

An Analysis of Travel Behaviour of Sellers and Consumers in Rural Market Centres: A Case Study

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ABSTRACT

The market participants are the key components, which make these market places as effective functional unit as well as a place of economic and social interaction. The behavioural pattern of market participants in these rural markets are determined by various factors such as, (i) distance, (ii) level of accessibility, (iii) size of market, (iv) specialisation of market trade in a particular commodity or commodities, (v) profitability, and (vi) economic and social relations, security, transport facilities etc. The behavioural pattern of market-place participants vary from persons to persons, and depend upon his economic status, social structure, cultural practices, local geographical situations as well as level of literacy.

Keywords: Travel Behaviour, Sellers, Consumers, Rural Markets.

The study of behaviour of market participants, i.e., sellers and consumers in space has been derived from the Central Place Theory of Christaller (1933). The concept of threshold and range of goods are two important elements, which decide the length of travelling distance and frequency of market visit by consumers as well as sellers. Reilly (1931) argued that the shopping behaviour is assumed to be determined by a more complex advantage of the size of centres against the disadvantage of the distance. The different studies in India and abroad revealed that the demand and supply, price of goods, market charges for traders, accessibility, and economic condition of a region are very important factors for making consumers and sellers' decision to visit rural markets (Khan *et al.* 2018).

The consumer would visit the nearest centre supplying foods and services. However, all the

efforts are mainly concentrated to the permanent market centres. The study of consumers and traders behaviour in the periodic markets has been very sporadic. The different studies in India and abroad revealed that the demand and supply, price of goods, market charges for traders, accessibility, and economic condition of a region are very important factors for making consumers and traders' decision to visit rural markets (Pred, 1963).

Objectives, Database and Study Area

Taking into consideration the behavioural pattern of market-place participants, an effort has been made to analyse the travel behaviour of sellers and consumers in selected rural markets. The study is based on primary data collected through field survey using random sampling technique. Out of the total 286 rural markets of the district, 30 rural

markets (10 percent markets) which are spread all over the study area have been undertaken for the detailed field work, on the following basis: (i) accessibility, that is, along the road or away from the road (within 10-15 km) (ii) Nature of the market, that is, daily or periodic. In order to make a detailed assessment to analyse the travelling behavioral pattern of sellers and consumers, 50 per cent sellers and 5 per cent consumers from each selected rural markets were interviewed for the nature and causes of their spatial movement or travel for visiting a particular market.

The Aligarh district in North Indian state of Uttar Pradesh is selected as study area. It is located in north western part of Ganga Yamuna doab and forms a part of Agra division and lies between 27° 27' N to 28° 11' N latitudes and 77° 27' E to 78° 38' E longitudes. The total area of the district is 3,650 sq km, which supports a population of 3,673,849. Administratively, the district has been divided into five tehsils (sub-divisions) and twelve development blocks. It has total 1170 inhabited villages and 24 town areas.

DISCUSSION

(A) Sellers and Traders' Travel Behaviour

Trade is a tertiary activity, particularly operated by a well defined community. The sellers or traders and mostly the middlemen channelised the rural product to urban centers and manufactured goods to the other way round (Jain, 1993). Traders earn their livelihood through profit margin, effecting the movement of goods from producer to consumer through their agencies (McKim, 1972). The trade links in the agricultural marketing system are those routes used by farmers and by transporters carrying farmer's produce. The mode of transport used the length and time of journey and the costs of transport will all affect the efficiency of the marketing system (FAO, 2005).

The propensity of traders visits to a market depend upon the economic return from the per unit sale of business. If the threshold limit of firm (minimum number of demand required for economic viability of a firm) exceeds the range of goods (willingness of consumers to purchased the goods), the traders will move farther distance and may visits more

than one markets with a view to get economic viability of their firms (Stine, 1969). Their journey will be continued till the traders may achieve at least the turn over more or equal to sum of purchase, transport and variable costs. If the range of goods exceeds the threshold limit, the traders will be home based and would not travel any distance to get economic viability (Khan *et al.* 2003).

Table 1 highlights the mean distance travelled by sellers and traders of various commodities in selected rural markets. The study shows that the visiting pattern and travelling distance made by sellers and traders in each market are different. Traders and sellers in daily and large markets travelled less distance as compared to the periodic and small markets. In large markets, many traders are home based i.e. their shops and residence are found in the markets. The itinerant and part-time traders, who are not having permanent shops in the markets, travelled more distance from their residence to the markets. The nature of commodities for transactions has also affected the traders travelling distance in these rural market centres. The big traders who are having bike showrooms in large rural markets, travels an average distance up to 19.33 km followed by traders dealing in food grains (6.86 km), vegetables (5.20 km), oilseeds (5.13 km), fruits (4.56 km), grocery items (4.20 km), electronic and electrical goods (3.90 km), repairing and services (3.43 km), each for sweet and savory snacks, wooden items and iron items (3.33 km), meat and fish (3.26 km), mobiles (3.24 km), earthen wares (3.16 km), tractors (3 km), dairy products (2.96 km) and so on. The market wise travel pattern shows variation which varies between 5.96 km for Chandaus to 1.94 km for Sikandarpur Bhukarawale. The study shows that the maximum distance is travelled by livestock traders (60 km) (table 1 and fig.1).

In rural periodic markets, traders have to travel a longer distance to get the economic viability of the business. Thus, they visit a number of periodic markets held in a region on different days of the week. Their arrangements are such that the traders return their home every night after selling their products into different periodic markets (Khan *et al.* 2018).

Table 1: Average Distance (Km) Travelled by Sellers and Traders of Various Commodities in Selected Rural Markets of Aligarh District

Sl. No.	Selected Market	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Food grains	Oilseeds	Vegetables	Fruits	Meat & Fish	Dairy products	Grocery items	Sweet & Savory snacks	Earthen wares	Wooden items	Iron items	Electrical items	Electronic goods	Mobiles
1	Tappal	12	10	8	4	2	3	5	3	5	6	6	7	6	5
2	Jartauli	5	4	4	3	2	2	4	2	2	3	2	3	2	2
3	Goraula	4	3	3	3	3	2	3	3	2	3	3	2	3	2
4	Chandaus	11	9	10	7	4	3	8	5	4	5	5	7	8	6
5	Pisava	13	10	8	8	5	4	9	6	5	5	5	7	7	7
6	Gomat	7	6	6	3	2	2	4	2	3	2	2	2	3	3
7	Shivala	6	7	4	4	3	2	3	2	2	2	2	2	2	2
8	Bhanauli	6	5	3	4	4	3	2	2	2	2	3	3	3	2
9	Jawan Sikanderpur	9	7	8	5	3	4	5	3	4	4	4	6	6	4
10	Sunamai	5	3	3	4	4	2	3	2	2	2	2	2	3	2
11	Roravar	4	3	3	4	4	3	5	4	3	5	5	6	6	5
12	Lodha	8	6	4	3	3	3	3	3	3	4	4	4	3	2
13	Sikandarpur Bhukarawale	4	2	2	3	2	2	2	2	2	2	2	2	—	2
14	Panaithi	8	6	7	4	4	4	4	5	5	4	4	4	4	3
15	Kalai	5	6	3	4	3	2	2	3	3	2	3	2	2	—
16	Nagla Sabal urf Gonda	14	10	11	9	6	5	8	6	5	5	5	7	5	5
17	Nagla Darvar	7	6	8	6	4	4	7	4	4	4	4	6	4	4
18	Hastpur Chandfari	6	5	3	4	3	3	4	3	3	3	2	4	3	3
19	Sathini	4	3	4	3	2	2	3	3	2	2	2	3	—	2
20	Kazimabad	6	4	5	4	3	3	5	4	4	3	3	5	5	3
21	Jirauli Dhoom Singh	7	5	6	5	4	4	5	5	4	4	4	6	4	4
22	Narauna Akapur	8	4	9	8	3	5	4	4	3	4	4	4	4	3
23	Bijauli	6	4	5	6	4	4	5	3	4	3	3	3	—	3
24	Barhaul	5	3	4	5	3	3	4	2	3	2	2	3	3	2
25	Narupura Katka	4	5	3	4	2	2	3	3	2	2	2	2	—	2
26	Dhansari	3	2	3	2	3	2	3	2	2	2	3	3	—	2
27	Rajmau	4	4	4	3	2	2	2	3	2	2	3	2	2	2
28	Barla	6	5	5	5	4	4	5	4	3	4	4	4	3	3
29	Akrabad	11	7	6	6	5	3	4	5	4	5	4	4	4	5
30	Gopi	8	5	4	4	2	2	2	2	3	4	3	3	3	4
	Total Average	6.86	5.13	5.20	4.56	3.26	2.96	4.20	3.33	3.16	3.33	3.33	3.93	3.92	3.24

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Sl. No.	Selected Market	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Average
		Durable goods	Agricultural implements	Fertilizers & seeds	Clothes/ Garments	Foot wears	Cosmetics/ Ladies items	Jewellery	Stationery items	Medicines	Handicrafts	Building materials/ Sanitary wares	Livestock	Bicycle	Bike	Tractors	Repairing & services	Average
1	Tappal	4	3	4	5	2	3	1	2	3	4	2	—	3	20	3	8	5.13
2	Jartauli	—	—	1	3	—	—	—	—	1	—	—	—	—	—	—	2	2.61
3	Goraula	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	2	2.62
4	Chandaus	4	5	5	7	4	4	2	3	4	5	3	—	4	18	—	7	5.96
5	Pisava	4	4	4	6	3	4	2	2	5	4	3	—	3	—	—	8	5.59
6	Gomat	—	1	1	2	1	1	—	1	1	2	1	—	1	—	—	2	2.44

7	Shivala	—	—	1	2	—	—	—	—	1	—	—	—	—	—	2	2.72	
8	Bhanauli	—	—	—	1	—	1	—	—	2	—	—	—	—	—	3	2.83	
9	Jawan Sikanderpur	3	2	3	4	2	2	1	2	3	1	2	—	1	—	3	3.74	
10	Sunamai	—	—	—	1	—	—	1	—	—	—	—	—	—	—	2	2.52	
11	Roravar	2	2	2	6	4	3	3	3	3	3	2	—	2	—	6	3.74	
12	Lodha	—	1	1	1	—	1	—	—	1	1	1	—	—	—	3	2.86	
13	Sikandarpur Bhukarawale	—	—	—	2	—	1	—	—	1	—	1	—	1	—	2	1.94	
14	Panaithi	3	3	3	3	3	2	2	2	2	1	2	—	2	—	3	3.59	
15	Kalai	—	—	—	1	1	—	—	—	1	—	—	—	—	—	2	2.64	
16	Nagla Sabal <i>urf</i> Gonda	3	2	4	4	3	2	1	2	4	3	3	—	5	20	5	5.78	
17	Nagla Darvar	2	2	3	3	2	2	1	1	3	2	2	—	2	—	4	3.74	
18	Hastpur Chandfari	—	1	1	2	1	1	—	—	2	—	—	—	1	—	3	2.77	
19	Sathini	—	—	—	1	—	—	—	—	1	—	—	—	—	—	2	2.43	
20	Kazimabad	—	2	2	3	2	1	—	1	2	1	1	—	2	—	3	3.08	
21	Jirauli Dhoom Singh	3	3	3	5	3	3	2	3	3	3	3	—	3	—	5	4.03	
22	Narauna Akapur	2	2	2	3	2	2	1	1	3	2	2	60	2	—	6	5.60	
23	Bijauli	—	1	1	3	1	2	—	4	1	—	—	—	—	—	2	3.23	
24	Barhaul	—	1	1	1	—	1	—	—	1	—	1	—	1	—	3	2.45	
25	Narupura Katka	1	—	—	1	1	—	—	—	1	—	—	—	—	—	2	2.33	
26	Dhansari	—	—	—	—	—	1	—	1	1	—	—	—	—	—	2	2.17	
27	Rajmau	—	—	—	2	1	1	—	—	—	—	—	—	—	—	3	2.44	
28	Barla	1	1	2	2	2	2	1	2	2	1	1	—	2	—	3	3.00	
29	Akrabad	2	2	3	3	3	3	1	2	3	3	2	—	3	—	3	3.95	
30	Gopi	3	2	2	2	2	2	1	1	2	2	1	—	2	—	2	2.70	
Total Average		2.64	2.10	2.33	2.75	2.15	1.95	1.42	1.94	2.11	2.37	1.83	60.00	2.22	19.33	3.00	3.43	3.35

Source: Field Survey.

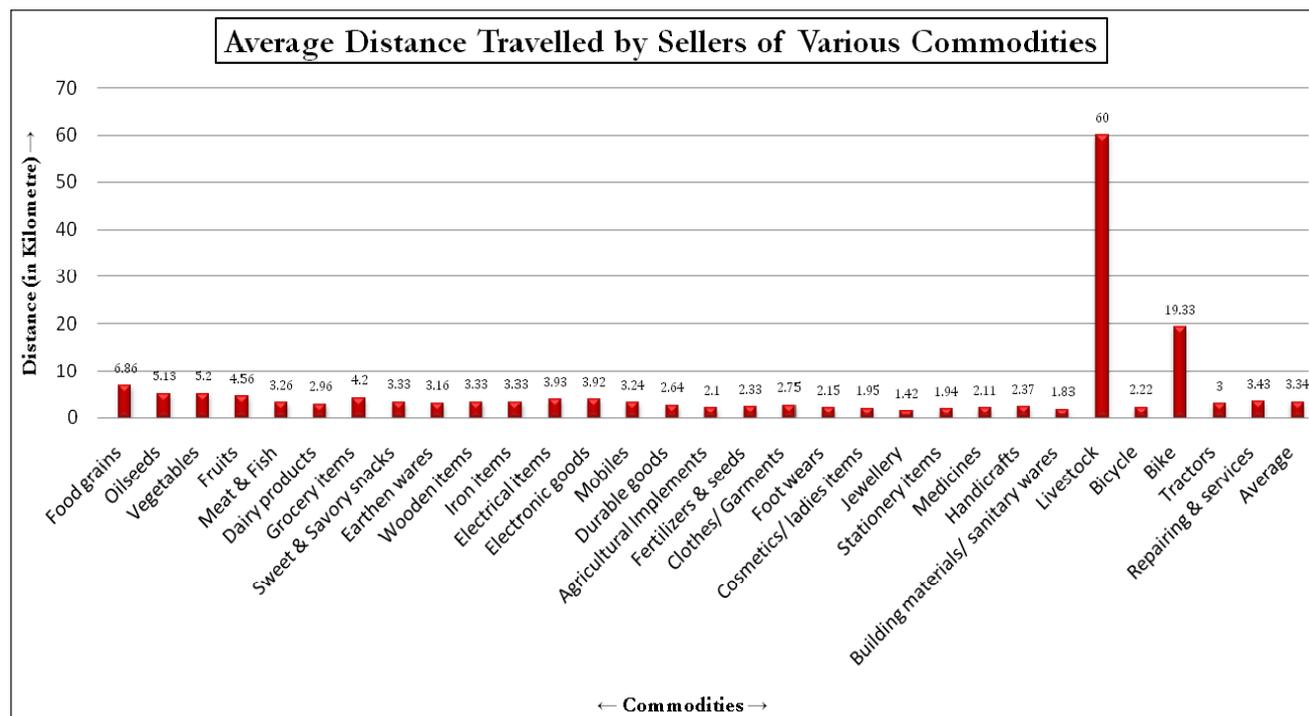


Fig. 1

(B) Consumer’s Travel Behaviour

In marketing geography, the consumer behaviour is also one of the dimensions of research (Saxena, 2003). The psychological or behavioral approach is the main consideration in the market place. The choice of consumers to visit to a particular market is determined by various factors like nearness to market, easy accessibility, size of market, specialisation, profitability and social relations with cultural backgrounds. At the same time, consumer’s mobility is restricted due to low per capita income, limited needs and low accessibility of market centres reflecting with lesser mobility on the geographical space (Belgaum, 2014). The frequency and distance travelled by consumers to visit rural markets vary from person to person and from market to market. In daily markets, consumers are generally travelling longer distances. They make multi-

purpose shopping trips. Many types of durable commodities, electronic and electrical goods, agricultural commodities and implements attract consumers from longer distances as compared to vegetables, meat and fish, sweet and savory items and handicraft products. In periodic markets, they travel shorter distance as compared to daily rural markets because of low range of goods transacted there. The frequency of consumers to visit markets also varies with the nature of commodities. Their pattern of travel is also influenced by social structure and demographic composition. The female, children and senile group travelled shorter distances; the educated and high castes consumer also travelled shorter distances; whereas mature male and low castes covered large distances (Khan *et al.* 2003).

Table 2 highlights the mean distance travelled by consumers to purchase various kinds of commodities

Table 2: Average Distance (Km) Travelled by Consumers to Purchase Various Kinds of Commodities in Selected Rural Markets of Aligarh District

Sl. No.	Selected Market	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
		Food grains	Oilseeds	Vegetables	Fruits	Meat & Fish	Dairy products	Grocery items	Sweet & Savory	Savory snacks	Earthen wares	Wooden items	Iron items	Electrical items	Electronic goods	Mobiles
1	Tappal	9	10	7	5	4	5	10	6	3	5	10	7	13	7	
2	Jartauli	2	2	2	2	3	2	3	2	2	2	2	—	—	—	
3	Goraula	2	1	2	1	1	1	2	2	2	2	2	—	—	—	
4	Chandaus	10	9	7	5	6	6	13	7	5	7	12	9	14	8	
5	Pisava	11	10	5	4	5	5	10	5	3	5	8	6	11	8	
6	Gomat	5	6	5	3	3	2	6	3	2	3	5	4	6	5	
7	Shivala	4	3	2	1	1	2	3	2	2	2	3	—	—	—	
8	Bhanauli	2	—	2	1	3	1	2	2	1	2	2	3	—	—	
9	Jawan Sikanderpur	8	6	5	3	3	3	8	3	2	4	7	5	8	5	
10	Sunamai	2	—	3	2	2	2	3	2	2	3	3	2	—	2	
11	Roravar	12	5	6	4	3	4	11	3	2	6	8	7	12	6	
12	Lodha	4	3	2	2	2	2	4	2	2	3	3	2	3	4	
13	Sikandarpur Bhukarawale	3	—	2	3	—	2	2	3	2	3	2	—	—	2	
14	Panaithi	5	4	4	2	2	3	5	3	3	3	4	2	4	4	
15	Kalai	2	1	2	1	2	1	2	2	2	2	2	—	—	—	
16	Nagla Sabal <i>urf</i> Gonda	8	11	8	4	4	6	12	5	4	6	11	8	14	8	
17	Nagla Darvar	6	8	5	3	3	4	6	4	4	5	6	4	5	5	
18	Hastpur Chandfari	5	4	3	2	2	3	5	2	3	4	3	2	3	2	
19	Sathini	3	4	3	2	3	2	4	3	2	2	2	2	—	2	
20	Kazimabad	6	7	6	3	3	3	10	4	3	4	6	5	10	5	
21	Jirauli Dhoom Singh	10	10	8	4	4	5	12	6	4	7	13	8	13	9	
22	Narauna Akapur	7	9	7	3	3	4	11	5	3	5	8	7	11	7	

23	Bijauli	4	3	3	2	2	2	4	2	2	2	3	2	3	2
24	Barhaul	4	2	4	2	2	2	3	2	3	2	2	2	—	3
25	Narupura Katka	2	3	3	1	2	3	2	2	2	3	2	3	2	2
26	Dhansari	2	—	2	2	3	3	2	4	3	2	3	2	—	2
27	Rajmau	2	3	4	1	2	2	3	2	2	2	2	—	2	—
28	Barla	5	6	4	2	2	3	5	3	3	3	4	3	5	4
29	Akrabad	7	8	8	5	3	4	9	6	2	5	7	8	12	9
30	Gopi	6	5	6	4	4	3	7	4	2	3	6	5	7	8
Total Average		5.26	5.50	4.33	2.63	2.89	3.00	5.96	3.36	2.56	3.56	5.03	4.50	7.90	4.95

Cont...

Sl. No.	Selected Market	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Average
		Durable goods	Agricultural implements	Fertilizers & seeds	Clothes/ Garments	Foot wears	Cosmetics/ Ladies items	Jewellery	Stationery items	Medicines	Handicrafts	Building materials/ Sanitary wares	Livestock	Bicycle	Bike	Tractors	Repairing & services	
1	Tappal	9	10	18	9	5	11	6	9	15	5	15	—	7	25	35	7	9.89
2	Jartauli	—	—	2	2	—	2	—	—	2	—	—	—	—	—	—	2	2.12
3	Goraula	—	—	2	2	—	3	—	2	3	—	—	—	—	—	—	2	1.88
4	Chandaus	12	13	17	12	6	14	6	9	15	6	18	—	6	26	—	6	10.14
5	Pisava	10	8	16	8	4	12	5	6	14	5	13	—	5	28	—	7	8.46
6	Gomat	5	4	8	2	2	7	3	3	8	2	10	—	3	—	—	3	4.37
7	Shivala	—	2	6	—	—	2	—	—	2	—	—	—	—	—	—	2	2.43
8	Bhanauli	—	—	2	—	—	2	—	—	4	—	—	—	—	—	—	2	2.06
9	Jawan Sikanderpur	6	6	14	4	4	8	4	7	8	4	11	—	4	—	—	4	5.70
10	Sunamai	—	2	4	3	3	3	2	2	3	2	4	—	—	—	—	3	2.56
11	Roravar	10	5	11	7	5	13	6	8	7	4	10	—	5	25	—	5	7.50
12	Lodha	—	3	10	2	2	4	—	3	4	2	8	—	2	—	—	3	3.24
13	Sikandarpur Bhukarawale	—	—	2	—	—	3	—	—	3	—	5	—	—	—	—	4	2.73
14	Panaithi	3	3	7	2	4	5	4	3	5	2	12	—	3	—	—	4	3.88
15	Kalai	—	—	3	—	—	2	—	—	2	—	—	—	—	—	—	2	1.86
16	Nagla Sabal urf Gonda	11	12	18	10	6	12	7	9	15	6	18	—	6	30	—	8	9.89
17	Nagla Darvar	4	5	12	4	4	8	4	5	12	5	14	—	4	—	—	6	5.74
18	Hastpur Chandfari	2	3	7	3	2	6	2	4	7	3	7	—	2	—	—	4	3.51
19	Sathini	—	2	4	2	2	3	—	2	4	2	5	—	—	—	—	3	2.73
20	Kazimabad	6	5	13	6	4	9	4	4	3	3	8	—	2	—	—	3	5.37
21	Jirauli Dhoom Singh	11	11	16	11	5	13	7	8	9	6	17	—	4	23	—	7	9.32
22	Narauna Akapur	7	7	13	5	5	12	6	8	8	5	12	20	5	20	—	5	7.86
23	Bijauli	—	2	8	2	—	4	—	2	3	3	—	—	—	—	—	2	2.81
24	Barhaul	2	2	5	3	—	4	2	2	3	2	8	—	—	—	—	2	2.83
25	Narupura Katka	—	3	3	2	3	4	—	2	2	3	5	—	—	—	—	2	2.54
26	Dhansari	—	—	3	2	2	2	—	—	2	2	—	—	—	—	—	3	2.42
27	Rajmau	—	2	3	—	—	4	—	—	3	—	—	—	2	—	—	3	2.44
28	Barla	3	3	9	2	2	6	2	2	4	2	8	—	3	—	—	3	3.74
29	Akrabad	8	7	9	7	5	11	4	5	5	4	9	—	3	—	—	5	6.48
30	Gopi	6	5	8	4	3	9	3	4	4	3	8	—	3	—	—	4	4.96
Total Average		6.76	5.20	8.76	4.64	3.71	6.60	4.27	4.73	5.96	3.52	10.22	20.00	3.83	25.28	35.00	3.86	4.71

Source: Field survey.

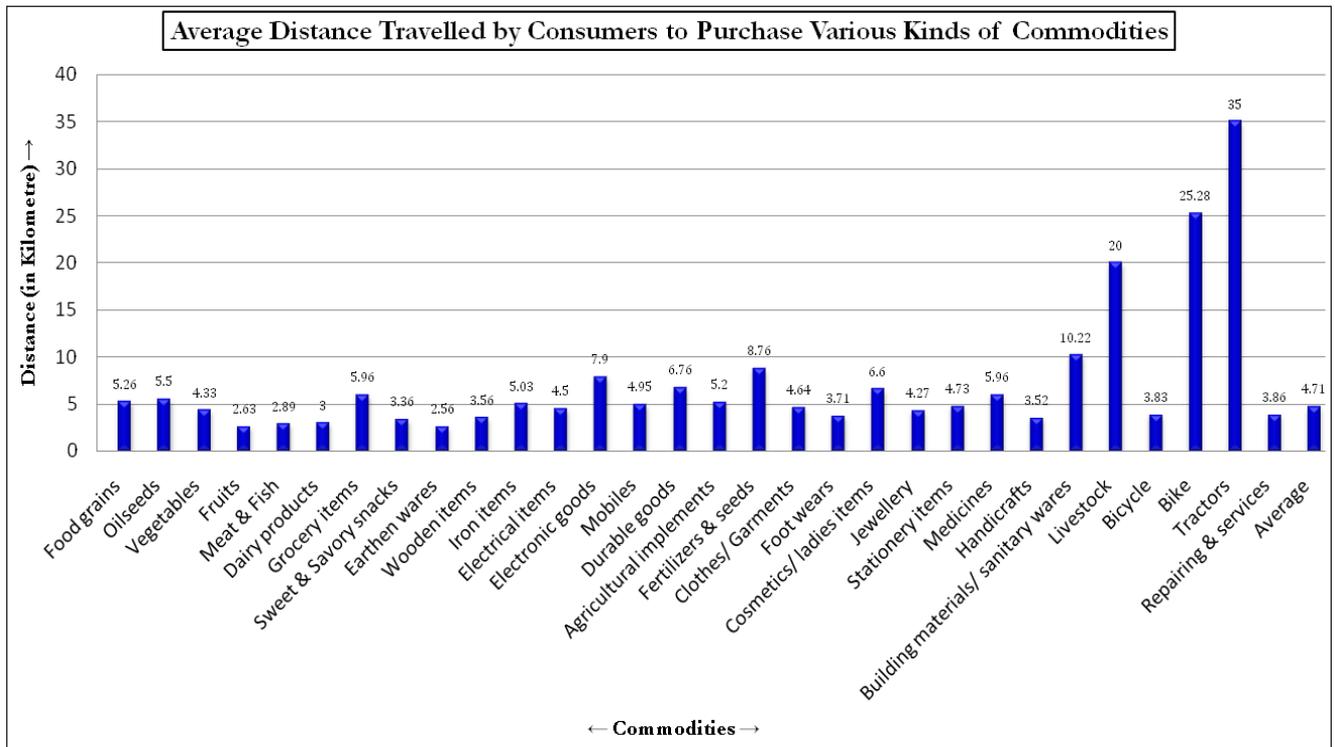


Fig. 2

in selected rural markets. The average distance travelled by consumers in selected markets was 4.71 km. The consumers travelled maximum distance of 35 km to purchase tractors, followed by bike (25.28 km), livestock (20 km), building material/sanitary wares (10.22 km), fertilizers and seeds (8.76 km), electronic goods (7.90 km), durable goods (6.76 km), fashionable goods and cosmetics (6.60 km), grocery (5.96 km), agricultural implements (5.20 km) and so on. The study reveals that the durable commodities, food grains, fashionable goods, grocery, agricultural implements and urban goods attract the consumers from longer distances. The market wise travel pattern shows variation among markets, which varies between 10.14 km for Chandaus to 1.86 km for Kalai (Fig. 2).

CONCLUSION

Study concluded that the travel behaviour of traders has been defined on the basis of a number of ways to maximise the profits on investments. The most common feature is to visit the nearest or most accessible market from the home or the market-place where the traders can get the best economic return. In addition, the consumer behaviour is affected by certain elements like customs, traditions, rituals, aspirations, needs and demand of the society.

These factors ultimately exert effect on their travel behaviour which varies in spatial, socio-cultural and economic contexts from one region to another.

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