

ARTICLES

## **AN ASSESSMENT OF TYPOLOGIES OF RURAL MARKET CENTRES IN NORTH INDIA**

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*ABSTRACT*

***An assessment of typologies of rural market centres in North India***

*The taxonomical approach is deemed necessary in the analysis of spatial development of market centres. The problem of such a study of market centres has been much experienced because of the numerous characteristics of market centres and the variety of functions they perform. The study, further, helps to understand the real nature of market centres. The aim of the present study is to make an exhaustive analysis of the taxonomy of market centres of the study area on the basis of several variables which bear a seal on spatial development of market centres, such as (a) number of shops, which reflects the functional magnitude, (b) estimated participants, (c) transacted commodities, (d) market function, (e) trade area.*

*KEY WORDS*

*typology, Rural, Market Centres, Shops, Estimated Participants, Transacted Commodities, Market Function, Trade Area*

## **1. Introduction**

One of the most important concepts in the study of market centres is the concept of typology i.e. to arrange the market centres in different groups on the basis of their characteristics. According to Smith (1975), classification and understanding are closely intertwined; some understanding of properties and relationships within a set of phenomena is needed before classification can be attempted, and classification should itself advance such understanding. Market Centres are the integral parts of the geo-economic and cultural landscape of a region (Saxena, 1988).

The study of classification of market centres seems an important aspect of marketing geography. It makes easy to understand the nature of commodities transacted, nature of exchange system, the nature of consumers and traders movement in the existing markets. Numerous scholars in India as well as abroad have classified the market centres based on size of population engaged in trade and commerce, location or nature of settlement in which market is held, trade area, commodity, attendance and nature of transaction (Khan, 1991).

### **1.1 Objectives, Database and Study Area**

Keeping in view the above facts, an effort has been made to assess the typology of rural market centres by classifying them on the basis of estimated participants, number of shops, number of transacted commodities, market function as well as trade area of the market. The study is entirely based on primary data collected through field survey by direct questionnaire, using random sampling technique. Out of the total rural markets (205) of the district, 15 percent markets (31 rural markets) which are spread all over the study area have been undertaken for the detailed field work, on the following basis: (a) Accessibility i.e. along the road or away from the road (within 10-15 km) (b) Nature of the market i.e. daily or periodic.

The Ambedkarnagar district in North Indian State of Uttar Pradesh has been selected as study area, taking into consideration its agricultural base as well as presence of large number of rural market centres. The area is very backward in infrastructure as well as in industrial development. More than 90 percent population of the district depends upon agriculture for their livelihood. It forms a part of the Ghagra sub-basin of Ganges basin and lies between 26° 09' N and 26° 40' N latitudes and between 82° 12' E and 83° 05' E longitudes (figure 1).

The total area of the district is 2361 sq km, which supports a population of 2.026.876 persons. About 91 percent population lives in villages and it mostly depends on rural market centres. Administratively, the district has been divided into four tehsils (subdivisions) and nine development blocks. It has total 1780 inhabited villages, 7 town areas and 232 rural markets.

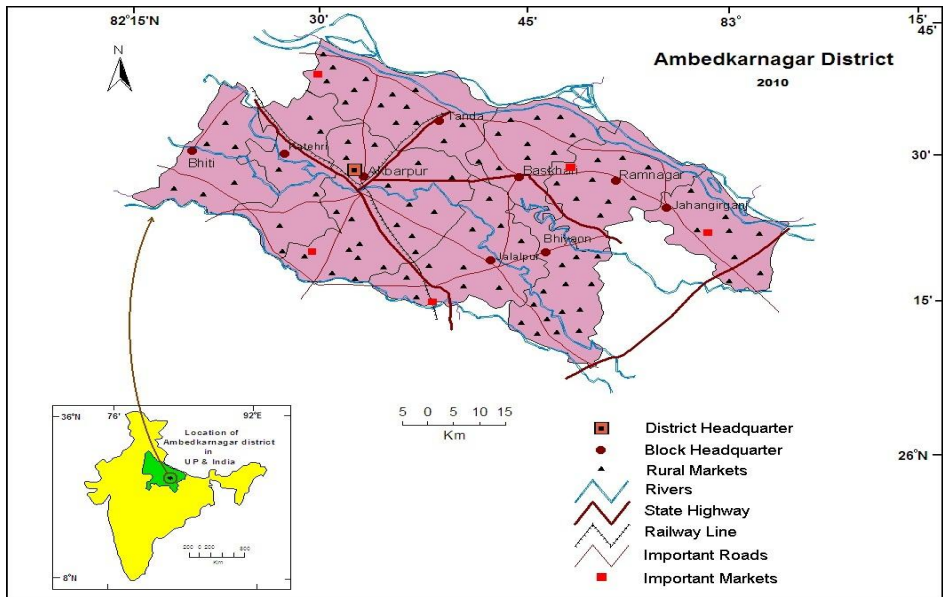


Figure 1: Location of Study Area

## 2. Discussion

### 2.1 Based on Number of Shops

The number of shops is an important and basic variable for the classification of the market centres as it reflects their functional magnitude. In rural areas, all the shops in a market are not permanent particularly in periodic markets. At any market, there are generally, three kinds of shops, viz., temporary, permanent and itinerant, and all these have crucial importance for the classification of market centres. In the present case, all such kinds of shops have been added up to classify market centres of the district. On the basis of total number of shops in the market, the selected rural markets have been classified. The classification of markets has been undertaken to exhibit the large variation in the total number of shops in the 31 selected markets. Thus, the markets were categories as small size (up to 100 shops), medium size (101-200 shops) and large size (more than 200 shops) as shown in table 1 and figure 2.

Table 1: Block wise Total Number of Shops in Selected Rural Markets, 2010-11

S. No.	Development Block	Selected Rural Markets	Total Shops
1	Bhiti	Mijhoura	160
2		Bhiti	210
3		Jalalpur	75
4	Katehri	Pratappur Chamurkha	400
5		Khemapur	150
6		Pahetipur	200
7	Akbarpur	Lorepur Tajan	90
8		Rampur Sakarwari	90
9		Kasaruwa	500
10		Bariyawan	300
11	Tanda	Khaspur	220
12		Rasoolpur Mubarakpur	550
13		Uthrathu	175
14	Baskhari	Herapur Mundera	180
15		Hanswar	300
16		Baskhari	270
17	Ramnagar	Hussianpur	160
18		Indaipur	95
19		Makrahim	130
20		Acchti	80
21	Jahangiranj	Birhar	95
22		Jahangiranj	135
23		Padampur Chauraha	160
24		Deoriya	85
25	Jalalpur	Manguradela	110
26		Nag Jalalpur	185
27		Saidapur	160
28		Malipur	220
29	Bhiyaon	Amburpur	140
30		Bandipur	100
31		Bhiyaon	
Total			5845

Source: Based on Field Survey, 2010-11.

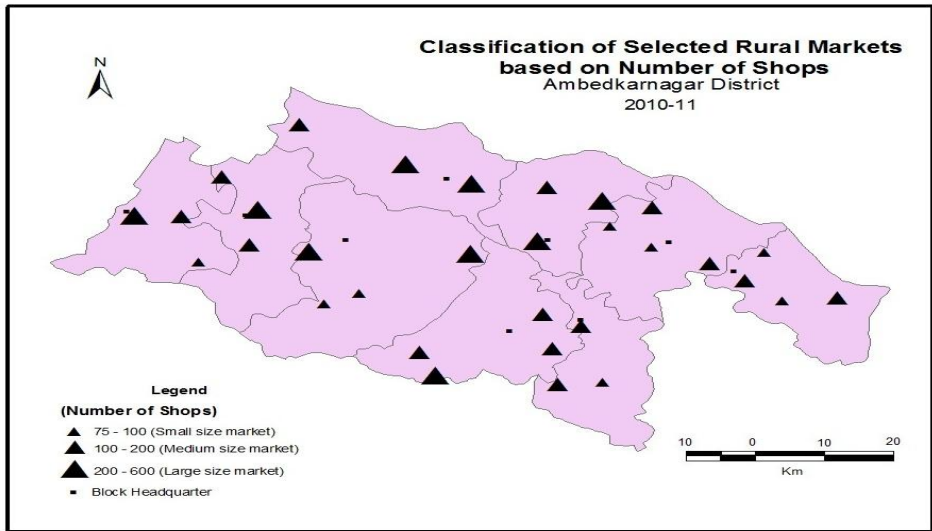


Figure 2: Classification of Selected Rural Markets Based on Total Number of Shops

Table 1 and 2 shows that the number of shops in the rural markets ranges from 75 in Jalalpur to 550 in Rasoolpur Mubarakpur. Among the total 31 selected markets, 8 markets (25.81 per cent) fall in category of small size markets while 14 (45.16 per cent) fall in medium category and the rest 9 markets fall in large category.

Table 2: Classification of Selected Rural Markets Based on Total Number of Shops, 2010-11

Small size Market (≤ 100 Shops)	Medium size Market (101-200 Shops)	Large size Market (> 200 Shops)
Jalalpur	Manguradela	Bhiti
Acchti	Bhiyaon	Malipur
Deoriya	Makrahim	Khaspur
Lorepur Tajan	Jahangirganj	Baskhari
Rampur Sakarwari	Amburpur	Hanswar
Birhar	Khemapur	Bariyawan
Indaipur	Saidapur	Pratappur Chamurkha
Bandipur	Padampur Chauraha	Kasaruwa
	Mijhaura	Rasoolpur Mubarakpur
	Hussianpur	
	Uthrathu	
	Herapur Mundera	
	Nag Jalalpur	
	Pahetipur	

Source: Based on Field Survey, 2010-11.

## 2.2 Based on Estimated Participants

The importance of a market centre can also be judged by the number of the people who visit a market. The congregation, therefore, becomes an important indicator of the type of a market centre. Rural markets are organized to facilitate the activities of market users, i.e. buyers and sellers who visit different markets held in a region (Amani and Khan, 1993). So, they are the important components of market, who assemble for exchange process. Therefore, assembling is an important indicator for the classification of market centres. The number of market participants in rural markets is estimated on the basis of counting their number in a grid (size of area) 5×5 metres.

Each market is divided into various grids and finally total grids are multiplied by number of market participants counted in one grid to get total attendance of the selected markets. On the basis of total participants in the market, the selected rural markets have been classified in three categories as small (up to 500 participants), medium (501-1000 participants) and large markets (more than 1000 participants) (figure 3). The classification of markets has been undertaken to illustrate the large variation in the total estimated participants.

Table 3 and 4 shows that the markets which have up to 500 participants are categorized as small markets. They share 22.58 per cent (07 markets) of 31 selected rural markets. There are 15 (48.39 per cent) medium markets, having participants between 501-1000 persons and the remaining nine markets with more than 1000 participants are categorized as large markets. They are Bhiti (1060 participants), Pahetipur (1200 participants), Malipur (1200 participants), Bakhari (1250 participants), Bariyawan (1550 participants), Hanswar (1650 participants), Pratappur Chamurkha (2150 participants), Kasaruwa (2315 participants) and Rasoolpur Mubarakpur (2850 participants).

Table 3: Block wise Estimated Participants in Selected Rural Markets, 2010-11

S. No.	Development Block	Selected Rural Markets	Estimated Participants
1	Bhiti	Mijhoura	750
2		Bhiti	1060
3		Jalalpur	345
4	Katehri	Pratappur Chamurkha	2150
5		Khemapur	690
6		Pahetipur	1200
7	Akbarpur	Lorepur Tajan	410
8		Rampur Sakarwari	430
9		Kasaruwa	2315
10		Bariyawan	1550
11	Tanda	Khaspur	1000
12		Rasoolpur Mubarakpur	2850
13		Uthrathu	850
14	Baskhari	Herapur Mundera	800
15		Hanswar	1650
16		Baskhari	1250
17	Ramnagar	Hussianpur	700
18		Indaipur	460
19		Makrahim	550
20		Acchti	475
21	Jahangirganj	Birhar	410
22		Jahangirganj	750
23		Padampur Chauraha	780
24		Deoriya	435
25	Jalalpur	Manguradela	580
26		Nag Jalalpur	825
27		Saidapur	700
28		Malipur	1200
29	Bhiyaon	Amburpur	620
30		Bandipur	575
31		Bhiyaon	650
Total			29.010

Source: Based on Field Survey, 2010-11

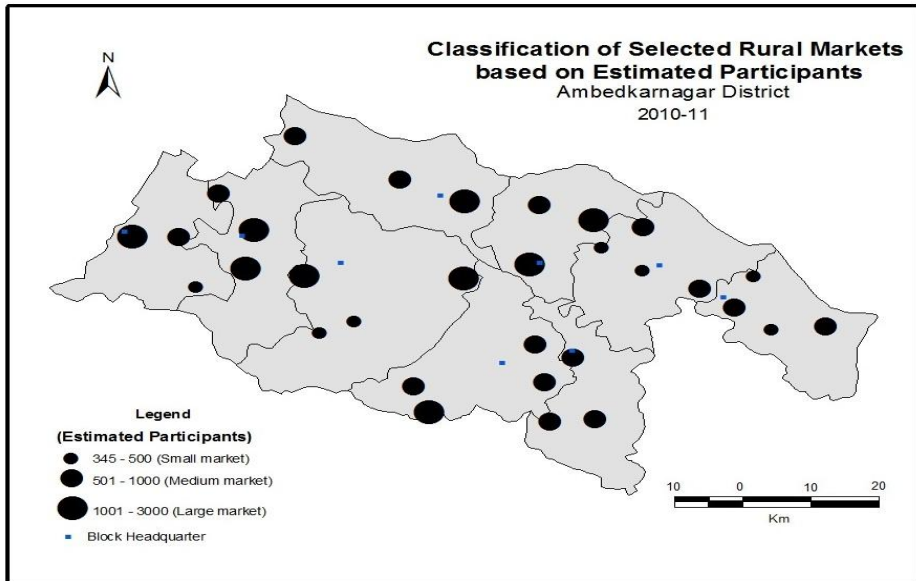


Figure 3: Classification of Selected Rural Markets Based on Estimated Participants

Table 4: Classification of Selected Rural Markets Based on Estimated Participants, 2010-11

<b>Small Market (≤ 500 Participants)</b>	<b>Medium Market (501-1000 Participants)</b>	<b>Large Market (&gt; 1000 Participants)</b>
Jalalpur	Makrahim	Bhiti
Lorepur Tajan	Bandipur	Pahetipur
Birhar	Manguradela	Malipur
Rampur Sakarwari	Amburpur	Baskhari
Deoriya	Bhiyaon	Bariyawan
Indaipur	Khemapur	Hanswar
Acchti	Hussianpur	Pratappur Chamurkha
	Saidapur	Kasaruwa
	Mijhaura	Rasoolpur Mubarakpur
	Jahangiranj	
	Padampur Chauraha	
	Herapur Mundera	
	Nag Jalalpur	
	Uthrathu	
	Khaspur	

Source: Based on Field Survey, 2010-11.



### 2.3 Based on Transacted Commodities

Commodity serves an important basis for the classification of the typology of market centres. It is an essential element of the markets. The size and status of the market depends upon the number, volume, nature and specialization of commodities (Dixit, 1984). In the present study, selected markets of the district are classified on the basis of major commodities traded at the rural market centres of the district.

The major commodities transacted in the rural markets has been categorized into 22 types, viz., (1) food grains, (2) oilseeds, (3) vegetables, (4) fruits, (5) meat and fish, (6) dairy products, (7) grocery items, (8) sweet and savory snacks, (9) earthen wares, (10) wooden items, (11) iron items, (12) electrical items, (13) electronic goods, (14) durable goods, (15) agricultural implements, (16) clothes/garments, (17) ladies items/cosmetics, (18) stationery items, (19) medicines, (20) handicrafts, (21) livestock and (22) bicycle/bike. On the basis of the major commodities traded, rural markets of the district are grouped into three categories, i.e. small markets ( $\leq 7$  commodities), medium markets (8-15 commodities) and large markets ( $> 15$  commodities) (table 5 and figure 4).

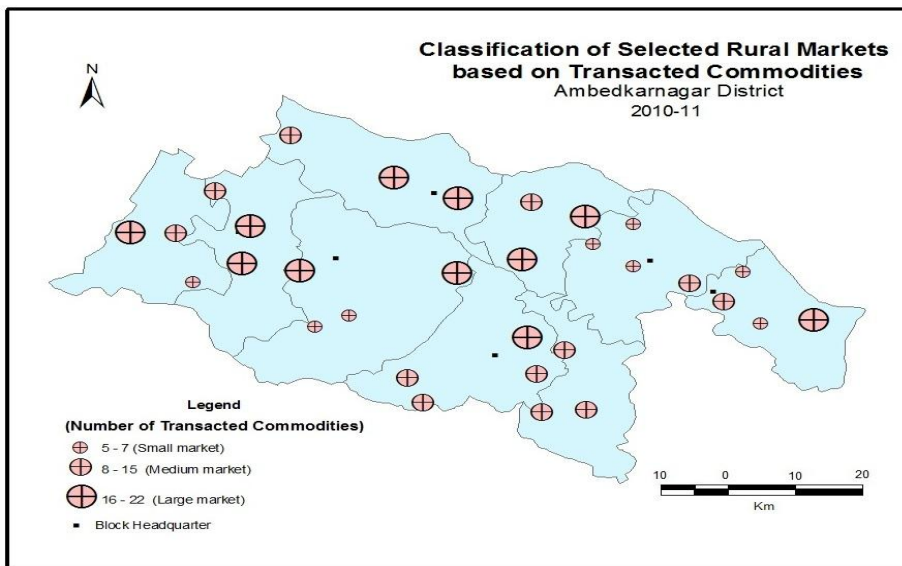


Figure 4: Classification of Selected Rural Markets Based on Transacted Commodities

Table 5: Classification of Selected Rural Markets Based on Transacted Commodities, 2010-11

Small Market (≤ 7 Commodities)	Medium Market (8-15 Commodities)	Large Market (> 15 Commodities)
Jalalpur	Bandipur	Bhiti
Lorepur Tajan	Bhiyaon	Pahetipur
Achti	Khemapur	Khaspur
Rampur Sakarwari	Jahangirganj	Hanswar
Indaipur	Amburpur	Baskhari
Makrahim	Saidapur	Manguradela
Birhar	Mijhaura	Bariyawan
Deoriya	Uthrathu	Pratappur Chamurkha
	Padampur Chauraha	Kasaruwa
	Herapur Mundera	Rasoolpur Mubarakpur
	Hussianpur	
	Nag Jalalpur	
	Malipur	

Source: Based on Field Survey, 2010-11.

## 2.4 Based on Market Function and Exchange Orientation

The type of function is a very important aspect in the study of markets. As stated by Scott (1977), any classification scheme must include market orientation, function and periodicity. Hodder (1965) has classified market centres according to their function in the distribution chain as, the feeder markets, the bulking centres, the major markets and the large trade centres.

In the present study, selected rural markets of the district are classified on the basis of function and exchange orientation as, ‘weekly markets’ (*haat*) which performs market business only on the fixed day/days of the week, ‘retail periodic markets’ which met on the fixed day/days of the week but also perform market business on other days of the week though on a very small scale and, ‘retail daily markets’ which have no periodic meetings and function throughout the week but only with retailing facilities.

As evident from table 6 and 7, bi-weekly retail markets predominate in the district having a share of 54.84 per cent to total rural markets. The daily retail markets share 32.26 per cent rural markets of the district with transaction business throughout the week and serve relatively larger population for a larger number of goods and services.

Table 6: Typology of Selected Rural Markets Based on Market Function and Exchange Orientation, 2010-11

S. No.	Development Block	Selected Rural Markets	Daily (Retail Daily Markets)	Weekly (Haats)	Bi-weekly (Retail Periodic Markets)
1	Bhiti	Mijhoura			1
2		Bhiti	1		
3		Jalalpur		1	
4	Katehri	Pratappur Chamurkha	1		
5		Khemapur			1
6		Pahetipur	1		
7	Akbarpur	Lorepur Tajan		1	
8		Rampur Sakarwari			1
9		Kasaruwa	1		
10		Bariyawan	1		
11	Tanda	Khaspur			1
12		Rasoolpur Mubarakpur	1		
13		Uthrathu			1
14	Baskhari	Herapur Mundera			1
15		Hanswar	1		
16		Baskhari	1		
17	Ramnagar	Hussianpur			1
18		Indaipur			1
19		Makrahim			1
20		Acchti		1	
21	Jahangirganj	Birhar			1
22		Jahangirganj			1
23		Padampur Chauraha	1		
24		Deoriya		1	
25	Jalalpur	Manguradela			1
26		Nag Jalalpur			1
27		Saidapur			1
28		Malipur	1		
29	Bhiyaon	Amburpur			1
30		Bandipur			1
31		Bhiyaon			1
Total		31 (100.00)	10 (32.26)	4 (12.90)	17 (54.84)

Source: Based on Field Survey, 2010-11.

Table 7: Classification of Selected Rural Markets Based on Market Function and Exchange Orientation, 2010-11

Haats	Retail Daily Markets	Retail Periodic Markets
Jalalpur	Bhiti	Mijhaura
Lorepur Tajan	Pratappur Chamurkha	Khemapur
Achti	Pahetipur	Rampur Sakarwari
Deoriya	Kasaruwa	Khaspur
	Bariyawan	Uthrathu
	Rasoolpur Mubarakpur	Herapur Mundera
	Hanswar	Hussianpur
	Baskhari	Indaipur
	Padampur Chauraha	Makrahim
	Malipur	Birhar
		Jahangiranj
		Manguradela
		Nag Jalalpur
		Saidapur
		Amburpur
		Bandipur
		Bhiyaon

Source: Based on Field Survey, 2010-11.

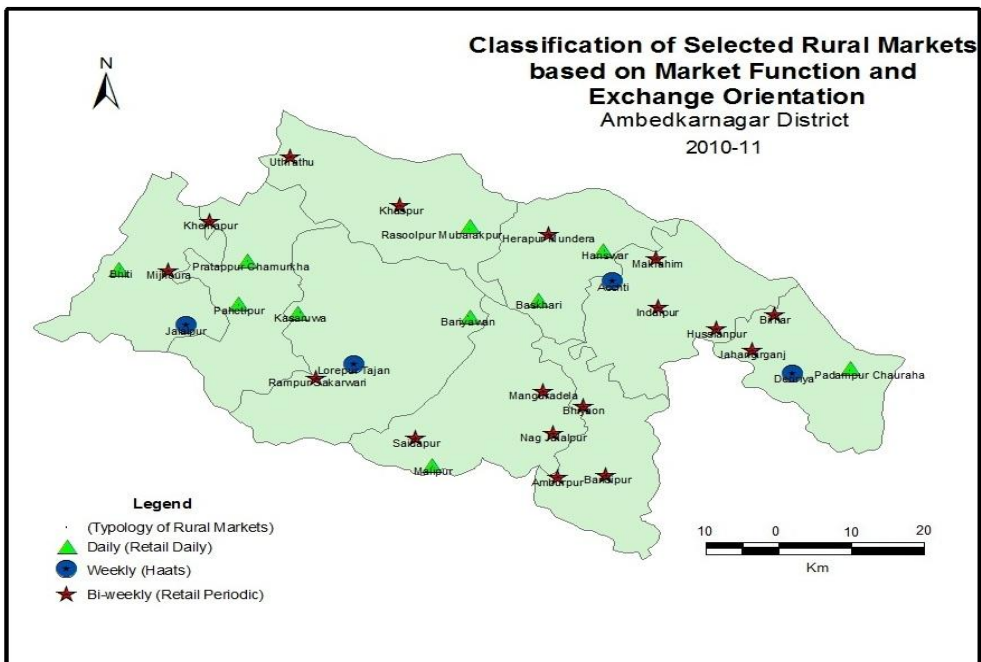


Figure 5: Classification of Selected Rural Markets Based on Market Function

The weekly *haats* share merely 12.90 per cent of the rural markets in the district but attracts a large number of rural population for their specialized nature of goods and commodities, like food grains, oil seeds, vegetables, meat and fish and livestock (figure 5).

## 2.5 Based on Market Trade Area

Market trade area is the reflection of market size, range of goods and services dealt in a particular market. The extent and potentiality of demand of commodities from tributary region, determine the origin and development of market centres. Thus, the market area and the size of the market are interdependent (Ali, 2007). The first theoretical model concerning the relationship between market and surrounding area was developed by Von Thunen. Different concentric rings of land use, based on economic rent have come out around a central city under an ideal condition (Von Thunen, 1886).

Threshold limit and range of goods are the main tools to delimit the complementary region in any given market (Christaller, 1972). Stine (1969) was the first to give the theoretical phenomena of periodic marketing on the basis of range of goods. The circular complementary area, if they are tangentially drawn, leave necessarily an unreserved area, then overlapping of area exist. To overcome the above problem, a hexagonal geometrical shape of trade area was claimed. Jackson (1971) has computed a theoretical trade area related to southern Ethiopian markets by using the formula:

$$\text{Trade Area} = \text{Total Area} / \text{Number of Market Centres}$$

In the present study, the trade area of 31 selected rural markets is computed based on the average distance travelled by consumers and traders in a given market (table 8 and figure 6). The travelling distance by consumers and traders is the best expression of centrality of rural market centre. The market trade area of a selected market is computed on the basis of following formula:

$$\text{Market Trade Area} = \pi r^2$$

where,  $r$  is radius of market area, and  $\pi$  is equal to 3.14

$$\text{Radius of Market Area } (r) = (\text{Mean travelled distance by traders} + \text{Mean travelled distance by consumers}) / 2$$

Table 8: Market Trade Area of Selected Rural Markets Based on Mean Distance Travelled by Traders & Consumers, 2010-11

S. No.	Development Block	Selected Rural Markets	Mean Distance Travelled by Traders (Km)	Mean Distance Travelled by Consumers (Km)	Radius of Market Area (r) (Km)	Market Trade Area ( $\pi r^2$ ) (Km <sup>2</sup> )
1	Bhiti	Mijhaura	6.37	3.55	4.96	77.25
2		Bhiti	5.10	5.35	5.23	85.72
3		Jalaipur	9.76	4.94	7.35	169.63
4	Katehri	Pratappur Chamurkha	6.43	8.67	7.55	178.99
5		Khemapur	6.57	3.65	5.11	81.99
6		Pahetipur	5.95	7.27	6.61	137.19
7	Akbarpur	Lorepur Tajan	10.06	5.24	7.65	183.76
8		Rampur Sakarwari	6.30	3.65	4.98	77.72
9		Kasaruwa	7.67	9.52	8.60	231.96
10		Bariyawan	6.25	7.35	6.80	145.19
11	Tanda	Khaspur	9.29	5.38	7.34	168.94
12		Rasoolpur Mubarakpur	9.38	13.10	11.24	396.70
13		Uthrathu	7.00	4.30	5.65	100.24
14	Baskhari	Herapur Mundera	7.35	4.30	5.83	106.54
15		Hanswar	8.48	10.62	9.55	286.38
16		Baskhari	7.52	11.19	9.36	274.80
17	Ramnagar	Hussianpur	7.38	3.95	5.67	100.77
18		Indaipur	6.11	2.95	4.53	64.44
19		Makrahim	6.40	3.70	5.05	80.08
20		Acchti	9.65	4.71	7.18	161.87
21	Jahangirganj	Birhar	6.32	3.16	4.74	70.55
22		Jahangirganj	7.62	4.29	5.96	111.35
23		Padampur Chauraha	5.20	5.95	5.58	97.59
24		Deoriya	10.47	5.12	7.80	190.79
25	Jalalpur	Manguradela	6.60	3.95	5.28	87.37
26		Nag Jalalpur	8.55	4.80	6.68	139.90
27		Saidapur	7.53	4.53	6.03	114.17
28		Malipur	6.05	7.43	6.74	142.64
29	Bhiyaon	Amburpur	7.47	4.00	5.74	103.28
30		Bandipur	6.65	3.70	5.18	84.09
31		Bhiyaon	6.60	4.00	5.30	88.20
<b>Total</b>			<b>7.36</b>	<b>5.62</b>	<b>6.49</b>	<b>132.26</b>

Source: Based on Field Survey, 2010-11.

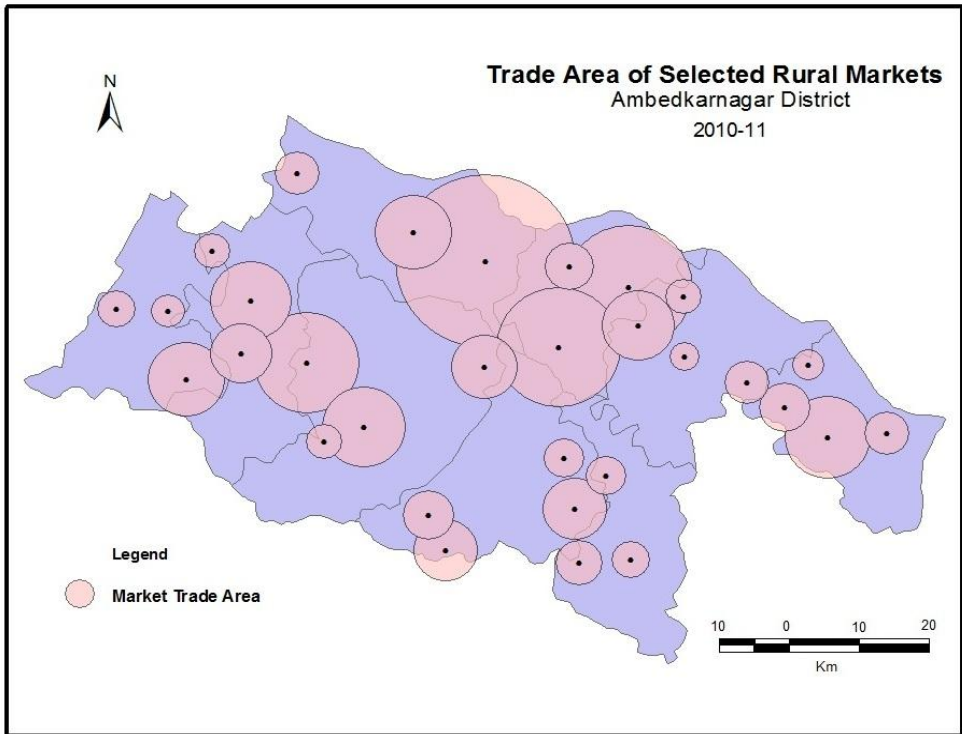


Figure 6: Trade Area of Selected Rural Markets

### 3. Conclusion

Effective policies for rural market development must be based on classification of the essential characteristics of the various market centres. Such an assessment allows the identification of both needs and opportunities in the rural market centres. The lack of different approaches in formulating rural market typologies resulted in ineffective and inadequate plans. It is necessary to establish sets of indicators that can both reflect the specific characteristics of, and distinguish between, the main types of rural market centres. Although it is now widely accepted that rural market centres are not homogeneous and there is no unitary concept as far as the typology of the rural market centres is concerned.

The typology and characteristics of rural market centres is directly based on the spatio-temporal as well as the socio-economic conditions of the geographical area. On the basis of the above analyses, it is concluded that the rural market centres in North India can be classified realistically into various regional types on the basis of their essential characteristics.

The differences between the defined types are significant and must be incorporated into designing and projecting policies and planning for rural market development at local levels. The schemes must highlight both problems and opportunities for each of the rural market types, enabling effective planning and implementation of suitable measures.

#### **4. References**

- Ali, M. 2007: Role of Periodic Markets in Transaction of Agricultural Commodities in Shahjahanpur District. Unpublished Ph.D. thesis, Geography Department, Aligarh Muslim University, Aligarh.
- Amani, K. Z. and Khan, N. 1993: Spatial Behaviour of Consumers and Traders in Periodic Markets in a North Indian State: A Case Study. *Asian Profile*, 21 (3), 227-246.
- Christaller, W. 1933: Central Places in Southern Germany. Translated by C. W. Baskin (1966): Prentice Hall, Englewood Cliffs, New Jersey.
- Dixit, R.S. 1984: Market Centres and their Spatial Development in the Umland of Kanpur. *Kitab Mahal*, Allahabad, 89-112.
- Hodder, B.W. 1965: Distribution of Markets in Yarubaland. *Scottish Geographical Magazine*, 81, 57-97.
- Jackson, R.T. 1971: Periodic Markets in Southern Ethiopia. *Transactions of the Institute of British Geographers*, 53, 31-42.
- Khan, N. 1991: Agricultural Development and Marketing. H.K. Publishers, Delhi.
- Khan, N. 1991: Synchronization of Periodic Markets in Faizabad District, Northern India. *Philippine Geographical Journal*, 35 (1), 13-26.
- Saxena, H. M. 1988: Rural Markets and Development. Rawat Publications, Jaipur, 18.
- Scott, E.P. 1972: The Spatial Structure of Rural Northern Nigeria, *Economic Geography*, 48, 316-332.
- Smith, D. M. 1975: *Patterns in Human Geography*. Penguin, 30.
- Stine, J. H. 1969: Temporal Aspect of Tertiary Production Elements in Korea. In F. R. Pitts (eds.) *Urban System and Economic Development*, School of Business Administration, University of Oregon, Eugene, 68-88.
- Von Thunen, J. H. 1826: *Dev Isoleirite Staat in Bezeihung auf Land Wirtschaft und Nationalo Konomie*. Rostock, translated by Wartenburg, C.M. as *Von Thunen's Isolated State* (1966): Oxford University Press, London.