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RESEARCH NOTES

Factors Affecting the Share of Groundnut Market Arrivals in the Market Yards in Andhra Pradesh

STATEMENT OF THE PROBLEM

The establishment of market yards is aimed at regulating the market practices effectively under the marketing committees. This would essentially attract the producer to dispose off his produce at the market yards. However, the decision of place for disposal (say, production centre, buyer's premises or market yards) by the producer-sellers is constrained by various factors, which can be classified into (i) internal and (ii) external (exogenous) variables. The internal variables (endogenous factor set) can be defined as those relating to the attitudes of producer-sellers and buyers towards the transaction place with the existing market conditions (Bhatia, 1984; Rajagopal, 1986; Krishnan, 1988). The external factors generally will not have a direct impact on the producer. However, they will have an indirect effect on them (Satyapriya, 1984; Sidhu, 1986; Tyagi, 1987). For instance, creating a good market environment would benefit the producer from the elimination of market imperfections.

The exogenous factors can be attributed to the existence of various market channels. For instance, village merchant (VM)/ broker (VB) or decorticator/oil miller (DEC/OM) channels at the production centre exist because of the non-development of market infrastructure, ineffective implementation of regulations or imperfections at the market centre (Tewari and George, 1969; Arora and Jayaprakash, 1979). Such factors also lead to opening up of DEC/OM channel at the market centres. Further, the endogenous and exogenous factors may act together in governing the producers' decision-making in regard to the place of sale and choice of the buyer. However, all the factors are qualitative in nature. Hence, assessing the impact of these factors seems to be a difficult task. In this framework, the study attempts to examine the following two objectives: (i) to identify the factors influencing the share of groundnut arrivals at the market yards and (ii) to capture the impact of these factors on the arrivals at the market yards.

DECISION-MAKING MODEL DESIGN

The proportions of groundnut producers and of the quantity of output transacted in each channel for each farm category are accounted to facilitate comparison (for an analysis of the effects of location and marketing channels on prices received by the producers, see Patnaik, 1984). The data from the groundnut producers relating to (i) production centre and (ii) market centre are collected. The channels at the production centre are classified into two, viz., VM/VB channel (longer) and directly to decorticators (shorter). On the other hand, the two channels identified at the market centre are: directly selling to decorticators at mill premises and through licensed agents at the market yard.

The weight of a particular reason (factor) stated by the producer for a particular decision is accounted in terms of (i) the proportion of producers who give that reason to all the reasons stated by all producers and (ii) (thereby) the proportion of output disposed off due to that reason to the total output of all producers. The proportions are worked out for each farm category and channel.

In order to capture the effect of variability in the nature of channels and farm categories

on the factor (reason) thereby influencing the share of the market arrivals in the market centre or production/village centre, the dummy variable models of the following forms are considered and fitted.

Production/Market Centre Decision Variable Models

$$P_{ni} = B_{0i} + B_{1i}\ C + B_{2i}\ F_1 + B_{3i}\ F_2 \text{ and}$$
$$Q_i = A_{0i} + A_{1i}\ C + A_{2i}\ F_1 + A_{3i}\ F_2$$

where P_n = the proportion of farmers in a size category in a channel stated a decision variable (say, lack of transport facility opting for production centre) to the total farmers of the size category in that channel.

Q = the percentage of output disposed off by the producers in a farm category in a channel due to a decision variable to the total output of all producers of the size category in that channel.

i = decision variable running from 1,2,....8 in the case of production centre choice and from 1,2,....6 in the case of market centre decision.

C = dummy variable for channel, 0 for VM/VB channel, and 1 for decorticator channel in the case of production centre; and 0 for decorticator and 1 for Licensed Agent (LA) at the market yard for market disposals.

F_1 = dummy variable for farm category, 1 for medium farmers and 0 for others;

F_2 = dummy variable for farm category, 1 for large farmers and 0 for others;

The base variable is the small farmer.

Hypothesis: The proportion of farmers or output disposed off at the production centre/market centre (decision) due to lack of transport facility/anticipation of better prices (decision variable) is a function of market channel and farm category.

Models Pertaining to the Choice of Buyer and Place

In the case of the choice of buyer, the variability in the nature of market practices at the production centre and market centre is also considered in the dummy variable models.

$$P_{nj} = Q_{0j} + Q_{1j}\ C + Q_{2j}\ F_1 + Q_{3j}\ F_2 + Q_{4j}\ M \text{ and}$$
$$Q_j = w_{0j} + w_{1j}\ C + w_{2j}\ F_1 + w_{3j}\ F_2 + w_{4j}\ M$$

where P_n, Q, C, F_1 and F_2 variables are the same as specified earlier.

M = dummy variable for the place, 0 for production centre and 1 for market centre.

j = decision variables running from 1,2,....7.

Hypothesis: The proportion of producers or output disposed off to the buyer (decision) due to age-old relationship (cause) is a function of market channel, farm size and transaction place.

FIELD SURVEY DESIGN AND DATA BASE

Puttur, a developing market predominantly for groundnut, was selected for the study. Gollapalli village and its hamlets, located in the vicinity of 4 km on Puttur-Chittoor road from Puttur market yard, were purposively selected. The location of the village serves two ways: (i) it is a semi-developed village and (ii) it is almost in the middle of the notified area of the market yard within a radius of 12 km. Further, some of the adjacent mandals/blocks are not subject to the enforcement of market regulations. The groundnut producers are selected through stratified random sampling. The stratification is made as small (less than 5 acres of dryland), medium (5.1-10.0 acres of dryland) and large (more than 10 acres of dryland) farmers. The ratio of small, medium and large farmers are in the proportion of 3:2:1 accounting for a total sample size of 68 groundnut producers only. The study relates to *kharif* 1992-93. The data are collected through canvassing the designed questionnaires for the purpose.

FINDINGS AND DISCUSSION

From Table I, it is observed that the number of small farmers decreased while moving from VM/VB channel to market yard agents channel. However, in the case of medium and large farmers, the number of seller-participants is high in the channels of market centre rather than in the production centre. Thus it can be inferred that there is an inverse relationship between farm size and the length of the marketing channels.

TABLE I. DISTRIBUTION OF SAMPLE HOUSEHOLDS ACCORDING TO CHANNEL AND FARM CATEGORY

Farm category	Production centre sales		Market centre sales		Total
	Village merchant/Broker (VM/VB)	Decorticator/ Oil miller (DEC/OM)	Decorticator/ Oil miller (DEC/OM)	Licensed agent (LA)	
(1)	(2)	(3)	(4)	(5)	(6)
Small farmers	13	8	5	6	32
Medium farmers	3	5	8	8	24
Large farmers	0	2	4	6	12
All	16	15	17	20	68

From Table II, it is evident that in terms of the proportionate flow of groundnut production, the large farmers preferred regulated channels (shorter) compared to the small farmers who opted for VM/VB unregulated channels.

Factors Affecting the Choice of Production Centre

The multi-factors that affected the groundnut farmers opting for the production centre as the place of sale are identified as: lack of transport facilities, lack of knowledge about market practices, uneconomic quantity to be carried to the market centre, fear of cheating at the market, no guarantee for remunerative prices at the market centre, non-competitive conditions at the market centre, delay/waiting time in the payment of sale proceeds at the market yard and buyer's demand for production/village centre.

TABLE II. DISTRIBUTION OF GROUNDNUT OUTPUT OF SAMPLE HOUSEHOLDS ACCORDING TO CHANNEL AND FARM CATEGORY

(quintals)

Farm category	Production centre sales		Market centre sales		Total
	VM/VB	DEC/OM	DEC/OM	LA	
(1)	(2)	(3)	(4)	(5)	(6)
Small farmers	227.40	154.25	114.70	123.00	619.35
	(36.72)	(24.91)	(18.52)	(19.86)	(100)
Medium farmers	158.10	208.00	388.00	362.00	1,116.10
	(14.17)	(18.64)	(34.76)	(32.43)	(100)
Large farmers	0	146.00	278.70	530.00	954.70
		(15.29)	(29.19)	(55.51)	(100)
All	385.50	508.25	781.40	1,015.00	2,690.15
	(14.33)	(18.89)	(29.05)	(37.73)	(100)

Source: Primary Survey, 1992-93.
Figures in parentheses are percentages to the total.

Table III shows that among the variables, lack of transport, lack of market knowledge, uneconomic quantity and fear of cheating seem to be relatively more important in the case of small and medium farmers compared to the large farmers. For the large producers, non-availability of competitive buyers, waiting time in payment of sale proceeds and buyer's willingness/demand for purchase at the production centre are the factors influencing them to choose the production centre. Between the VM/VB and DEC/OM channels, in most of the cases, the producers have more inclination towards the latter (shorter) channel.

TABLE III. FACTORS AFFECTING THE NUMBER OF PRODUCERS TO CHOOSE PRODUCTION CENTRE - CHANNELWISE

(per cent)

Sr. No.	Factors/Reasons	Small farmers		Medium farmers		Large farmers
		VM/VB	DEC/OM	VM/VB	DEC/OM	DEC/OM
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Lack of transport	69.2	50.0	66.7	80.0	50.0
2.	Lack of market knowledge	61.5	50.0	100.0	80.0	50.0
3.	Uneconomic quantity	46.2	100.0	33.3	80.0	0
4.	Cheating at market	61.5	12.5	100.0	40.0	50.0
5.	Uncertainty in price	30.8	50.0	66.7	80.0	50.0
6.	Non-competitive conditions	76.9	62.5	66.7	80.0	100.0
7.	Waiting time for sale proceeds	46.2	75.6	33.3	80.0	100.0
8.	Buyer's willingness	69.2	37.5	100.0	40.0	100.0

Source: Primary Survey, 1992-93.

Similarly, Table IV also shows that the large producers opted for decorticator channel at the production centre due to lack of competition and high waiting time at the market yard and the buyer's willingness to buy at the producer's place.

Factors Determining the Choice of Market Centre

The major multi-variables governing the producers to choose the market centre for the disposal of their produce are found to be anticipation of better prices, standard market practices, immediate payment, preference for direct disposal, buyer's demand to transact at the market centre and non-availability of buyers at the production centre.

TABLE IV. FACTORS AFFECTING THE SHARE OF GROUNDNUT OUTPUT DISPOSALS THROUGH PRODUCTION CENTRE - CHANNELWISE

(per cent)

Sr. No. (1)	Factors/Reasons (2)	Small farmers VM/VB (3)	Small farmers DEC/OM (4)	Medium farmers VM/VB (5)	Medium farmers DEC/OM (6)	Large farmers DEC/OM (7)
1.	Lack of transport	64.7	61.8	65.8	76.4	48.6
2.	Lack of market knowledge	57.7	48.9	100.0	83.2	51.4
3.	Uneconomic quantity	42.0	100.0	36.1	82.7	0
4.	Cheating at market	57.7	10.5	100.0	40.9	48.6
5.	Uncertainty in price	29.7	41.2	82.9	83.2	51.4
6.	Non-competitive conditions	73.7	61.7	70.2	79.8	100.0
7.	Waiting time for sale proceeds	44.6	75.1	29.8	82.7	100.0
8.	Buyer's willingness	67.7	43.6	100.0	39.4	100.0

Source: Primary Survey, 1992-93.

The anticipation of better prices and standard market practices seem to be the dominant factors in choosing the market centre particularly decorticator channels in the case of small producers (Table V). The share of the output disposed off to the decorticators or the millers at the market centre is also found to be substantially high in the small farm category due to anticipation of better prices and standard market practices (Table VI). However, in the case of large producers, standard market practices, immediate payment at the market centre and non-availability of buyers seem to influence their choice of DEC/OM channel at the market centre (Tables V and VI). It is interesting to note that the choice of market yard sales, i.e., the sale through licensed agents at the market yards, seems to be relatively less preferred compared to the decorticators at the buyer's premises in the study area.

TABLE V. FACTORS INFLUENCING THE PROPORTION OF PRODUCERS TO CHOOSE THE MARKET CENTRE - CHANNELWISE

(per cent)

Sr. No. (1)	Factors (2)	Small farmers DEC/OM (3)	Small farmers LA (4)	Medium farmers DEC/OM (5)	Medium farmers LA (6)	Large farmers DEC/OM (7)	Large farmers LA (8)
1.	Anticipation of better prices	80.0	50.0	62.5	62.5	25.0	66.7
2.	Standard market practices	80.0	50.0	75.0	75.0	100.0	33.3
3.	Non-competitive conditions	60.0	50.0	37.5	62.5	75.0	66.7
4.	Immediate payment	40.0	50.0	62.5	50.0	75.0	66.7
5.	Preference for direct sale	60.0	50.0	50.0	25.0	50.0	66.7
6.	Buyer's willingness	60.0	33.3	62.5	37.5	0	66.7

Source: Primary Survey, 1992-93.

TABLE VI. FACTORS AFFECTING THE SHARE OF GROUNDNUT ARRIVALS IN MARKET CENTRE - CHANNELWISE

(per cent)

Sr. No. (1)	Factors (2)	Small farmers DEC/OM (3)	Small farmers LA (4)	Medium farmers DEC/OM (5)	Medium farmers LA (6)	Large farmers DEC/OM (7)	Large farmers LA (8)
1.	Anticipation of better prices	84.30	43.17	64.25	61.16	20.17	66.91
2.	Standard market practices	78.99	57.32	75.46	78.45	100.00	33.08
3.	Non-competitive conditions	70.01	57.32	39.25	63.59	75.64	66.91
4.	Immediate payment	29.99	49.51	58.12	49.81	69.07	64.00
5.	Preference for direct sale	70.01	50.49	50.18	19.86	40.11	64.89
6.	Buyer's willingness	61.46	31.79	62.42	43.20	0	64.00

Source: Primary Survey, 1992-93.

Decision-Making Process of the Choice of Buyer

The identified seven-fold variables determining the choice of the buyer are presented in Table VII which gives the percentage of the groundnut output disposed off to each buyer due to a cause variable at the production and market centres across farm categories. It is observed that the age-old relationship seems to be a significant factor in the case of decorticator channels for large and small producers. The choice of production centre channels is substantially constrained due to uneconomic quantity in the case of small producers. Credit-binding is also found to be a constraint to some extent in the choice of the buyer. Further, the anticipation for high price seems to be the predominant factor in governing the producer's decision in disposing off the produce through licensed agents at the market yards.

Determinants of the Share of Groundnut Market Arrivals

The regression models fitted to identify the decision variables for opting production centres in terms of the number of producers and the share of market arrivals are presented in Tables VIII and IX respectively. All the fitted models show good fit as the $\overline{R}^2$ values are more than 0.6. The values of F-statistic (Variance test) are also found to be significant at 1 per cent level, indicating that the sample truly represents the population.

In the 'lack of market knowledge' model, the variables, channel and farm size 1 (medium farmers) are found to be significant at 1 per cent level. The variables indicated that the number of farmers was found to be less by 16 per cent in the decorticator channel than in VM/VB channel for disposing of the produce at the production centre due to lack of market knowledge (Table VIII). However, the proportion of medium farmers was higher by 34 per cent compared to the small farmers for opting production centres due to lack of market knowledge. In terms of the share of groundnut arrivals, the produce disposed off to decorticators was less by 13 per cent due to lack of market knowledge compared to VM/VB channel and the share of medium farmers in the disposal of produce was higher by 38 per cent as compared to the small farmers at the production centre. Due to the uneconomic quantity, the proportion of small farmers who disposed off their produce at the production centre was higher by 16 and 98 per cent respectively over medium and large farmers. Further, the proportion of producers who disposed off their produce was higher by 50 per cent in DEC/OM channel over VM/VB channel at the production centre due to uneconomic quantity. But the proportion of quantity disposed off at the production centre due to this decision variable was obviously lower in the case of medium farmers (11.63 per cent) and large farmers (97.2 per cent) compared to the small farmers (Table IX).

The fear of cheating was found to be significantly high in the decorticator channel compared to VM/VB channel resulting in a lower proportion of farmers and output, particularly in the case of small farmers compared to medium and large farmers who entered into market transactions. Similarly, uncertainty about getting better price and non-competitive conditions at the market centre were relatively high in the case of medium and large farmers compared to the small farmers. Between the channels, competitive conditions were less in DEC/OM channel resulting in a lower proportion of producers and

TABLE VII. FACTORS AFFECTING THE GROUNDNUT MARKET ARRIVALS - PLACE, CHANNEL AND FARM SIZEWISE

(per cent)

Sr. No.	Factors	Small farmers				Medium farmers				Large farmers		
		Production centre		Market centre		Production centre		Market centre		Production centre	Market centre	
(1)	(2)	VM/VB (3)	DEC/OM (4)	DEC/OM (5)	LA (6)	VM/VB (7)	DEC/OM (8)	DEC/OM (9)	LA (10)	DEC/OM (11)	DEC/OM (12)	LA (13)
1.	Age-old relationship	58.14	21.52	78.99	25.69	65.84	37.50	37.50	24.36	100.00	71.65	56.98
2.	Better market practices	63.19	47.00	17.52	81.30	65.84	59.62	62.42	25.64	48.63	47.29	100.00
3.	Faith in buyer	49.08	72.35	33.22	76.34	36.05	40.91	90.70	54.23	100.00	51.49	87.40
4.	Credit-binding	56.33	50.18	49.00	35.69	0	59.09	0	0	48.63	71.65	35.06
5.	Uneconomic quantity	83.01	80.26	20.01	21.64	36.05	37.50	63.79	78.20	51.37	48.51	12.60
6.	High price	33.25	38.18	68.53	71.63	100.00	16.78	79.79	64.17	100.00	27.13	71.91
7.	Imperfections at production centre	25.73	39.35	52.48	45.85	70.21	59.62	51.19	35.30	100.00	71.65	80.38

Source: Primary Survey, 1992-93.

marketed quantity.

The buyer's willingness to buy at the production centre has greatly influenced a large proportion (69.6 per cent) of large farmers to opt for production centres (in which 65.5 per cent of their output was disposed off), compared to the small and medium farmers. (There is no significant difference between the small and medium producers in this case.)

TABLE VIII. PRODUCTION/VILLAGE CENTRE MODELS - PROPORTION OF FARM HOUSEHOLDS

Sr. No. (1)	Dependent variable (2)	Constant (3)	Channel (4)	Farm size 1 (5)	Farm size 2 (6)	$\bar{R}^2$ (7)	F-statistic (8)
1.	Lack of transport	61.08	-2.95 (0.18)	-13.75 (0.85)	-8.13 (0.38)	0.56	0.52
2.	Lack of market knowledge	63.63	-15.75* (3.71)	34.25* (8.06)	2.13 (0.38)	0.96	33.95*
3.	Uneconomic quantity	47.98	50.25* (14.15)	-16.45* (4.63)	-98.23* (20.92)	0.98	163.00*
4.	Fear of cheating	64.25	-54.50* (9.91)	33.00* (6.00)	40.25* (5.53)	0.97	47.84*
5.	No guarantee for better price	32.28	16.25* (5.51)	32.95* (11.17)	1.48 (0.38)	0.98	53.15*
6.	Non-competitive conditions	69.98	-0.55 (0.04)	3.65 (0.26)	30.58 (1.67)	0.10	1.15
7.	Waiting time in payment	41.73	37.75* (0.04)	-3.95 (0.44)	20.53 (1.73)	0.89	11.69*
8.	Buyer's willingness	76.28	-45.85* (3.24)	16.65 (1.18)	69.58* (3.72)	0.79	5.92*

Note: Figures in parentheses are t-values.
* indicates one per cent level of significance.

TABLE IX. PRODUCTION/VILLAGE CENTRE MODELS - PROPORTION OF OUTPUT OF FARM HOUSEHOLDS

Sr. No. (1)	Dependent variable (2)	Constant (3)	Channel (4)	Farm size 1 (5)	Farm size 2 (6)	R^2 (7)	F-statistic (8)
1.	Lack of transport	61.37	3.82 (0.57)	7.84 (1.16)	-16.56*** (1.86)	0.54	2.60
2.	Lack of market knowledge	59.69	-12.80* (3.22)	38.32* (9.63)	4.48 (0.85)	0.97	41.83*
3.	Uneconomic quantity	44.84	52.32* (9.21)	-11.63** (2.05)	-97.16* (12.93)	0.98	64.80*
4.	Fear of cheating	60.67	-53.15* (8.94)	36.36* (6.12)	41.10* (5.23)	0.97	39.20*
5.	No guarantee for better price	32.52	5.91* (4.05)	47.60* (8.49)	12.94*** (1.75)	0.95	24.94*
6.	Non-competitive conditions	68.27	-1.21* (10.81)	7.35* (10.81)	32.95* (14.30)	0.44	2.03
7.	Waiting time in payment	38.96	41.71* (3.73)	-3.57 (0.32)	19.34 (1.31)	0.85	8.42*
8.	Buyer's willingness	76.81	-42.32** (2.32)	14.06 (0.77)	65.50** (2.71)	0.61	3.10**

Note: Figures in parentheses are t-values.
*, ** and *** indicate 1, 5 and 10 per cent levels of significance respectively.

The regression models fitted to identify the decision variables for opting market centres with regard to the proportion of farmers and the share of market arrivals of groundnut output are presented in Tables X and XI respectively. From both the tables, it is found that except the payment procedure, none of the variable models has good fit. This indicates that the choice of market centre is neither due to the anticipation of better prices, better market practices, preference for direct sales, buyer's willingness at the market centre nor due to non-availability of buyers at the production centre. Even the payment procedure appeared to be satisfactory only in the case of large farmers (whose proportion was higher by about 26 per cent) compared to the small and medium farmers, resulting in larger marketed volume by them by 26.8 per cent.

TABLE X. MARKET CENTRE MODELS - PROPORTION OF FARMERS

Sr. No. (1)	Dependent variable (2)	Constant (3)	Channel (4)	Farm size 1 (5)	Farm size 2 (6)	$\bar{R}^2$ (7)	F-statistic (8)
1.	Better prices	63.05	3.90	-2.50	-19.15	-0.85	0.23
			(0.19)	(0.10)	(0.75)		
2.	Standard market practices	81.12	-32.23	10.00	1.65	-0.0002	1.00
			(1.67)	(0.42)	(0.07)		
3.	Non-availability of buyers	53.88	2.23	-5.00	15.85	-0.12	0.82
			(0.20)	(0.36)	(1.14)		
4.	Immediate payment of sale proceeds	46.80	-3.60	11.25	25.85*	0.57	3.22**
			(0.52)	(1.33)	(3.06)		
5.	Preference for direct disposal	58.05	-6.10	-17.50	3.35	-0.11	0.83
			(0.50)	(1.17)	(0.22)		
6.	Buyer's willingness	44.15	5.00	3.35	-13.30	-1.23	0.08
			(0.16)	(0.09)	(0.35)		

Note: Figures in parentheses are t-values.
* and ** indicate 1 and 5 per cent levels of significance respectively.

TABLE XI. MARKET CENTRE MODELS - PROPORTION OF OUTPUT

Sr. No. (1)	Dependent variable (2)	Constant (3)	Channel (4)	Farm size 1 (5)	Farm size 2 (6)	$\bar{R}^2$ (7)	F-statistic (8)
1.	Better prices	63.32	0.84	-1.03	-20.20	-0.97	0.18
			(1.39)	(0.03)	(0.65)		
2.	Standard market practices	82.42	-28.53	8.80	-1.62	-0.21	0.71
			(1.39)	(0.35)	(0.06)		
3.	Non-availability of buyers	63.18	0.97	-12.25	7.61	-0.27	0.65
			(0.08)	(0.85)	(0.53)		
4.	Immediate payment of sale proceeds	38.73	2.05	14.22	26.79*	0.39	2.09**
			(0.23)	(1.32)	(2.49)		
5.	Preference for direct disposal	64.43	-8.35	-25.23	-7.75	-0.31	0.60
			(0.50)	(1.22)	(0.38)		
6.	Buyer's willingness	44.11	5.04	6.19	-14.63	-1.10	0.13
			(0.12)	(0.48)	(1.03)		

Note: Figures in parentheses are t-values.
* and ** indicate 1 and 5 per cent levels of significance respectively.

While integrating the choice of place and buyer for assessing the factors governing the share of groundnut market arrivals in the market yard, most of the fitted regression models did not exhibit good fit. This would indicate that market practices, faith in the buyer, credit from the buyers, uneconomic quantity and high price are not significant determinants of the share of arrivals in the market yard or production centre through any channel. However, time-tested (age-old) relationship with the buyer and competitive structure at the market yard appeared to be significant particularly in the case of large farmers.

The age-old relationship model showed that the share of groundnut arrivals in the markets in the case of large farmers was higher by 36.78 per cent compared to the small and medium farmers (Table XII). Further, the competitive structure has attracted 44.65 per cent of higher share of arrivals in the market yard in the case of large farmers compared to the small and medium farmers. However, the age-old relationship seems to be strong with the village merchants and decorticators, thereby resulting in a 24.8 per cent (model No. 1) lower share of arrivals in the market yard compared to other channels.

TABLE XII. CHOICE OF BUYER AND PLACE MODELS - PROPORTION OF OUTPUT OF SAMPLE HOUSEHOLDS

Sr. No. (1)	Dependent variable (2)	Constant (3)	Channel (4)	Farm size 1 (5)	Farm size 2 (6)	Place (7)	$\bar{R}^2$ (8)	F-statistic (9)
1.	Age-old relation (time-tested)	66.01	-24.82** (2.14)	-4.78 (0.36)	36.78** (1.30)	-15.11	0.45	3.08
2.	Better market practices	49.55	7.37 (0.42)	1.13 (0.06)	12.15 (0.55)	1.97 (0.11)	-0.51	0.16
3.	Faith in the buyer	46.35	17.71 (1.19)	2.28 (0.13)	18.08 (0.96)	5.09 (0.34)	-0.06	0.87
4.	Credit-binding	55.81	-1.80 (0.13)	-33.03 (2.09)	6.65 (0.38)	14.21 (1.03)	0.25	1.82
5.	Uneconomic quantity	34.63	22.82 (1.38)	2.41 (0.13)	-19.60 (0.94)	10.88 (0.66)	-0.13	0.71
6.	High price	51.16	-1.68 (0.08)	12.29 (0.49)	12.87 (0.46)	5.15 (0.23)	-0.56	0.10
7.	Non-competitive conditions at production centre	44.34	2.09 (0.02)	13.48 (1.28)	44.65* (3.84)	-7.61 (0.83)	0.53	3.88*

Note: Figures in parentheses are t-values.
* and ** indicate 1 and 5 per cent levels of significance respectively.

CONCLUSIONS

The share of groundnut arrivals at the market yards is determined by the package of market practices, competitive conditions and buyer's willingness at the market yard. These decision variables would help to build up the confidence among the producers to divert the disposal of produce from the production centre to the market yards. The age-old relationship with the buyer also determines the place of disposal. Hence, the buyer's willingness to transact at the market yard is one of the pre-requisites for augmenting the share of the market yard. However, these findings in the study area are different from those in other market areas (Patnaik, 1989). Therefore, the determinants of market arrivals would definitely vary from one market to another due to the nature of market practices, size of the market and market infrastructure development.

To conclude, the share of the market yards in groundnut arrivals can be increased if the government enforces the marketing regulation in all markets. This would be possible only if the market yards are fully developed at all places. Further, the transport system may be attended to by the market committees themselves. A single window system of undertaking the activities of procurement from the production centres, credit availability to the producers, storage and grading can be undertaken by establishing Commodity Corporations relevant to a particular market.

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REFERENCES

Arora, V.P.S. and S.P. Jayaprakash (1979), "Comparative Efficiency of Alternative Marketing Agencies of Groundnut in Tamil Nadu in respect of Marginal, Small and Large Farms", *Indian Journal of Agricultural Economics*, Vol. 34, No. 4, October-December.

Bhatia, M.S. (1984), "Impact of State Agencies on the Marketing of Cotton in India", *Indian Journal of Agricultural Economics*, Vol. 39, No. 3, July-September.

Krishnan, T.N. (1988), "Small Farmers and Commodity Market: An Analysis of Market Participation and Price Discrimination", *Economic and Political Weekly*, Vol. 23, Nos. 52-53, December 24-31.

Patnaik, K. Uma Shankar (1984), "Decision Making: Location and Channel Effects in Groundnut Marketing - A Simpler Method", *Satavahana*, Vol. 2, Nos. 3 and 4, September.

Patnaik, K. Uma Shankar (1989), *Efficiency of Groundnut Marketing in India*, Discovery Publishing House, New Delhi.

Rajagopal (1986), "Economic Efficiency of Paddy Marketing System in Madhya Pradesh: A Case Study", *Indian Journal of Agricultural Economics*, Vol. 41, No. 4, October-December.

Satyapriya, V.S. (1984), "Institutional Factors and Marketing Behaviour - A Study of Three Major Arecanut Markets in Karnataka", *Indian Journal of Agricultural Economics*, Vol. 39, No. 3, July-September.

Sidhu, D.S. (1986), "Policies Pertaining to Agricultural Marketing and Input Supply", *Indian Journal of Agricultural Economics*, Vol. 41, No. 3, Part I, July-September.

Tewari, S.C. and M.V. George (1969), "Market Structure and Producer's Preference of Particular Market", *Agricultural Marketing*, Vol. 11, No. 4, January.

Tyagi, D.S. (1987), "Domestic Terms of Trade and Their Effects on Demand and Supply of Agricultural Sector", *Economic and Political Weekly*, Vol. 22, No. 13, March 28.

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