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***MARKETING OF AMAN PADDY WITH SPECIAL REFERENCE
TO THE GOVERNMENT PROCUREMENT PROGRAMME IN
TWO SELECTED AREAS OF BANGLADESH***

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Abstract

The study was undertaken to estimate marketable surplus of different farm size groups and their channels of marketing with respect to Aman paddy. The extent of farmer participation in selling paddy to the government procurement centre was also examined. The study indicated that all size groups sell paddy immediately after harvest though about half of them buy back in the off-season at a higher price. The main cause of immediate sales was the need for consumption goods. The government procurement programme of paddy benefited the intermediaries more than the farmers because the mechanism of procurement provided little incentive to farmers for selling at the procurement centres.

I. INTRODUCTION

It is generally recognized that farmers do not get fair price of their produce because of imperfections in the marketing system. This is specially the case with small cultivators who dispose of a part of their produce during and immediately after harvest at a lower than year's average price to meet different economic and social obligations. Their buyers are mainly middlemen, both local and non local.

To ensure fair prices to growers and to have sufficient stock in the public sector, government introduced the system of direct procurement in paddy, jute and wheat.

In Bangladesh three varieties of paddy are grown. These are Aman (Winter), Boro (Spring) and Aus (Summer). Among these the major one is Aman which occupies about

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three-fifths of the rice acreage and the grain procurement programme is followed more intensively in that season. The study covers only the Aman season of 1977 and marketing data were collected with respect to Aman only with the following broad objectives in mind :

- (i) To estimate the marketable surplus of different groups of farms ;
- (ii) To determine the marketing channel of Aman Paddy ;
- (iii) To investigate the position of small farmers under the existing marketing structure ; and
- (iv) To examine the extent of farmers' participation in the government procurement programme and the impact of the programme on market.

Sources of data and some general characteristics of the sample have been discussed in Section II. Section III deals with the estimation of marketable surplus and describes the marketing channel and discusses its structure with respect to small farm. Section IV reviews the government procurement programme and its distributive impact and the findings have been summarized in Section V.

II. SOURCES OF DATA AND GENERAL CHARACTERISTICS OF THE VILLAGES

Two main procurement centres in the two biggest rice surplus districts of Bangladesh were selected for the purpose of this investigation. The centres are Haluaghat in Mymensingh and Birganj in Dinajpur. These two centres were among the top few centres of Bangladesh on the basis of 1976/77 grain collection. The survey was conducted in 1977/78 Aman season. Three villages around important local markets at different distances from the two procurement centres were purposively selected. From these markets paddy/rice are supplied to the centre by the middlemen. In each village 50 randomly selected farmers were planned to be interviewed with small (upto 2.5 acres), medium (2.5 to 5.0 acres) and large (5.01 acres and above) farmers representing in the ratio of 5 : 3 : 2 in keeping with the overall Bangladesh situation¹. The number of finally chosen farmers is presented in Table 1. The intended sample could not be followed because of nonavailability of farms in the respective sizes. Besides growers, some paddy middlemen were interviewed to know their characteristics and nature of operation in the Aman procurement season.

1. The size refers to area under cultivation.

TABLE 1 NUMBER OF FARMERS INTERVIEWED IN THE SAMPLE VILLAGES

Procurement centre	Village	Large Farmer	Medium Farmer	Small Farmer	Total
Haluaghat	Manikura	10	15	21	46
	Gazirvita	20	9	13	42
	Telikhali	10	13	22	45
	Total	40 (30.08)	37 (27.82)	56 (42.10)	133 (100.0)
Birganj	Sajalpur	10	13	25	48
	Bhabki	10	15	25	50
	Basudevpur	8	12	25	45
	Total	28 (19.58)	40 (27.97)	75 (52.97)	143 (100.0)
All Centres	All villages	68 (24.64)	77 (27.90)	131 (47.46)	276 (100.0)
Bangladesh		(17.05)	(26.32)	(56.63)	(100.0)

Figures in the brackets are percentages.

Birganj is well connected by a metalled road and is a very important commercial centre particularly for rice. Twenty two rice mills inclusive of three automatic ones are in operation there and for these mills paddy is collected from the interior by different categories of middlemen. Haluaghat is located at the border belt of India. Road is the only means of communication but that is again damaged. No rice mill is operating there because of government restriction and banking facility is also inadequate. The other important characteristics of the selected villages are shown in Table 2.

The farm and the family size of the sample households are much higher than the national averages (Table 3). The average operated size of the farm is 4.78 acres and 3.25 acres at Haluaghat and Birganj respectively against the national average of 2.86 acres (Bangladesh 1972).

TABLE 2 IMPORTANT CHARACTERISTICS OF THE SELECTED VILLAGES

Procurement Centre	Village	Approximate distance from the PC	Area (sq. miles)	Households	Population
Halua-ghat	Manikura (Halua-ghat) ^a	adjacent to the procurement centre	6.0	728	4000
	Gazirvita (Surjapur)	5 miles	1.33	231	1205
	Telikhali (Baghaitola)	7 miles	0.5	127	600
Birganj	Shajalpur (Birganj)	adjacent to the procurement centre	2.0	705	4800
	Bhabki (Kabiraj)	3 miles	0.75	179	869
	Basudevpur (Golapganj)	5 miles	0.5	86	425

a. Names in the brackets are the local markets adjacent to the village covered.

TABLE 3 SOME ECONOMIC CHARACTERISTICS OF THE FARMS

Size Class	Farm size (acres)		Size of the family ^a		Cultivated area per adult unit (acres)		Production of paddy per adult unit (maund)	
	Halua-ghat	Bir-ganj	Halua-ghat	Bir-ganj	Halua-ghat	Bir-ganj	Halua-ghat	Bir-ganj
Large	11.18	8.10	7.65	8.35	1.46	0.97	28.44	15.93
Medium	3.11	3.39	5.60	5.45	0.55	0.62	15.24	9.63
Small	1.32	1.36	4.31	3.93	0.30	0.35	8.30	5.46
All sizes	4.78	3.25	5.68	5.22	0.68	0.62	18.37	9.96

a. In measuring the size of the family children below the age of 12 has been considered to be half an adult unit and adult woman equivalent to 0.9 unit.

Source: Field Survey

III. MARKETABLE SURPLUS AND MARKETING CHANNEL

Growers sell their produce to meet different socioeconomic needs. Sometimes they sell under duress during harvest because of emergency needs as evidenced in their off-season purchase. The bigger part of selling, however, relates mainly to the marketable surplus.

Marketable Surplus

In this study marketable surplus of paddy has been estimated by the following formula :

$$y = a - (bc + d + e) \text{ where}$$

y = Total annual marketable surplus,

a = Total production of paddy from own and rented land, if any.

b = Number of adult units in the family

c = Consumption requirement per adult unit,

d = Quantity deducted for seeds and wastage,

e = Consumption requirement for hired labour.

So defined, annual marketable surplus may be negative indicating food deficit on the farm. This definition differs from 'gross marketed surplus' i. e. quantity actually sold irrespective of the family and other requirements, and from 'net marketed surplus' which is equal to gross marketed surplus minus the "buy back" in the off-season, if any.

Total production of paddy is the sum of Aus and Aman, of which Aman constitutes about 73% at Haluaghat and 67% at Birganj. In the Study areas Boro is usually not grown. The determination of the consumption requirement has been made assuming 0.90 lb of rice per adult per day².

TABLE 4 MARKETABLE SURPLUS ACCORDING TO THE SIZE OF FARM

(Percentage of total paddy production)

Centre	Large	Medium	Small	All sizes
Haluaghat	68.80	49.03	19.39	57.16
Birganj	48.71	22.07	-20.40	26.24

². FAO recommendation is 0.87 lb (397 gms) and the average level of rice consumption in the rural areas in 1973-74 was 354 gms (Rabbani and Hossain 1978).

Seed requirement for Aus and Aman is taken to be 7.30% and 3.0% of their production respectively. These estimates have been based on the local per acre yield and the seed rates generally followed. The wastage is assumed to be 1.0% of Aus and Aman production³.

To estimate the consumption of hired labour, the results of the study of Hossain (1977) has been followed. He found that on average 40% of total farm workers are hired labour where average number of family labour is three. On that basis number of hired labour has been taken to be two for large farms and one for medium farms and a quarter of one for small farms who hire only in critical periods as transplanting, weeding and harvesting.

Estimated marketable surplus has been found to vary directly with the size of farm and it turned out to be negative for small farms at Birganj indicating that they are deficient (Table 4). The higher proportion of marketable surplus at Haluaghat has resulted from higher cropping intensity due to Aus cultivation which is not done in Birganj. In Birganj some sugarcane is grown, the land being not so suitable for Aus.

Marketing Channel

The growers sell their paddy mainly to the middlemen in the post-harvest season. Middlemen involved in the trading of paddy are of different categories. They are commonly known as (i) Barkiwala/Kutia, (ii) Faria, (iii) Bepari, (iv) Paikar, (v) Mahajan-Foodgrain dealer/Approved grain dealer, (vi) Commission agent and (vii) Rice retailer. Their common definitions are given below :

1. **Barkiwala**—They are generally landless farmers, labourers and very small farmers. They buy paddy from growers and after necessary processing at home carry rice on shoulder to the market for sale. They attend 3-4 markets. They are found at Haluaghat.
2. **Kutia**—They are a special group of petty rice traders migrated from Maldaha in India now settled in Dinajpur. They do the business like Barkiwala but their scale of operation is somewhat bigger.
3. **Faria**—They are generally non-licensed traders and deal in less than 20 maunds of paddy. Seasonal farias are mainly farmers who generally have bullock-carts. They buy from villages ; while regular ones operate in the market. They sometimes sell to the consumers. Regular farias sometimes give advance to the small seasonal farias.
4. **Paikar**—They are license holding Farias but handle a large volume of paddy. They usually deal in paddy, jute, mustard, wheat etc. They finance Farias and buy from them. They are mostly big growers. They are found at Birganj.

³ In Bangladesh the common figure for seeds, feeds and wastage is 10% of total grain production. This includes all paddy, Transplant as well as Broadcast, traditional as well as High Yielding Varieties,

5. **Rice Retailer**—They have a fixed place in the market and operate all the year round. Their transactions are small, usually from 0.5 seer to 5 seers per transaction.

6. **Beparis**—Beparis are licensed traders and can buy from anywhere in the country with the condition that they are to sell in the area specified in their license. They deal in many other commodities as jute, betel-nuts, rabi crops and sometimes cloth in addition to paddy and rice. They are associated with the Food Grain Dealers (FGD) at the purchasing centres and Aratdars at the selling centres. They buy through FGDs and pay them some commission, generally Tk. 1.00 per maund.

7. **Food Grain Dealers**—They are licensed traders operating business throughout the year in a fixed area. They are locally called as Mahajan. They generally finance the Paikars, Farias and sometimes lend money to the farmers.

8. **Approved Grain Dealer (AGD)**—They are generally Food Grain Dealers. But they get the license for the specific period, say 3 months, to sell to the government procurement centre and receive a commission of Tk. 0.75 per maund. During this period they are not allowed to transact with the Beparis and others.

9. **Aratdars**—They have a godown in the market where the Beparis keep their stock for a week or less (generally 3-4 days) and rice is sold through them. Sometimes rice is sold on credit at the guarantee of the Aratdars. They get commission from the Beparis amounting to Tk. 2.00 per maund as well as from rice retailers @ Tk. 1.00. They generally finance the Beparis by paying advance and the Rice retailers by allowing credit sale. They are located in the important rice centres namely Dacca, Dinajpur etc.

10. **Commission Agent**—They assist the Beparis in buying of paddy, rice, jute, mustard and pulses etc. Beparis stay at the office of the commission agents until the procurement is complete. They are generally paid commission at the rate of Tk. 1.00 per maund. They are found to function in Birganj.

The main characteristics of middlemen are shown in Table 5.

The main difference between the marketing channel in Haluaghat and Birganj is the absence of Paikars and Commission Agents at Haluaghat. The marketing channels for Haluaghat and Birganj are shown in Figures 1 and 2.

Market Participation and Price Variation⁴

It has been generally found that farmers sell their Aman produce during the harvest (December) and immediately after harvest (January) for loan repayment, payment of taxes, purchase of consumption goods, etc. This seems to be more prominent in case of small farmers who sell at that time at a lower price but buy again at a higher price in the off-season.

⁴. Market participation here means to what extent farmers transact their paddy in the market instead of their court-yard.

TABLE 5 IMPORTANT CHARACTERISTICS OF MIDDLEMEN INVOLVED IN PRIVATE AMAN PADDY/RICE TRADE IN THE STUDY AREAS

Characteristics	Type of middlemen									
	Barkiwala	Kutia	Faria	Palkar	Rice retailer	Bepari	Approved grain dealer	Aratdar	Commission agent	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
1. Area of operation	3 to 4 local markets	3 to 4 local markets	4 to 5 local markets	8 to 10 markets	Fixed in one market	Outsiders coming from deficit districts	Five or more markets around the procurement centres	Located in some big centres	Located in some big centres	
2. Land holding	20% land- less 65% with 2.5 acres 15% upto 1.0 acre	10% Land- less max ownership 2.0 acres	15-30% landless 75% with 2.5 to 5.0 acres max ownership 5.0	50% with 2.5 to 5.0 acres 50% above 5.0 acres	50% land- less 50% upto 3.0 acres	Above 5.0 acres	35% 5 to 10.0 acres 40% up to 25.0 acres 25% above 25 acres	Information not available	Information not available	
3. Number/Market										
Regular	About 100	8-10	35-45	—	25-30	Irregular	51 at Haluaghat	None	5-7 at Birganj	
Seasonal (Aman)	250-300	20-25	Over 100	50 per day	25-60				None at Haluaghat	
4. Volume Operated/head										
Seasonal (Aman)	22-30 seers of rice/ market day	2-4 mds. of rice/ market day	10 mds./ market day	50-150 mds./week	2-4 mds./ day	150-200 mds./each time	280-400 mds./ week	40-50 mds./ day at Dacca	1000 mds./ week	
Off season			7-10 mds./ market day							

(Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5. Working Capital (Tk.)	200	1000	2000	10,000 (1600— 14,000)	500—600	15,000— 20,000	20,000— 50,000	Did not dis- close but as- sumed to be about 50,000	15,000— 25,000
6. Source of finance :									
Regular	10% owned 90% credit	75% owned 25% credit	10% owned 90% credit	—	50% owned 50% credit	80% owned 20% credit	—	Not available	30% owned 70% credit
Seasonal			50% owned 50% credit	100% owned	—		40% owned 60% credit		
7. Conditions for private credit	2.5 to 3 maund of paddy for Tk. 100/00 for 4 months	Without interest	To be re- turned on the same day	—	No interest within 3 days, some- times 3% per week	Without in- terest, some- times profit is shared	Without interest sometimes pro- fit is shared	Not available	Without inter- est from Pal- kars and growers

Source : Field Survey

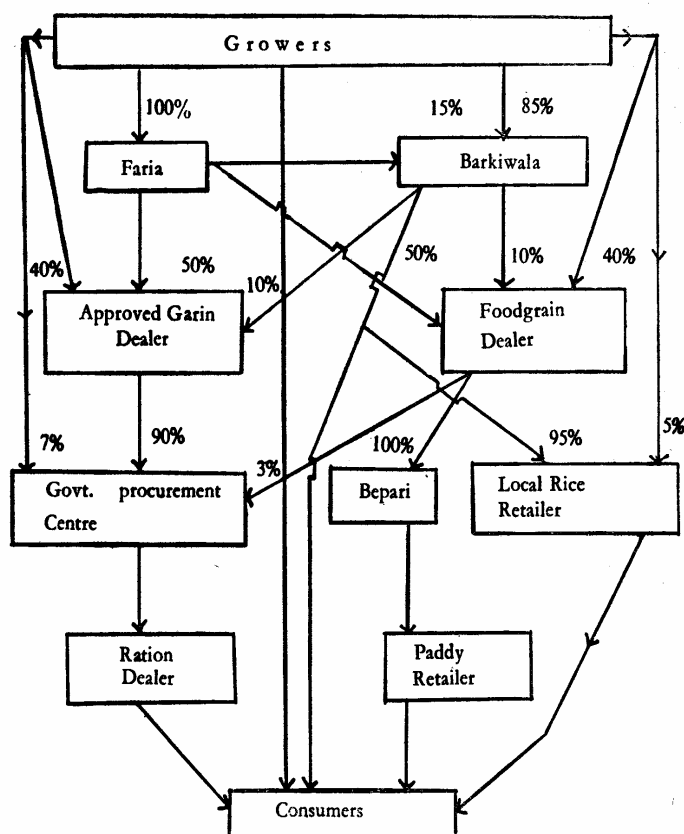


Figure 1 Common Marketing Channel of Aman Paddy/Rice at Haluaghat

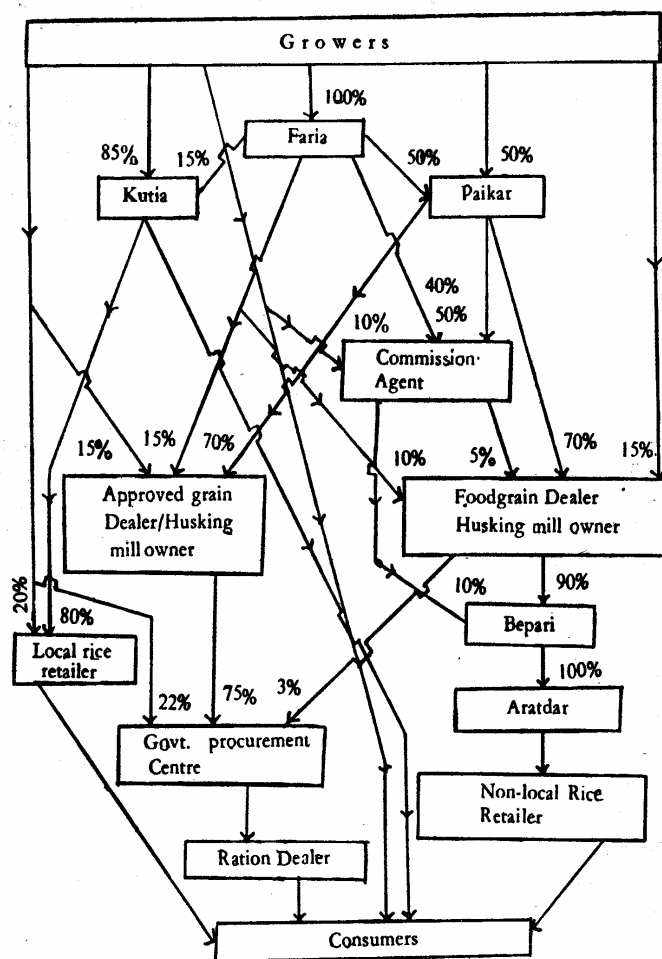


Figure 2 Common Marketing Channel of Aman Paddy/Rice at Birganj

The study shows that 83% of total farmers at Haluaghat and 71% at Birganj sold Aman paddy in the Post Harvest Period (December—January). They sold 40% and 30% of Aman production and 44% and 76% of their marketable surplus respectively (Table 6). The amount is lower at Birganj because about half of the small farmers do not sell at all. The small farmers there have negative marketable surplus; and therefore, selling of 18% of Aman paddy seems to be sale under duress otherwise they would not have bought back in the off-season (Table 14). It also shows that small farmers at Haluaghat sell the highest proportion of their marketable surplus during these two months though as a proportion of Aman production it is lower.

TABLE 6 THE EXTENT OF MARKETING IN
THE POST HARVEST PERIOD

Size Class	Haluaghat			Birganj		
	% farmers	% Aman production	% market- able surplus	% farmers	% Aman production	% market- able surplus
Large	97.5	48.71	42.20	96.4	36.79	50.90
Medium	83.8	30.69	42.84	92.5	26.27	79.26
Small	70.4	23.17	77.20	49.3	17.54	-65.56
All Classes	82.7	40.38	44.04	70.6	29.73	75.72

Source : Field Survey

At Birganj about 81% of marketed paddy is sold to the local businessmen who include Barkiwala/Kutia, Faria and other traders living within the radius of five miles from the selected market. They may sometimes be licensed grain dealers as well. No farmer has sold to the Mahajan or mill owners (Table 7) who are license holders having godown facilities. They sometimes lend money to the petty traders. Non-local businessmen are distant traders located outside five miles elsewhere commonly called Bepari. Local businessmen at Haluaghat procured about 64% of total quantity sold by farmers. Farmers' disposal to the government procurement centre was 16% at Halauaghat and 12% at Birganj.

Selling pattern as discussed earlier becomes a bit different when analysed according to distance from the procurement centre. Such analysis shows that generally non-local businessmen procure a larger quantity of paddy in the distant markets in both the areas, but they are absent in the villages near the centre (Table 8). At Bhabki of Birganj, however, all transactions took place with the local businessmen either because of presence of a large number of local traders or bad connection. The former seems to be more plausible. Another important feature is that selling to the government procurement centre was more common in villages close to the centre and practically none in the villages located between 3 to 5 miles off the centre.

TABLE 7 TOTAL QUANTITY OF PADDY SOLD TO DIFFERENT
BUYERS BY SIZE OF FARM

(In maund)

Size Class	Type of buyers					Total
	Local business- men	Non-local business- men	Farmers and labourers	Mahajan/ Millers	Government procurement Centre	
Haluaghat						
Large	1685.0 (66.7)	42.0 (1.7)	287.0 (11.4)	130.0 (5.1)	383.0 (15.1)	2527.0 (100.0)
Medium	441.0 (66.4)	57.0 (8.6)	43.0 (6.5)	24.0 (3.6)	98.5 (14.8)	663.5 (100.0)
Small	120.0 (40.0)	40.0 (13.3)	72.0 (24.0)	20.0 (6.7)	48.0 (16.0)	300.0 (100.0)
All sizes	2246.0 (64.4)	139.0 (4.0)	402.0 (11.5)	174.0 (5.0)	529.5 (16.0)	3490.5 (100.0)
Birganj						
Large	694.0 (75.1)	20.0 (2.2)	67.0 (7.2)	— —	142.5 (15.4)	923.5 (100.0)
Medium	357.5 (97.3)	10.0 (2.7)	— —	— —	— —	367.5 (100.0)
Small	145.6 (78.4)	— —	12.0 (6.5)	— —	28.0 (15.1)	185.6 (100.0)
All sizes	1197.1 (81.1)	30.0 (2.0)	79.0 (5.3)	— —	170.5 (11.5)	1476.6 (100.0)

Figures in the brackets indicate the percentage of total sale by each size class.

Source : Field survey.

TABLE 8 PRICE RECEIVED FROM DIFFERENT TYPES OF BUYERS BY SIZE OF FARM

Type of buyers	Taka/maund											
	Halughat Centre											
	Manikura				Gazirvita				Telikhali			
	Large	Medium	Small	All classes	Large	Medium	Small	All classes	Large	Medium	Small	All classes
1. Local businessmen	74.71	73.4	70.7	73.9	80.0	78.5	77.8	79.9	77.6	76.4	77.9	77.0
2. Non-local businessmen	—	—	—	—	—	—	—	—	76.6	79.0	79.6	78.0
3. Farmers and labourers	72.0	83.0	74.1	76.5	77.9	75.0	80.5	77.9	69.7	79.1	71.9	71.2
4. Mahajan/Millers	80.0	68.7	—	75.0	—	—	—	—	60.0	—	73.7	62.3
5. Government procurement centre	82.0	—	82.0	82.0	—	—	—	—	84.0	—	—	84.0

	Birganj Centre											
	Basudevpur											
	Shajalapur				Bhabki				Basudevpur			
	Large	Medium	Small	All classes	Large	Medium	Small	All classes	Large	Medium	Small	All classes
1. Local businessmen	76.5	79.1	76.3	77.2	75.8	73.2	79.9	75.6	72.5	68.2	70.3	70.9
2. Non-local businessmen	—	—	—	—	—	—	—	—	65.0	74.0	—	68.0
3. Farmers and labourers	79.7	—	72.9	78.2	—	—	—	—	68.0	—	—	68.0
4. Mahajan/Miller	—	—	—	—	—	—	—	—	—	—	—	—
5. Government procurement centre	82.7	—	—	82.7	—	—	—	—	—	—	80.4	80.4

Source : Field Survey.

Farmers interviewed at Gazirvita considered that sales to the AGDs meant selling to the government procurement centre and thus they did not go to the procurement centre. And one who sold at the centre from Telikhali, the farthest village, intimated that he participated at the request of the Food Inspector.

Price variation according to distance was found only in one centre (Birganj) where a little higher price prevailed in the market close to the government procurement centre (Table 8). But no such pattern is seen in Haluaghat. The price comparison as such may not reflect the correct situation because there may be different proportion of sales at different times and selling late in the season generally brings higher price.

At Haluaghat small farmers sell about 77% of their marketable surplus at post harvest season when price remains low (Tables 9 and 10). Small farmers at Birganj at that time also sell a sizable amount of paddy inspite of their negative surplus. In both the centres irrespective of size of farm December sales was higher compared to January sales. These farmers being deficient in food supply need to buy back at higher prices during February—June for family consumption. Actual February—June prices for the study year could not be collected. Studies in the past indicated that off-season prices are higher than normal time

TABLE 9 PROPORTION OF MARKETABLE SURPLUS AND AMAN PRODUCTION MARKETING IN DECEMBER & JANUARY BY SIZE OF FARM

Size Class	% of marketable surplus sold by month			% of Aman production sold by month		
	December	January	Total	December	January	Total
Haluaghat						
Large	22.9	19.3	42.2	26.4	22.3	48.7
Medium	32.3	10.1	42.9	23.5	7.2	30.7
Small	65.7	11.6	77.2	19.7	3.5	23.2
All Classes	26.9	17.2	44.0	24.6	15.7	40.4
Birganj						
Large	31.1	19.8	50.9	22.5	14.3	36.8
Medium	56.2	23.1	79.3	18.6	6.7	26.3
Small	(-)40.4	(-)16.1	(-)56.6	12.5	5.0	17.5
All Classes	49.1	26.6	75.7	19.3	10.4	29.7

Source : Field Survey.

TABLE 10 PRICE OF PADDY RECEIVED BY FARMERS IN DECEMBER
AND JANUARY 1977/78

Taka per maund

Size Class	Haluaghat			Birganj		
	December	January	Difference	December	January	Difference
Large	70.7	76.4	5.7	74.0	78.5	4.5
Medium	69.8	76.4	6.6	71.0	76.0	5.0
Small	70.7	74.5	3.8	74.1	77.5	3.4
All Classes	70.4	76.3	5.9	73.2	77.9	4.7

Source: Field Survey

but that just cover capital and storage costs and a normal profit (See Farruk 1970). Even then price difference between the post harvest season and the off-season is found to have more adverse effect on the small farms because they buy relatively more during the off-season compared to medium and large farms (Table 11). The reason for harvest time sale was found to be meeting of emergency needs e.g. purchase of consumer goods, repayment of debt in most cases, particularly for small and medium farm (Table 12).

TABLE 11 NUMBER OF SELLERS BUYING BACK IN OFF-SEASON AND
THE QUANTITY BOUGHT

Size Class	% post harvest sellers buying back		Quantity of post-harvest sales bought back (%)	
	Haluaghat	Birganj	Haluaghat	Birganj
Large	30.8	40.7	25.0	29.4
Medium	61.3	45.1	32.3	75.6
Small	57.5	40.6	53.2	60.5
All Classes	49.1	42.6	32.7	45.2

Source: Field Survey

TABLE 12 PRINCIPAL USE OF MONEY RECEIVED FROM SALES OF PADDY
IN THE POST HARVEST PERIOD

Size class	(% of sale proceeds by item)				
	Consumer goods ^a	Farming	Repayment of debt	Others ^b	Total
Haluaghat					
Large	36.0	22.6	21.2	20.2	100.0
Medium	27.4	13.8	31.6	27.1	100.0
Small	55.3	11.3	31.6	1.7	100.0
All Classes	36.8	19.9	24.2	19.9	100.0
Birganj					
Large	53.3	15.9	7.6	23.2	100.0
Medium	57.7	3.8	22.3	16.2	100.0
Small	57.4	10.2	13.5	18.9	100.0
All Classes	54.7	12.0	11.9	21.3	100.0

^a Includes clothing

^b Includes payment of taxes, buying of land, marriage expenses, repair of houses and educational expenses.

Source : Field Survey

GOVERNMENT PROCUREMENT PROGRAMME

Extent of participation

The suppliers to the procurement centre fall in either of three categories : (i) AGDs, (ii) FGDs and (iii) Growers. The common marketing channel from growers to the procurement centre is shown in Figure 3.

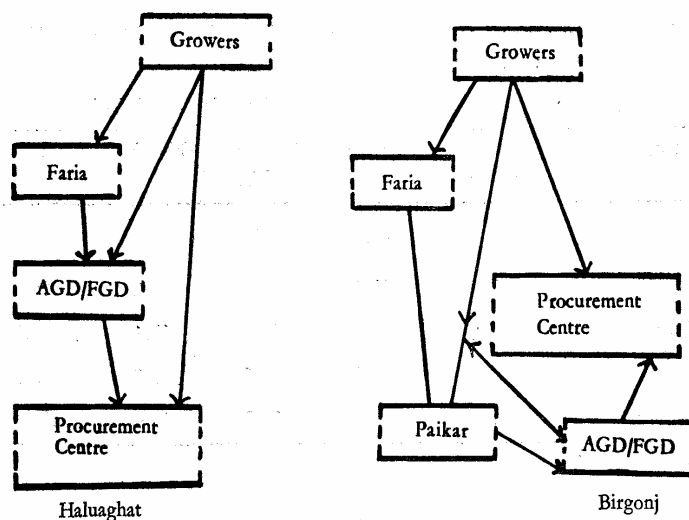


Figure 3 Common marketing channel from growers to the procurement centre

AGDs are approved dealers who are subject to frequent checking of their records and accounts by the Food Inspector to find whether declared price is paid by them. Furthermore, they are not allowed to sell to other middlemen during the procurement season. They are given incentive commission of Tk. 0.75 per maund for the services they render to the government.

Their expected services are : (i) active support by collecting paddy/rice from the interior of the country so as to achieve the target ; (ii) drying and winnowing of paddy if it is not suitable for storage and (iii) bagging, marking and stacking in the government godowns.

FGDs are generally licensed grain dealers for the whole year. Most of the FGDs are AGDs. FGDs do not get any commission and they are not obliged to sell to the procurement centre.

To encourage growers' participation there is an instruction from the government to the Food Inspector for giving first preference to growers. In practice it is not followed because the Inspector has to handle large number of farmers selling small quantities and thus may not be able to fulfil target set earlier. Further, because they need to issue a certificate in four copies for each seller and that is obviously a time-consuming task. It is also difficult to check the quality of paddy of so many individual seller. As a result, the Food Inspectors go for bulk purchase from AGDs and others ignoring the government instruction.

During the field survey only 14 and 3 farmers selling directly to the government procurement centre could be identified in the selected villages of Haluaghat and Birganj respectively. Most of these farmers came from the villages near the procurement centre. With such low participation realistic conclusion cannot be drawn about the relative benefit derived by different size classes of farmers from the procurement programme. However, some clues as to why other farmers did not sell could be found out from the small number who sold to the centre.

The participant sellers were asked whether they faced any problem at the procurement centre. Everybody mentioned one or more problems. The principal problem was reported to be unusual delay in the queue. Almost everybody mentioned that one whole day was required to make the grain transaction and collect certificate of payment. Then another day was needed for encashing the certificate from the bank. The point to be noted here is that the Inspector generally issued the certificate in the afternoon when bank hour was over. The sellers thus had to take payment the following day or even later. Sometimes they were harassed objecting that the grains were not of good quality. Another complaint was that there was inadequate supply of gunny bags in the centre and therefore, in many instances many sellers inclusive of AGDs had to guard their paddy at the procurement camp for days together. Such delay in selling of paddy is not conducive to encourage growers' participation.

Some non-participant growers were also asked the causes of their not-selling to the procurement centre inspite of their knowledge of higher price there. Replies to the question are summarized in Table 13. At Birganj the main cause was the "Small quantity of salable paddy" and at Haluaghat it was "Trouble-some transaction." To the big growers the main reason was 'Troublesome transaction' in both the centres.

The main incentive to the participant growers was the higher price. The average price the growers received was about Tk. 82.0 against the declared rate of Tk. 84.0 because of deduction for admixture of grains and higher moisture content etc. The growers, on the other hand, considered that their paddy was better than that of AGDs. Farmers suggested that indiscriminate rate of deduction was not correct. It may be mentioned that correct discrimination on the part of a single Inspector is not possible as he is to decide the quality on the basis of eye estimation and by physical touch due to non-availability of moisture meter. He is also unable to examine all the cases separately because of heavy flow of paddy in the procurement season. It has been observed that the average daily procurement of paddy was 1222 and 1981 maunds at Birganj and Haluaghat respectively from December to March.

TABLE 13 PRINCIPAL REASON FOR NOT SELLING TO THE GOVERNMENT PROCUREMENT CENTRE

PROCUREMENT CENTRE							(%)
Size Class	Distant location of the procurement centre	Trouble some transactions	Non-payment of cash	Small quantity of saleable paddy	Poor transport to the centre	Others	Total
Haluaghat							
Large	4.5	41.8	28.3	20.9	4.5	—	100.0
Medium	9.8	29.5	19.7	32.8	6.6	1.6	100.0
Small	12.2	26.8	13.4	32.9	13.4	1.2	100.0
All classes	9.0	32.4	20.0	29.0	8.6	0.9	100.0
Birganj							
Large	—	52.0	4.0	40.0	4.0	—	100.0
Medium	—	15.4	5.1	69.2	10.3	—	100.0
Small	—	8.5	5.1	84.7	1.7	—	100.0
All classes	—	19.5	4.6	70.7	4.9	—	100.0

^a It means delay in the queue for weighing, waiting for certificates at the Inspector's Centre, extra payment to the coolie or porter for racking in the godown etc.

Source : Field Survey.

Impact of the procurement programme

Unlike the past, for the last three years (1976—1979) government procurement price has been serving as a support price to the farmers as it has been found higher than the open market rate during the procurement season (Table 14). The AGDs were the principal beneficiaries of this support level price because most of the grains at procurement centres were supplied by them. Whether or not AGDs paid the government declared price to the farmers remains to be seen.

TABLE 14 WHOLESALE PRICE OF COARSE RICE AND THE GOVERNMENT PROCUREMENT PRICE DURING AMAN HARVEST

Year	November	December	January	Government price of coarse rice
1959-60	24.35	23.06	24.54	19.31
60-61	22.54	23.33	24.50	19.31
61-62	27.50	23.80	24.38	19.31
62-63	29.75	28.30	27.65	19.31
63-64	27.00	24.00	23.29	21.34
64-65	25.65	23.88	25.70	20.66
65-66	31.25	27.56	28.01	21.34
66-67	38.67	37.60	39.95	26.28
67-68	37.41	33.14	32.33	27.85
68-69	42.27	36.57	37.96	29.41
69-70	39.69	34.43	35.37	29.41
70-71	35.45	34.96	34.70	29.41
71-72	42.36	43.42	39.53	37.40
72-73	71.11	65.85	70.72	53.00
73-74	90.20	83.22	91.92	71.69
74-75	227.13	223.76	242.08	118.00
75-76	104.86	102.82	113.63	118.00
76-77	111.51	101.66	102.01 ^a	118.00
77-78	124.00	125.45 ^a	134.04 ^a	132.00

^a Average price for 16 markets in Dacca, Mymensingh, Dinajpur, Rajshahi and Rangpur

Source : (i) Directorate of Agricultural Marketing, Ministry of Agriculture,
(ii) Department of Procurement, Ministry of Food.

During 1977-78 the government procurement price of Tk. 84 inclusive of transport premium of Tk. 0.40 per maund was payable to the grower-seller and the AGDs. When purchased from AGDs, an additional commission of Tk. 0.75 per maund was to be allowed indicating that AGDs were to buy @ Tk. 84 from growers. In reality most of the grains at procurement centres were purchased from the AGDs. At Haluaghat over 90% and at Birganj about 80% of total procured quantity was purchased from AGDs. At Haluaghat AGDs paid only Tk. 78.0 on average. At Birganj they purchased in bulk from large land owners whose rates were not available.

AGDs claimed that they had to incur about Tk. 3.5 on various counts after purchasing grain from growers (Table 15). Since this additional expenses were not paid by the procurement centre, they were compelled to pay lower than declared price to the growers. In reality AGDs did not go out to distant markets and hence did not incur the entire amount of costs claimed. They on the other hand mentioned that they received on average Tk. 82.0 instead of Tk. 84.0 because the supplied grains were considered to be of low quality for which deductions were made. In any case, the AGDs made sure that they had a good margin and that they did by paying lower price to the farmers.

TABLE 15 COST INCURRED BY AGDs FOR MARKETING OF PADDY

Item	(Tk. per maund)	
	Haluaghat	Birganj
(i) Transport by bullock cart (3-5 miles)	2.00	1.50
(ii) Labour cost at the local market and at AGD's godown	0.70	0.50
(iii) Labour cost upto racking at the govt. godown ..	0.37	0.50
(iv) Drying, winnowing and bagging	0.50	0.37
(v) Local taxes	0.50	0.50
(vi) Other miscellaneous	0.10	0.12
Total :	3.72	4.39

Source : Field Survey

The market price in 1977-78 was higher compared to both 1975-76 and 1976-77 price. In that year the price difference between the market rate and the government procurement rate has also decreased compared to two previous years. There are two possible reasons for this :

- (i) Appointment of a larger number of AGDs which resulted in increased buyer competition ; and
- (ii) Early start of procurement from the 15th of November against the usual start of January in the past.

Price rise in 1977-78 might also be related to other factors e.g. production level, general price level in the country. However detailed analysis of this could not be done due to lack of data.

VI. CONCLUSIONS

Marketable surplus decreases with the reduction in the size of farm. Small farmers at Birganj have negative surplus and inspite of that they sell about 18% of their Aman production in the post harvest season of December-January at a lower price. More than 40% of harvest time sellers buy about 40% of the quantity sold in the Aman off-season at a high price. This is a double loss and both small and medium farmers are the sufferers. The principal cause of immediate sale is the need for consumption goods inclusive of clothes and of loan repayment.

Farmers' participation in the government procurement programme is poor and because of very limited data no conclusion could be drawn as to which farm group benefitted most. The main incentive of participation was higher price and the principal hindrances were small quantity of salable paddy at their disposal for sales and 'Trouble-some transaction' at the procurement centre.

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