The NPC of a commodity is the ratio of domestic price to its border price (international reference price).

$$NPC = \frac{Pd}{Pb} \dots\dots\dots (1.22)$$

Where,

NPC - is the nominal protection coefficient for banana in a given country.

Pd - domestic reference price of banana in Rs/Qt1

Pb - international reference price of banana in Rs/Qt1.

NPC was worked out for banana for four years 2013, 2014, 2015 and 2016.

5. RESULTS AND DISCUSSION:

Annual Growth Rate and Standard Deviation of Production of Banana in Tamil Nadu and Export of Banana from India, Competitiveness using Nominal Protection Coefficient. Friedman Ranking Technique to rank the problems and risks of the respondents in banana export.

5.1 Production of Banana in Tamil Nadu

Table 1. Area of cultivation, Production and Productivity of Banana in Tamil Nadu.

Year	AREA IN 000 HA	AGR	PRODUCTION IN 000 MT	AGR	PRODUCTIVITY IN MT/HA	AGR
2009-10	113.7		4980.9		43.8	
2010-11	125.4	9.33	8253	65.69	65.8	50.23
2011-12	130.4	3.83	6736.4	-18.38	51.66	-21.49
2012-13	111.36	-17.10	5136.2	-23.75	46.12	-10.72
2013-14	118.04	5.66	5650	10.00	47.87	3.79
2014-15	95.24	-23.94	4147.18	-26.60	43.55	-9.02
2015-16	94.61	-0.67	4331.65	4.45	45.78	5.12
2016-17	94.99	0.40	3640.73	-15.95	38.33	-16.27
Mean	110.47		5359.51		47.86	
Std. Dev	14.2		1513.09		8.19	
C.V	12.86		28.23		17.11	

Table.1 reveals that production of banana was the highest during 2010-11, the production was lower than the mean, except during 2010-11 and 2011-12. The coefficient of variation was higher for production compares to the area of cultivation and productivity; it indicates the production of banana in Tamil Nadu over the years was highly volatile. The high production during 2010-11 was due to higher productivity.

5.2 Export Quantity, Value and Unit Value of Banana Exported from India:

Table.2 Export Quantity, Value and Unit Value of Banana Exported from India

Year	Export Qty in 000 Tonnes	AGR	Value in 000 Dollars	AGR	Unit Value in US \$	AGR
2008	30402		12827		421.91	
2009	54273	78.52	26901	109.72	495.66	17.48

2010	60813	12.05	25046	-6.90	411.85	-16.91
2011	40921	-32.71	17259	-31.09	421.76	2.41
2012	53793	31.46	23558	36.50	437.94	3.83
2013	37150	-30.94	26495	12.47	713.19	62.85
2014	54496	46.69	34800	31.35	638.58	-10.46
2015	80189	47.15	51014	46.59	636.17	-0.38
2016	111803	39.42	60341	18.28	539.71	-15.16
2017	89837	-19.65	48891	-18.98	544.22	0.84
Mean	61367.70		32713.20		526.10	
Std. Dev	25445.23		15683.09		107.38	
C. V	41.46		47.94		20.41	

The annual growth rate of export quantity, export value and unit value were high in 2008, 2008 and 2013 with 78.52 percent, 109.72 percent and 62.85 percent respectively. The high value of the coefficient of variation for export quantity and export value shows the instability. It indicates the high risk involved in the export of banana from India.

5.3 Problems faced by banana exporters in terms of quality:

The problems faced by banana exporters in terms of quality are black spot, chemical residue, chilling injury, skin defects due to rubbing during transportation, foreign matter, damage due to pests and bruise. To ascertain the magnitude of the problem faced by the banana exporters in terms of quality among the above categories, Friedman Ranking Technique was applied.

Table.3 Problems Faced by Banana Exporters in Terms of Quality

S.No	Problems in terms of Quality	Mean Rank score	Rank
1	Black Spot	7.01	I
2	Bruising	5.77	II
3	Chemical Residue	5.29	III
4	Chilling Injury	5.21	IV
5	Skin defects due to rubbing	4.47	V
6	Foreign Matter	3.57	VI
7	Damage due to pests	2.79	VII
8	Irregular appearance due to pests	1.89	VIII

Table.3 highlights that among various problems faced by banana exporters in terms of quality, the problem of the black spot was ranked first with a Friedman mean score of 7.01. It is followed by the problem of bruising with a mean rank score of 5.77. The problems such as chemical residue, chilling injury, skin defects due to rubbing were ranked in the third, fourth and fifth positions with the Friedman’s mean score of 5.29, 5.21 and 4.47 points respectively. On the other hand, the problems such as foreign mater and damage due to pests were ranked in the sixth and seventh positions with the mean score of 3.57 and 2.79 points respectively. Lastly, the problem of irregular appearance due to pests was ranked in the eighth place with a mean score of 1.89 points. From the analysis, it is concluded that the major problems faced by banana exporters are black spot, bruising, chemical residue and chilling injury.

5.4 Types of Risks faced in Export of Banana:

‘Risk’ and ‘uncertainty’ are inseparable in business. Types of risks involved in exporting of banana are the commercial risk, cargo risk, credit risk, political risk, exchange rate fluctuation risk and legal risk. Table. 4 reveals that the credit risk was ranked first with Friedman mean score of 5.04. It is followed by cargo risk with a mean score of 4.63. The commercial risk was placed in third position with a mean score of 3.96. The risks such as exchange rate fluctuation risk and political risk were ranked in the fourth and fifth places with the Friedman mean score of 3.63 and 2.03 respectively. Lastly, the legal risk was ranked in the sixth position with a mean score of 1.71 points. It is concluded that the major risks faced by the banana exporters to export banana include credit risk and cargo risk.

Table. 4 Types of Risks faced in Export Of Banana

S.No	Type of Risk	Mean Rank score	Rank
1	Credit Risk	5.04	I
2	Cargo Risk	4.63	II

3	Commercial Risk	3.96	III
4	Exchange rate fluctuation Risk	3.63	IV
5	Political Risk	2.03	V
6	Legal Risk	1.71	VI

5.5 Export Competitiveness of Banana:

The export competitiveness of Indian banana was analysed using Nominal protection Coefficient for the period between 2013 and 2016.

Table. 5 Nominal Protection Coefficients

Year	Export(in 000 tonnes)	Domestic Price (Rs/Quintal)	Reference Price Rs/Quintal)	NPC
2013	37150	3188.95	4602.27	0.69
2014	54496	3326.50	4814.01	0.69
2015	80189	3533.60	5218.44	0.68
2016	111803	3620.54	5717.3	0.63

The above table reveals that the domestic reference price of banana was less than the international reference price during the period under reference. The export has increased from 2013 and the maximum was reached during the year 2016 with 111803 thousand tonnes. The Nominal protection Coefficient of banana during 2016 was the lowest and less than 1.0 during the period between 2013 and 2016. It indicates that the Indian banana was found to be highly competitive and have good prospects in the international market.

6. CONCLUSIONS:

The international market for banana is large. The production of banana in Tamil Nadu was high during 2010-11 due to high productivity and it was highly volatile between 2009-10 and 2016-17. The export quantity increases from 2014, but the unit value realised through export showed a decreasing trend. Hence, the productivity to be increased to decrease the cost of production and to increase the export. The main problems faced by banana exporters in terms of quality were Block Spot, Bruising, Chemical Residue, Chilling Injury and Skin defects due to rubbing. To overcome these problems, producers have to adopt the latest post-harvest handling techniques and change the type of farming into organic farming. Hence, the Government of India has to provide training to the producers in the latest post-harvest handling techniques and organic farming through its facilitating agencies. The major risk faced by the banana exporters were Credit and Cargo risk. The Government of India has to give high priority for banana export credit and at the same time instruct the authorities to allot cargo space in the air and allot container in ship transport on high priority basis due to its nature of perishability. The Nominal Protection Coefficient was less than 1.0 which indicates that the banana export from India has high prospects.

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