SURVEY OF CATTLE MARKETS IN TAMIL NADU: AN ASSESSMENT OF FUNCTIONARIES' CONSTRAINTS

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ABSTRACT

A survey on cattle markets in Tamil Nadu was carried out to assess the constraints of market functionaries. The shandy organizers, buyers, sellers and market intermediaries were asked to rank the given set of problems during marketing of cattle in shandies of study area and the responses analysed through Garrett's ranking technique. Inadequate watering facility, poor sheltering and fencing, insufficient market yard and too high bidding amount were the major constraints by the shandy organizers in the study area. By and large, the absence of adequate sheltering and fencing, poor lairage sanitation, inadequate watering facility, insufficient market yard, poor ramp/dock facility and inadequate veterinary services were problems recognized as major by the sellers in the shandies of study area. Absence of sheltering and fencing facilities and poor lairage sanitation were the important problems felt by the buyers throughout the study area, while the least important constraint was high entry fee. The prime problems faced by the buyers in the cattle markets of study area were poor lairage sanitation, lack of sheltering and fencing, inadequacy of water, poor ramp facility, insufficient market yard and exploitation by middlemen. Finalisation of transactions between buyers and sellers, poor turnout of animals to shandies and too low brokerage offered were the major constraints felt by the market intermediaries throughout the study area. Overall, the survey revealed that the cattle shandies and their operations need much improvement for sustaining their operations in the long-run.

KEYWORDS: Livestock, Cattle, Shandy, Market, Marketing & Constraints

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INTRODUCTION

In an agricultural economy, healthy marketing system is a sine qua non for economic development. As McNair *et al.* (1951) rightly observed, "marketing is the income producing side of the business". Marketing has assumed equal importance as that of production in the context of planned economic development. Marketing stimulates growth, co-ordinates economic integration, fosters innovation, creates wants, serves and satisfies human needs, supplies the felt demand and above all tends to unite and unify even belligerent countries through timely trade agreements.

Livestock development begins at the marketing end as it offers indispensable inducements to the producer to search and adopt advanced methods of production. The success of AI programme and the consequent structural changes in cattle population have made the local cows uneconomical, while mechanization of agriculture contemplated the male animals as unwarranted and surplus in the farm which need to be disposed off. These factors, in turn, have created a massive potential for cattle trade in Tamil Nadu. However, the rural producers are a most unorganized lot. The scale of production is small and scattered. The basic concept while professing bovine

husbandry is guided more by tradition and custom than by the initiative for production and marketing. In lieu with this fact, the available commodity, the cattle, is taken to the nearest shandy or market and is disposed off at a price, which is guided not by the economic considerations but by the need to sell. Most of the livestock owners, especially cattle holders, stock their animal up to a period of production, and thereafter, they are forced to sell the animals in order to make as much earning as possible. This is mainly due to the scarcity in feeding resources and disease problems. In some cases farmers or landless labourers purchase the draught animals during cultivation for ploughing and carting, and sell the animals after the work or the demand is over. Whichever the case, livestock marketing is mostly the forced one and under stress.

Although regulated markets for agricultural commodities are well established, the benefits of regulation have not yet reached the producer-seller in cattle marketing. The market committees and co-operative markets established through regulated agricultural producers' markets under the state legislation have made strides in the marketing of crop producers. Such market committees provided the basic infrastructural facilities and amenities. However, there are no market committees or regulated markets available in the state for marketing of livestock. The present status of cattle marketing in the state is not orderly and efficient from the viewpoint of farmer-seller. A number of undesirable aspects like higher brokerage, marketing costs and a good deal of cheating in striking the deal is prevalent in most of the markets, besides poor infrastructure. The lack of market intelligence to sellers, buyers and policy makes has also contributed to the miseries of cattle marketing. This paper, therefore, aims at providing an insight to the existing problems in the cattle shandies, and the problems confronted by shandy organisers, sellers, buyers and the intermediaries in cattle marketing.

MATERIALS AND METHODS

For the present study, Thiruvannamalai, Villupuram (North-Eastern Zone), Salem, Dharmapuri (North Zone), Coimbatore, Erode (Western zone), Tirunelveli and Dindigul (Southern zone) were purposively selected. By adopting simple technique, ten cattle shandies from each selected district were chosen for the study. From each selected shandy, 15 buyers, 15 sellers and 15 intermediaries were chosen at random leading to total sample size of 1200 for each of buyers sellers and market intermediaries.

To identify the major constraints faced by different market functionaries, the shandy organizers, buyers, sellers and market intermediaries were asked to rank the given set of problems prevailed during marketing of cattle in shandies of study area and the responses analysed through Garrett's Ranking Technique (GRT). The technique helped in deciding the most important constraints considered by the respondents by giving their order of preference during transaction of animals. GRT is used to rank the choice of factors or reasons (Kathiravan et al., 1999 and Selvakumar, 2003). According to this, the respondents were asked to assign rank to different problems with respect to their opinion. The order of merit given by the respondents was converted into ranks by using the following formula:

$$\text{Percent position} = \frac{100(R_{ij} - 0.50)}{N_j}$$

Where,

R_{ij} = Rank given for i^{th} problem by j^{th} individual

N_j = Number of problems ranked by j^{th} individual.

The percent position of each rank thus obtained was converted into scores by referring the table given by Garrett.

Then for each problem the scores of individual respondents were added and divided by the total number of respondents. The mean score for all the problem were arranged in descending order and thus ranks were assigned to the problem.

RESULTS

Shandy organisers' constraints

The constraints felt by the shandy organizers are shown in Table 3.36. The analysis of shandy organizer's constraints revealed that in North-Eastern zone, absence of sheltering and fencing facilities were the major constraints (mean score of 69.26) followed by absence of permanent ramp (63.78), poor turnout of animals to shandies (58.54), inadequate watering facility (56.81) and inadequate space in the shandies (56.02), whereas their group in the North-Western zone, observed inadequate space in shandies as the most important constraint with a mean score of 72.75, followed by high bidding cost (70.86), inadequate watering facility (68.95), poor sheltering and fencing facilities (62.89) and absence of permanent ramps (55.42). Inadequate watering facility with a mean score of 65.92 was the predominant problem faced by the shandy organizers in Western zone, whereas it was poor animal turnout (66.52) in Southern zone.

Table 1: Livestock Shandy Organisers' Constraints

S.No.	Constraints	North-Eastern	North-Western	Western	Southern	Overall
1	Inadequate veterinary services	6 (54.58)	8 (41.68)	9 (26.94)	4 (58.35)	8 (45.39)
2	Insufficient market yard	5 (56.02)	1 (72.75)	2 (62.85)	7 (52.98)	3 (61.15)
3	Inadequate watering facility	4 (56.81)	3 (68.95)	1 (65.92)	3 (62.68)	1 (63.59)
4	Absence of permanent ramp	2 (63.78)	5 (55.42)	6 (49.65)	8 (50.06)	5 (54.73)
5	Poor sheltering and fencing	1 (69.26)	4 (62.89)	3 (59.25)	6 (54.37)	2 (61.60)
6	Distant from main road	9 (38.65)	9 (40.30)	4 (59.89)	9 (30.83)	9 (42.26)
7	Poor turnout of animals	3 (58.54)	7 (42.65)	8 (39.51)	1 (66.52)	6 (51.81)
8	Exploitation by people towards donations	8 (45.75)	6 (48.96)	7 (42.82)	5 (55.40)	7 (48.23)
9	Contract amount too high	7 (50.56)	2 (70.86)	5 (55.89)	2 (64.89)	4 (60.55)

The shandy organizers in Western zone ranked inadequate floor area in shandies as the second major limitation followed by poor sheltering and fencing, distance from pain road, high bidding cost, absence of permanent ramp, exploitation people in the form of donation and poor turnout of animals to shandies. However in southern zone, too high bidding cost and inadequate watering facility occupied second and third ranks with mean score of 64.89 and 62.68, respectively.

Sellers' Constraints in Livestock Shandies

As could be observed from the Table 2, poor sheltering and fencing facilities were the prime problems (68.00) faced by the seller farmers of North-Eastern zone, followed by poor lairage sanitation (65.42), exploitation by middlemen (61.14). Inadequate watering facility (57.74), inconspicuous ramp facility (55.64), high entry fee (50.29) and inadequate feed and

fodder (47.70). Inadequate frequency of shandies from main road and insufficient veterinary services were the some of the least important constraints as felt by the sellers in this zone.

Table 2: Sellers' Constraints in Livestock Shandies

Sl. No.	Constraints	North-Eastern	North-Western	Western	Southern	Overall
1	Inadequate veterinary services	10 (42.86)	7 (58.52)	7 (52.87)	3 (64.75)	6 (54.75)
2	Inadequate transport facility	11 (33.46)	9 (40.30)	8 (45.86)	4 (61.25)	8 (45.22)
3	Inadequate watering facility	4 (57.74)	2 (70.60)	5 (58.00)	5 (58.75)	3 (61.27)
4	Poor ramp facility	5 (55.64)	6 (60.10)	4 (59.68)	7 (51.42)	5 (56.69)
5	Poor sheltering and fencing	1 (68.00)	3 (68.49)	2 (70.56)	6 (55.46)	1 (65.63)
6	Poor lairage sanitation	2 (65.42)	4 (66.30)	3 (63.45)	2 (65.89)	2 (65.27)
7	Distant from main road	12 (32.91)	10 (35.69)	1 (72.75)	13 (22.14)	10 (40.87)
8	Inadequate feed and fodder	7 (47.70)	8 (55.12)	9 (40.25)	11 (35.46)	9 (45.63)
9	Insufficient market yard	8 (46.27)	5 (65.27)	6 (55.69)	1 (69.86)	4 (59.27)
10	Poor lodging and boarding facilities	9 (44.19)	12 (30.25)	12 (28.95)	8 (48.25)	12 (37.91)
11	Exploitation by middlemen	3 (61.14)	1 (72.10)	10 (36.82)	9 (42.69)	7 (53.19)
12	High entry fee	6 (50.29)	11 (33.25)	11 (32.45)	10 (38.96)	11 (38.74)
13	Inadequate frequency of shandy	13 (28.50)	13 (28.13)	13 (23.45)	12 (29.64)	13 (27.43)

In North-Western zone, exploitation by middlemen and inadequate watering facility were the two major constraints perceived by sellers followed by poor sheltering and fencing facilities, poor lairage sanitation, insufficient market yard and inadequate ramp facility. In contrast to this, the sellers in Western zone felt distance from main road as the foremost constraint (72.75) along with poor sheltering and fencing facilities, poor lairage sanitation, inadequate ramp facility and insufficient watering facility were the other constraints which secured mean scores of 70.56, 63.45, 59.58 and 58.00, respectively.

In Southern zone, insufficient market yard mentioned to be a significant constraint followed by poor lairage sanitation, inadequate veterinary services, poor transport facility, insufficient watering facility, poor sheltering and fencing facilities and inadequate ramp facility. High entry fee, inadequate feed and fodder and poor frequency of shandy were some of the least important constraints as explicated by the sellers in Southern zone of Tamil Nadu.

Buyers' constraints in Livestock Shandies

Among various constraints ranked by the buyers, poor lairage sanitation occupied prime position in Western zone, however it was reported as second most important constraint in North-Eastern and Southern zones and it was in the fourth place in North-Western zone. In North-Eastern zone, poor sheltering and fencing facilities were the problem mentioned as most

important with a mean score of 70.25. Exploitation by middlemen, poor ramp facility and inadequate watering facility were few other major constraints expressed by the buyers in North-Eastern zone of Tamil Nadu (Table 3).

Table 3: Buyers' constraints in Livestock Shandies

Sl. No.	Constraints	North-Eastern	North-Western	Western	Southern	Overall
1	Inadequate veterinary service	9 (44.21)	7 (50.22)	9 (39.55)	3 (65.41)	7 (49.85)
2	Inadequate transport facility	11 (30.22)	9 (43.00)	8 (46.25)	4 (64.00)	8 (45.87)
3	Inadequate watering facility	5 (59.36)	2 (69.33)	5 (54.00)	5 (62.30)	3 (61.25)
4	Poor ramp facility	4 (64.32)	6 (54.33)	3 (62.14)	7 (55.48)	4 (59.07)
5	Poor Sheltering and fencing	1 (70.25)	3 (63.24)	4 (58.65)	6 (58.75)	2 (62.72)
6	Poor lairage sanitation	2 (68.32)	4 (59.00)	1 (69.87)	2 (69.45)	1 (66.66)
7	Distant from main road	12 (29.88)	10 (38.45)	2 (67.00)	11 (39.47)	9 (43.70)
8	Inadequate feed and fodder	7 (54.00)	8 (55.33)	12 (21.05)	10 (42.36)	11 (40.83)
9	Insufficient market yard	8 (48.64)	5 (55.33)	7 (48.21)	1 (72.65)	5 (56.21)
10	Poor lodging and boarding facilities	10 (32.10)	12 (28.77)	11 (28.22)	8 (51.99)	12 (35.27)
11	Exploitation by middlemen	3 (66.58)	1 (72.15)	10 (35.24)	9 (49.75)	6 (55.93)
12	High entry fee	6 (57.11)	11 (29.55)	6 (49.57)	12 (28.00)	10 (41.06)

The major problem faced by buyers in shandies of North-Western zone of Tamil Nadu was the exploitation by middlemen with average score of 72.15 followed by inadequate watering facility (69.33), poor sheltering and fencing facilities (63.24), poor lairage sanitation (59.00), insufficient market yard (55.33) and poor ramp facility (54.33). Inadequate transport and inadequate veterinary services, exploitation by middlemen, poor boarding and lodging facilities for market functionaries and inadequate feed and fodder for animals in shandies were the least important constraints as observed on the buyers in Western zone.

In Southern zone, insufficient market yard attained a mean score of 72.65 and stood first among the problems faced by the buyers followed by poor lairage sanitation, insufficient veterinary services, inadequate transport and watering facilities. Poor sheltering and fencing, and inconspicuous ramp facilities secured a mean score of 58.75 and 55.48, respectively.

Market Intermediaries' Constraints in Livestock Shandies

From the Table 4, it is evident that too low brokerage amount offered was the major constraint in north-eastern and north-western zones with mean scores of 76.20 and 74.70, respectively. In North-Eastern zone, poor sheltering and fencing facilities occupied second followed by finalisation of transactions between buyers and sellers, inadequate watering and ramp facilities, poor turnout of animals and insufficient market yard

In North Western zone, finalisation of transaction between buyers and sellers stood second with mean score of

72.85 followed by inadequate watering facilities (66.50), insufficient market yard (61.65), poor turnout of animals (57.25), poor sheltering and fencing facilities (43.24) and exploitation by shandy organizers (42.02). In Western zone, most of the market intermediaries mentioned exploitation by shandy Organizers as the major problem followed by poor sheltering and Fencing facilities. The third important problem as ascribed by middlemen was distant from main road followed by poor turn of animals to shandies, poor ramp facility, too low brokerage offered and finalisation of transactions between buyers and sellers. The market intermediaries in Southern zone listed low turnout of animals to shandies, insufficient market yard, finalisation of transactions between buyers and sellers, inadequate watering facility and exploitation by shandy organizers as important Problems. Poor sheltering and fencing facilities, inconspicuous ramp facility and too low brokerage offered were the least important problems perceived by them in Southern zone.

Table 4: Market Intermediaries' Constraints in Livestock Shandies

S.No.	Constraints	North-Eastern	North-Western	Western	Southern	Overall
1	Inadequate veterinary services	8 (44.70)	10 (25.47)	9 (33.46)	6 (45.75)	10 (37.35)
2	Insufficient market yard	7 (46.50)	4 (61.65)	10 (32.91)	2 (62.18)	6 (50.81)
3	Inadequate watering facility	4 (60.08)	3 (66.50)	8 (42.86)	4 (51.67)	4 (55.28)
4	Poor ramp facility	5 (54.65)	8 (27.80)	5 (47.70)	9 (35.76)	8 (41.48)
5	Poor Sheltering and fencing	2 (72.69)	6 (43.24)	2 (61.14)	8 (39.78)	5 (54.21)
6	Distant from main road	10 (27.00)	9 (26.95)	3 (57.74)	7 (42.80)	9 (38.67)
7	Poor turnout of animals	6 (48.09)	5 (57.25)	4 (50.29)	1 (75.53)	2 (57.79)
8	Exploitation by shandy organizers	9 (32.90)	7 (42.02)	1 (69.75)	5 (48.65)	7 (48.33)
9	Too low brokerage amount	1 (76.20)	1 (74.70)	6 (46.27)	10 (26.89)	3 (56.02)
10	Finalisation of transactions between buyers and sellers	3 (62.75)	2 (72.85)	7 (44.19)	3 (55.47)	1 (58.82)

DISCUSSIONS

Absence of sheltering and fencing facilities, inadequate shandy area, lack of permanent ramp and distance from main roads were the least faced constraints faced by the shandy organizers. Moreover, inadequate veterinary facility was only a minor constraint as exhibited by the shandy organizers. The problems of shandy organisers are inadequate watering facility, poor shelter and fencing insufficient market yard and too high bidding amount.

By and large, the absence of adequate sheltering and fencing, poor lairage sanitation, inadequate watering facility, insufficient market yard, poor ramp/dock facility and inadequate veterinary services were problems recognized as major by the sellers in the shandies of study area. Absence of sheltering and fencing facilities and poor lairage sanitation were the important problems felt by the buyers throughout the study area, while the least important constraint was high entry fee. Similar findings were made by Deoghare (2001), Pandit and Dhaka (2005), Srivastava and Saraswat (2006), Pnakaj and Singh (2008), Tanwar and Rohilla (2012) and Handage et al. (2017) in different shandies across the country. The prime problems faced by the buyers in the cattle markets of study area were poor lairage sanitation, lack of sheltering and

fencing, inadequate of water, poor ramp facility, insufficient market yard and exploitation by middlemen. Finalisation of transactions between buyers and sellers, poor turnout of animals to shandies and too low brokerage offered were the major constraints felt by the market intermediaries throughout the study area.

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