A Study on Marketing Problems of Paddy and Bengal Gram Farmers with special reference to Kurnool District, Andhra Pradesh.

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Abstract

Paddy and Bengal gram are one of the prime crops in India it generates livelihood for many farmers directly and indirectly. Production of Paddy and Bengal Gram was good in Kurnool but while marketing famers were facing problems like marketing cost of the produce is high, location of market yards is too long from villages, delay in weighing of the produce, delay in payment for sale of produce by market intermediaries at AMCs, farmers not having proper awareness on market information and not having proper knowledge on grading, price fluctuations was high, and market intermediaries doing malpractices like price cut etc. From the analysis of marketing problems faced by Paddy and Bengal Gram farmers, it is observed that means majority of the farmers were agreed that they were facing problems while marketing the Paddy and Bengal Gram. The government can reduce the marketing cost by providing subsidies in proper transportation and proper storage facilities, the market committees has to strictly monitor the operations like weighing, grading, sales and payments. The government has to make sure all the information regarding agricultural marketing should have updated in agricultural websites and high price fluctuations can be reduced by having proper control over supply.

Keywords: Paddy, Bengal gram, Marketing Problem, Kurnool

Introduction

Paddy and Bengal gram crops are two important crops in cereals and pulses. As the Paddy and Bengal gram are one of the prime crops in India it generates livelihood for many farmers directly and indirectly. Mostly in South India most of them were depending on Rice as basic food. Bengal gram also is consumed many in different forms of food.

	Paddy				Bengal Gram					
Year	India	Andhra Pradesh	%		India	Andhra Pradesh	%			
2005-06	89610834.8	11703624	13.06		5571212.67	626974	11.25			
2006-07	91699533	11872130	12.95		6393010	653429	10.22			
2007-08	95092333.4	13324000	14.01		4747990	912000	19.21			
2008-09	95331459	15098354	15.84		6967778	857221	12.30			
2009-10	87423794	10838267	12.40		6845410	846659	12.37			
2010-11	95115591.1	14419313	15.16		7673656.16	719248	9.37			
2011-12	102349587	12891792	12.60		6969625	519918	7.46			
2012-13	105217862	11511000	10.94		8143401	762000	9.36			
2013-14	103260370	7993425	7.74		7302008.4	648031	8.87			
2014-15	106876431	8455584	7.91		6670856	390967	5.86			
ource: http://aps.dac.gov.in/APV/Public_Report1.aspy · Production in Tonnes										

Table 1: Production Share of Paddy and Bengal Gram of Andhra Pradesh in India from 2005-

06 to 2014-15

Source. <u>http://aps.uac.gov.m/APY/Public_ReportLaspx</u>; Production in Tonnes

From table 1 it is clearly observed that Andhra Pradesh production of Paddy and Bengal Gram occupies good share in India's production. The minimum Andhra Pradesh share of Paddy was 7.74 percent during the year 2014-15 and maximum was 15.84 during the year 2008-09. The minimum Andhra Pradesh share of Bengal Gram was 5.86 percent during the year 2014-15 and maximum was 19.21 percent during the year 2007-08.

Table 2: Production Share of Cotton and Groundnut of Kurnool District in Andhra Pradesh from 2005-06 to 2014-15

Year	Paddy				Gram					
	Andhra Pradesh	Kurnool	%		Andhra Pradesh	Kurnool	%			
2005-06	11703624	3585660	30.64		626974	226885	36.19			
2006-07	11872130	3070020	25.86		653429	207142	31.70			
2007-08	13324000	3830000	28.75		912000	412000	45.18			
2008-09	15098354	3769290	24.96		857221	327390	38.19			
2009-10	10838267	4143650	38.23		846659	335860	39.67			
2010-11	14419313	3971010	27.54		719248	265102	36.86			
2011-12	12891792	3799240	29.47		519918	153188	29.46			
2012-13	11511000	3370000	29.28		762000	232000	30.45			
2013-14	7993425	2584000	32.33		648031	277856	42.88			
2014-15	8455584	2442620	28.89		390967	190205	48.65			
Source: http://aps.dac.gov.in/APV/Public_Report1_aspy - Production in Tonnes										

Source: <u>http://aps.dac.gov.in/APY/Public_Report1.aspx</u>; Production in Tonnes

From table 2 it is clearly observed that Kurnool production of Paddy and Bengal Gram occupies major share in Andhra Pradesh's production. The minimum Kurnool share of Paddy was 24.96 percent during the year 2008-09 and maximum was 38.23 during the year 2009-10. The minimum Kurnool share of Bengal Gram was 29.46 percent during the year 2010-11 and maximum was 48.65 percent during the year 2014-15.

Statement of the Problem

Production of Paddy and Bengal Gram was good in Kurnool but marketing of both is a big challenge to the farmers. During the marketing of the produce farmers are facing many problems like marketing cost of the produce is high, location of market yards (Agricultural Market Committees) is too long from villages, delay in weighing of the produce at AMCs, delay in payment for sale of produce by market intermediaries at AMCs, farmers not having proper awareness on market information and not having proper knowledge on grading, price fluctuations was high, market intermediaries doing malpractices like price cut, more existence of market intermediaries in channels of distribution, lack of proper transportation facilities and storage facilities to store the produce from rat attacks etc.

Review of Literature

Paddy Marketing Problems

Most of the people basic food is rice, that rice was cultivated by a farmer in form of Paddy and that farmer was facing many problems while cultivating and marketing it. The marketing constraints faced by the farmer while marketing paddy was higher marketing cost, distinct location of Direct Procurement Centres, delay in weighing and payment at the Direct Procurement Centres, lack of awareness on market information and market intelligence services, lack of awareness of credit facilities after harvesting, lack of market led production, lack of knowledge on grading and standards (Saravana Kumar & Kiruthika 2015). Paddy will be cultivated by the farmers with some expectations like no deduction from MSP, no delay in payment, no delay in procurement, higher MSP etc., but these expectations were not reaching due to some constraints while marketing the paddy. The marketing constraints faced by farmers were malpractices including price cut, delay in payment, undue waiting time, transportation problems, storage problems, existence of middlemen, unfair treatment and lack of market information (Prakash 2012).

Bengal Gram Marketing Problems

Bengal gram is also known as Chickpea which is most important pulse crop contributing 20 percent in the worlds pulse production. There were many major constraints faced by the farmers during the pre-harvest and post-harvest of Bengal gram. The post-harvest problems faced by the farmers were lack of proper storage and processing facilities, poor and undeveloped infrastructure facilities like road, transportation etc., and price fluctuations of pulses (Meera Kumari 2016). Chickpea is one of the important major crop in Bihar, but many of the farmers were facing challenges in cultivating and marketing chickpea. The major problems or constraints that faced by the farmers

were low yield, pest and disease attack, small grain size, low market price, lack of technical knowledge, lack of proper storage facilities the crop was under attack by rats and large number of market intermediaries inference in price (Ravi Gopal Singh 2017).

Objectives of the Study

- 1. To compare production of Paddy and Bengal Gram in India & Andhra Pradesh and Andhra Pradesh & Kurnool district,
- 2. To analyze the marketing problems faced by the farmers in Paddy and Bengal Gram marketing,
- 3. To know the relationship between marketing problems and operational efficiency of agricultural market committees, and
- 4. To offer suitable suggestions for improvement in the marketing of Paddy and Bengal Gram.

Methodology

Sample size calculation for finite population

Total Farmers Population in Kurnool (N) = 703683

Sample Size

$$e = \frac{\frac{Z^2 \cdot p(1-p)}{e^2}}{1 + \left(\frac{Z^2 \cdot p(1-p)}{e^2N}\right)}$$

z at 95 % desired level of confidence i.e., z = 1.96; e = 0.05; p = 0.5

Sample size = 383.79~= 384

A multistage stratified sample design was followed to identify the sample farmers. In the first stage top two crops was selected based upon production one is from cereals and another one from pulses namely Paddy (Rice) from cereals and Bengal Gram from pulses using judgement sampling. Similarly, in the second stage top five paddy and Bengal gram growing mandals have been selected by using judgment sampling. In the third stage, top five villages of paddy and bengal gram growing have been selected by using judgment sampling. The farmers are selected randomly from each village by using quota sampling for each crop.

The following table shows the quota sampling:

Sl. No.	Name of the Crop	Top Five Mandals Total Farmers	Percentage (%)	Quota Sampling	Sample Farmers	Sample Size Chosen
1	Paddy	61031	50.66	384*0.5066	194.54	195
2	Bengal Gram	59429	49.34	384*0.4934	189.46	190
	Total	120460	100.00		384.00	385

The research instrument used for the study is Questionnaire. Likert's Rating scale was used to analyze the marketing problems faced by the farmers in the study area. Tools used to analyze the data are frequency, percentage and One Way ANOVA.

Hypothesis

H₀: There is no significant difference between operational performance and efficiency of agriculture market committees with respect to marketing problems

Ha: There is significant difference between operational performance and efficiency of agriculture market committees with respect to marketing problems.

Gender of the Farmer	Frequency	Percent	Experience in Farming	Frequency	
Male	374	97.14	Below 5 years	61	
Female	11	2.86	Above 5 years to 10 years	128	
Total	385	100.00	Above 10 to 15 years	63	İ
			Above 15 to 20 years	69	
Age (Years)	Frequency	Percent	Above 20 years	64	
Below 25 years	36	9.35	Total	385	
Above 25 to 35 years	130	33.77	Extent of cultivation land	Frequency	
Above 35 to 45 years	126	32.73	Less than 2 acres	75	
Above 45 to 55 years	92	23.90	Above 2 to 5 acres	108	
Above 55 years	1	0.26	Above 5 to 8 acres	129	
Total	385	100.00	Above 8 acres	73	
Education Qualification	Frequency	Percent	Total	385	
Illiterate	21	5.45	Annual income of the family	Frequency	
Primary	73	18.96	Less than ₹ 75000	57	
Secondary	123	31.95	Above ₹ 75000 to ₹ 1.5 lakhs	48	
College	149	38.70	Above ₹ 1.5 lakhs to ₹ 2 lakhs	167	
Technical	19	4.94	Above ₹ 2 lakhs	113	
Total	385	100.00	Total	385	

Data Analysis & Interpretation

Table 3: Frequency Table of Socio-Economic Variables

Source: Primary survey

It is observed from the table 3 that out of 385 respondents 374 (97.14 percent) farmers were belongs to male category and 130 (33.77 percent) farmers to the age group of above 25 years to 35 years; 149 (38.70 percent) farmers were did their completed their education from college and 128 (33.25 percent) farmers were having farming experience of above 5 years to 10 years; 129 (33.51 percent) farmers were holding cultivation land above 5 to 8 acers and 167 (43.38 percent) farmers were earning family annual income of above ₹ 1.5 lakhs to ₹ 2 lakhs.

Marketing Problems	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Weighted Average
Higher Marketing Cost	2 (0.52)	11 (2.86)	36 (9.35)	234 (60.78)	102 (26.49)	1.10
Far Distance Location of AMCs	11 (2.86)	14 (3.64)	16 (4.16)	260 (67.53)	84 (21.82)	1.02
Delay in Weighing at AMCs	8 (2.08)	10 (2.60)	9 (2.34)	282 (73.25)	76 (19.74)	1.06
Delay in Payment at AMCs	10 (2.60)	10 (2.60)	14 (3.64)	298 (77.40)	53 (13.77)	0.97
Lack of Awareness of Market Information	5 (1.30)	13 (3.38)	30 (7.79)	239 (62.08)	98 (25.45)	1.07
Lack of Knowledge on Grading	2 (0.52)	4 (1.04)	27 (7.01)	265 (68.83)	87 (22.60)	1.12
High Price Fluctuations	14 (3.64)	24 (6.23)	16 (4.16)	263 (68.13)	68 (17.66)	0.90
Malpractices including price cut	7 (1.82)	17 (4.42)	4 (1.04)	269 (69.87)	88 (22.86)	1.08
More existence of Middlemen	9 (2.34)	12 (3.12)	21 (5.45)	282 (73.25)	61 (15.84)	0.97
Lack of Proper Transportation Facilities	5 (1.30)	17 (4.42)	35 (9.09)	258 (67.01)	70 (18.18)	0.96
Lack of Proper Storage Facilities	0 (0.00)	4 (1.04)	13 (3.38)	292 (75.84)	76 (19.74)	1.14

Table 4: Frequency Table of Marketing Problems

Source: Primary survey

From the table 4 it is observed that majority of the respondents agreed that they were facing problems while marketing Paddy and Bengal Gram. Out of 385 farmers 234 (60.78 percent) farmers agreed that marketing cost was high, 260 (67.53 percent) farmers were agreed that Agricultural Market Committees was located far from villages, 282 (73.25 percent) delay in weighing at AMCs, 298 (77.40 percent) delay in payments by market intermediaries to farmers towards the sale of produce, 239 (62.08 percent) farmers were agreed that they didn't have proper awareness of market information, 265 (68.83 percent) farmers were agreed that they were not having knowledge about grading the produce by market intermediaries, 263 (68.13 percent) farmers were agreed that they were

suffering from high price fluctuations, 269 (69.87 percent) farmers were agreed that market intermediaries doing malpractices including price cut, 282 (73.25 percent) farmers were agreed that they are more middlemen exist in channels of distribution, 258 (67.01 percent) farmers were agreed that lack of proper transportation facilities is one of the marketing problems and 292 (75.84 percent) farmers were agreed that lack of proper storage facilities was is the major marketing problem facing by them.

		Sum of Squares	df	Mean Square	F	Sig.	Actual Sig.	Result	
Provision and	Between Groups	4.916	11	0.447	2.007	0.027	0.05		
Maintenance of	Within Groups	83.043	373	0.223				H_0 Not	
facilities	Total	87.958	384					Accepted	
Dissemination of	Between Groups	4.688	11	0.426	1.835	0.047	0.05		
market information	Within Groups	86.647	373	0.232				H ₀ Not Accepted	
and publicity	Total	91.335	384					recepted	
Licencing and	Between Groups	4.971	11	0.452	1.998	0.028	0.05		
control of	Within Groups	84.390	373	0.226				H ₀ Not Accepted	
functionaries	Total	89.361	384						
	Between Groups	4.765	11	0.433	1.956	0.032	0.05	H ₀ Not Accepted	
Rationalisation of market charges	Within Groups	82.596	373	0.221					
market enarges	Total	87.361	384						
Organisation and	Between Groups	4.663	11	0.424	1.879	0.041	0.05	H ₀ Not Accepted	
supervision of	Within Groups	84.152	373	0.226					
sales	Total	88.816	384						
Training	Between Groups	4.898	11	0.445	1.943	0.033	0.05	H_0 Not	
programmes to	Within Groups	85.491	373	0.229					
farmers	Total	90.390	384					recepted	
	Between Groups	5.453	11	0.496	2.211	0.013	0.05		
Elimination of Malpractices	Within Groups	83.637	373	0.224				H ₀ Not Accepted	
	Total	89.091	384					Accepted	
	Between Groups	4.760	11	0.433	1.890	0.039	0.05		
Settlement of disputes	Within Groups	85.381	373	0.229				H ₀ Not Accepted	
ansputos	Total	90.140	384					recepted	

 Table 5: One Way ANOVA on Opinion Marketing Problems with respect to Operational

 Efficiency of Agriculture Market Committees

Source: Primary Survey

From the table 5 the analysis strongly supports Null Hypothesis (H_0), in other words calculated significance value is less than actual significance value which results in Null Hypothesis is not accepted, that means there is significant relationship between operational performance and efficiency of agricultural market committees with respect to marketing problems faced by the farmers.

Findings

The production share of Paddy and Bengal Gram has been discussed in Table 1 and Table 2. Table 1 represents that Andhra Pradesh is contributing good percentage in India's total Paddy and Bengal Gram production. Table 2 represents Kurnool is contributing good percentage in Andhra Pradesh's total Paddy and Bengal Gram Production.

From the analysis of table 3 if is found that majority of the respondents were male farmers belongs to the age group of above 25 years to 35 years who has education qualification by having farming experience of above 5 years to 10 years with above 5 to 8 acers of cultivation land and earning above $\gtrless 1.5$ lakhs to $\gtrless 2$ lakhs as family annual income.

From the analysis of marketing problems faced by Paddy and Bengal Gram farmers (Table 4) it is observed that weighted average of among 11 problems 7 problems weighted average was above 1 and remaining 4 problems weighted average is close to 1, that means majority of the farmers were agreed that they were facing problems while marketing the Paddy and Bengal Gram. The major marketing problem was faced by the farmers is lack of proper storage facilities with highest weighted average of 1.14. Due to not having proper storage facilities the produce was damaged by attack of rats, insects etc.

From the table 5 it is found that analysis not supports Null Hypothesis (H_0), it means that the study revealed that there is significant relationship between operational performance and efficiency of agricultural market committees and marketing problems faced by the farmers.

Discussion:

As the paddy and bengal gram were most important crops and occupies good percentage number in India's and Andhra Pradesh's production it is minimum responsibility by the government to look into the problems faced while marketing paddy and bengal gram. The government can reduce the marketing cost by providing subsidies in proper transportation and proper storage facilities, the market committees has to strictly monitor the operations like weighing, grading, sales and payments. The government has to make sure all the information regarding agricultural marketing should have updated in agricultural websites and high price fluctuations can be reduced by having proper control over supply.

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