

A STUDY OF AREA OF INFLUENCES OF AGRICULTURE COMMODITY MARKETS (APMC's) IN SOLAPUR DISTRICT OF MAHARASHTRA

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ABSTRACT

Marketing is a part and parcel of modern day's life. Marketing is pervasive in nature and it affects our day-to-day life in every possible manner. Marketing is both an art as well as a science competitive environment motivates organizations to understand marketing as a discipline if management. In fact today marketing is regarded as most important of all management functions business. The concept of agriculture commodity marketing is defined by a number of geographers and economist. In general, Agriculture marketing is defined as a process, from which the farmer starts with a decision to produce a saleable farm commodity, and it involves all the aspects of markets structure or system, both functional and institutional, based on technical and economic considerations, and includes pre-harvest and post-harvest operations, assembling, grading, storage, transportation and distribution (National Commission on Agriculture, 1976).

Solapur District is selected as a study region for the present investigation. The district is situated on the south- east fringe of Maharashtra state and lies entirely in the Bhima and Sina basins. Economy of the region has an agrarian base. Out of total working population nearly two third (67.55%) working population engaged in primary economic activity, especially in agriculture and one third in secondary and tertiary sectors of economy.

In this district the APMC market centers depend upon the agriculture. Agricultural marketing plays an important role not only in stimulating production and consumption, but in accelerating the pace of economic development. Its dynamic functions are of primary importance in promoting economic development. All the eleven talukas in the district are served by regulated markets, the Solapur market committee serving the South and North Solapur talukas together. All the taluka's are brought under the purview of Maharashtra Agricultural Produce Marketing (Regulation) Act of 1963. The ten regulated markets in the district are the wholesale trade centers in the district which are mainly the export centers of surplus commodities. Barshi market is the most important exporting centre in the district. In the report of year 1 April 2018 to 31 March 2019, there are 306 Main Markets and 598 Sub-markets functioning in the state. The APMC's are functioning in all districts of the state.

Key words: *Commodity Marketing, APMC Market, Wholesale Trade, Distribution, Area Of Influence, Functioning*

INTRODUCTION:-

Agriculture commodity market centers are economically the most important regional development of pattern. They provide tertiary services to the region act as nodal centers for transportation and serve as growth centers by providing various tertiary services to the region. Agriculture commodity centers also help in increasing social contact serve as Agriculture commodity centers of diffusion and become focus for political and other activities. Hence the Agriculture commodity centers have predominant economic importance in any region. Market centers also play a vital role in social – economic development of region. The periodicity of markets varies from region to region. A study of the agricultural marketing system is necessary to an understanding of the complexities involved and the identification of bottlenecks with a view to providing efficient services in the transfer of farm products and inputs from producers to consumers.

The number of regulated markets has gradually increased in the country. The establishment of regulated markets has helped in creating orderly and transparent marketing conditions in primary assembling markets. Further, the increase in the number of regulated market yards in India, from a meager 286 at the time of independence to 7557 in the year 2005, has helped in increasing the access of farmers to such orderly market places.

These regulated markets (7557) consist of 2428 principal markets and 5129 sub yards. During 1992-93, agricultural commodities worth Rs 62,000 crore were traded in these regulated wholesale markets, which account for about 43 percentage of the value of marketed surplus. Maharashtra is the first state with Agricultural Markets in India with Wholesale as 880 and Rural Primary as 3500 with a total of 4380 as on 2010.

OBJECTIVES:-

In view of the above, following are specific objectives of the present investigation.

1. To describe various factors that influence trade areas.
2. To analyze the area of influence of agriculture commodity market centers in Solapur district.

DATABASE AND METHODOLOGY:-

Database: - For the analysis of the existing status of the various aspects of APMCs centers, related data and information have been collected from various sources. The work is based on secondary data. The secondary data has been collected from the district gazetteers, district census hand books, socio-economic reviews, APMC and GP office of the study region.

Methodology: - In the present study primary data has supplemented by secondary source of data. The collected data through different sources analyzed and processed by V.L.S Prakash Rao's (1994) modified method. The results are shown with the help of table and map.

STUDY REGION:

Solapur District is selected as a study region for the present investigation geographically Solapur is located between 17° 10' to 18° 32' North latitude and 74° 42' to 76° 15' east longitude. The district is situated on the south east fringe of Maharashtra state and lies entirely in the Bhima and sina basins and its tributaries. The district is surrounded by Ahmednager district to the north, Osmanabad district is the North – East, Karnataka state to the South - East, Sangli district to the South - West, Satara district to the West and Pune district to the North -West. The district covers Geographical area of 14895.40 sq.kms. This is 4.82 percent of the total area of Maharashtra state and a population of 4315527 (2011 census), which is 3.84 % of total population of the state. It ranks 8th in population in the state. Out of the total area of the district 348.80 sq.kms. (2.28 %) is urban area where as remaining 14546.60 sq.kms. (97.72 %) is rural area. The district is having 11 Tahsils. (Fig.No.1). Area wise Karmala tahsil is biggest covering an area of 1609.70 sq.kms. and North Solapur is smallest covering an area of 746.30sq.kms.

Economy of the region has an agrarian base. Out of total working population nearly two third (67.55 %) working population engaged in primary economic activities, especially in agriculture and one third in secondary and tertiary sectors of economy. Solapur district famous for its chadder, handloom, Power loom, Beedi industries and Khilari bullocks and cows.

The main objectives of this enactment were: (1) to bring about equity in bargaining power among the agriculturists and traders, (2) to promote mutual confidence, (3) to prevent malpractices and (4) to give a fair deal to the peasants. This enactment led to the establishment of the market committees at the following places, [Date of establishment of the market committee is given in bracket.] viz., (1) Akluj (10th March, 1950), (2) Karmala (1st January, 1943), (3) Barshi (11th June, 1948), (4) Pandharpur (1st July, 1947), (5) Solapur (12th August, 1959), (6) Sangola (1st December, 1962), (7) Mangalwedha (19th May, 1965), (8) Mohol (14th December, 1954). (9) Kurduwadi (1st May, 1950) and (10) Akkalkot (20 November, 1952).

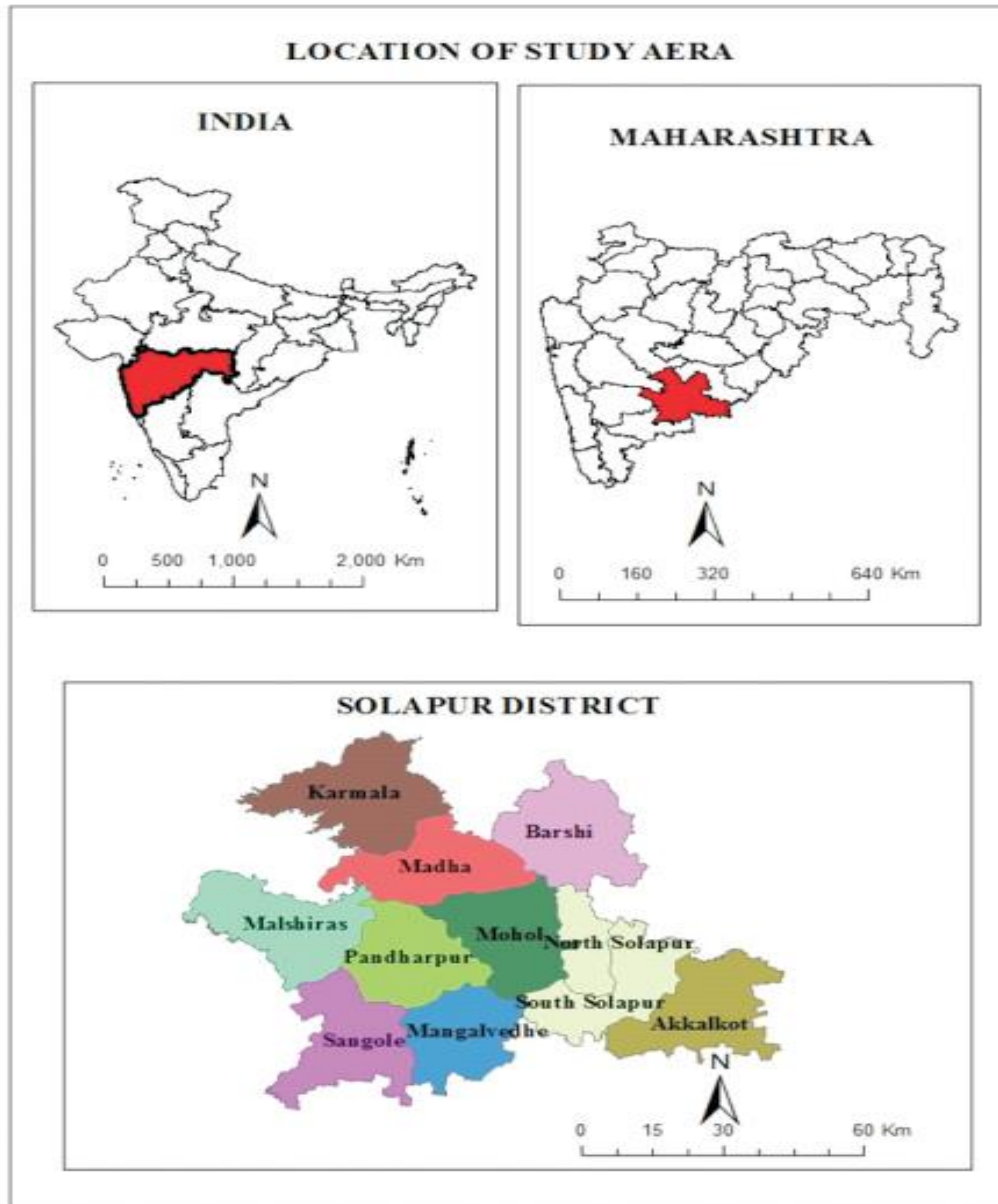


Fig. no. 1

AREA OF INFLUENCES OF MARKETS:

Areas of Influence are a way of visualizing catchment areas for a group of points such that any location within an area is closer to its generating point than any of the other generating points.

Factors that Influence Trade Areas

Trade areas often extend beyond city or neighborhood boundaries and come in a variety of shapes and sizes, depending on a community's pulling power and local geography. A business district may serve a number of different trade areas depending on a variety of factors such as types of products sold or customer market segments served

Important Factors

Various factors determine trade areas including the community's population community and its proximity to other competing business districts (Reilly's Law of area influencing factors) are as following.

- **Population of your community:** Generally the larger your community's population, the bigger is the trade area.
- **Proximity of other competing business districts:** Typically there is a cutoff point where customers are drawn to the competing center instead of your community.
- **Mix of businesses in your community:** A critical mass of businesses pulls customers from a further distance than a more limited mix of businesses.
- **Destination attractions:** A significant destination business (such as a large discount department store) or community attraction can expand your trade area—drawing customers from a long distance. However, do not assign a single business's trade area to the whole community. Rarely do other businesses match the pull of a prominent destination business.
- **Traffic patterns:** Each region has distinct traffic patterns strongly impacted by its network of streets and highways, as well as major landforms such as rivers, lakes, and mountains.

In the current study the zone of the influences of 80 markets centers of the study region has been demarcated applying the method of V.L.S. Prakash Rao. Rao's method calculates the degree of influences or market center by considering the total human population of the area and the population of individual town.

The functional importance of the town is measured qualitatively in terms of centrality index. It is considered to obtain more accurate and realistic result. Considering this aspect the original formula of Prakash Rao, given below has been modified.

$$D = \frac{T \times A}{U} \quad R \quad \sqrt{\frac{T \times A}{U}}$$

Where, D-is the degree of influence

A- is the total area of the region

U- is the total population of the region T- is the town population

R- is the radius of a circle.

V.L.S. Prakash Rao's formula has been modified by Patil (1994), Pawar and Gharpure (1985). They have used following formula for identifying sphere of influence of market centers.

$$SI = \frac{TC \times A}{A} \quad R = \sqrt{\frac{TC \times A}{A}}$$

Where,

SI- is sphere of influence

TC- is total centrality value of market centers,

A- is total area (sq.km.) of the study region.

C- is total centrality of all market centers

R- is radius of a circle indicating the sphere of influence.

In the current study the above modified formula has been used to demarcate the service areas of the relevant market center.

Table No.1

Distribution of Area of Influence of APMC Markets in Study Region

Sr. No.	APMC Center Name	Area in Sq. Km.	Total population	Urban Population	Centrality Index	Radius	Rank
1	Solapur	1884.99	1318249	986138	162.77	12.75	1
2	Barshi	1541.64	372711	118722	42.38	6.5	2
3	Pandharpur	1292.8	442368	98923	29.61	5.44	3

4	Malshiras (Akluj)	1607.98	485645	64401	23.98	4.89	4
5	Akkalkot	1413.97	314570	63680	20.85	4.56	5
6	Madha (Kurduwadi)	1523.86	324027	49463	17.45	4.17	6
7	Karmala	1593.01	254489	43199	15.93	3.99	7
8	Sangola	1567.13	322845	34321	12.45	3.52	8
9	Mohol	1324.7	276920	42450	13.02	3.6	9
10	Mangalwedha	1144.92	205932	31824	8.43	2.9	10
	Total	14895	4317756	1533121			

Source: Data compiled by Researcher (Census 2011)

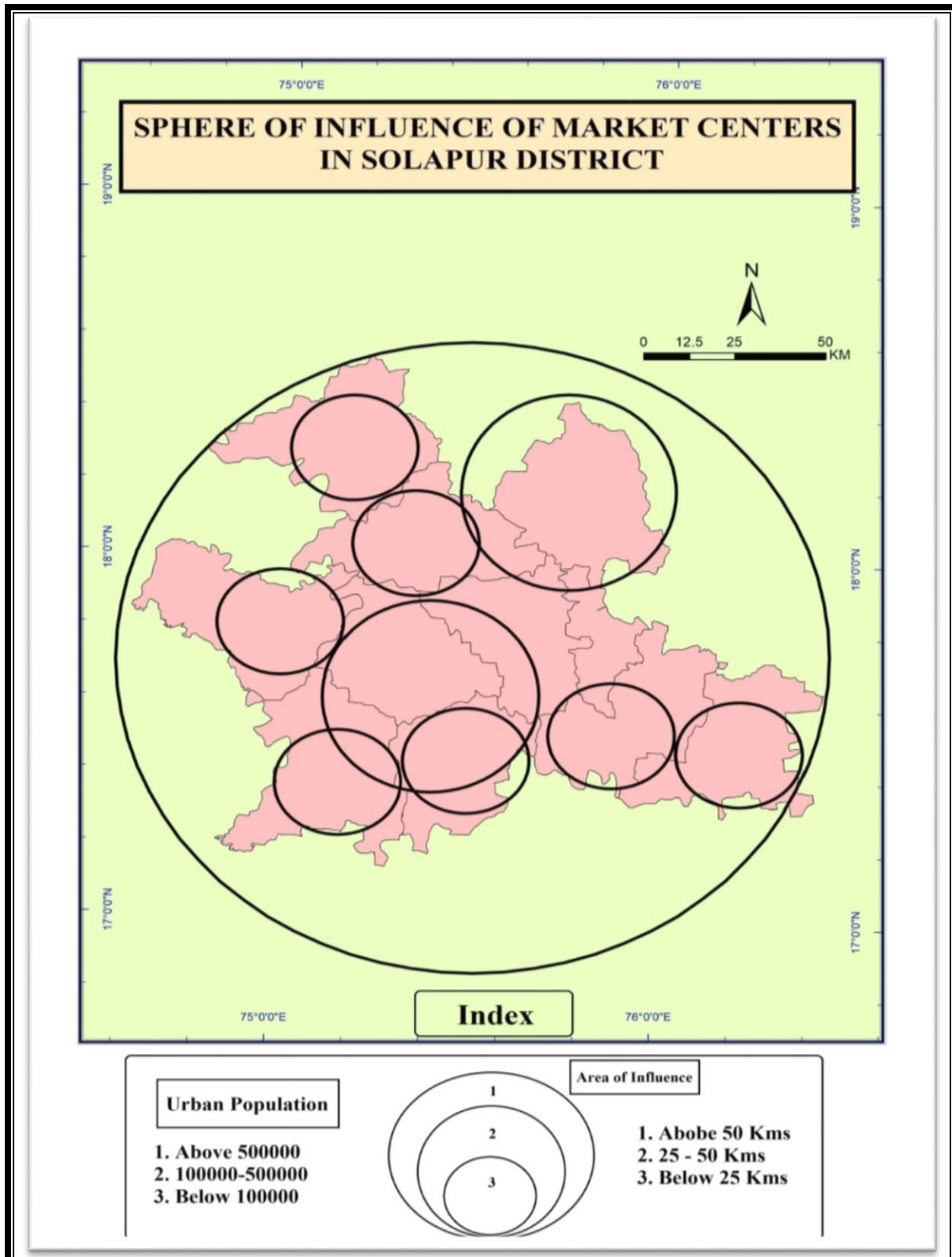


Fig. no. 2**CONCLUSION**

The markets centers can differ by products (goods, services) or factors (labour and capital) sold, product differentiation, place in which exchanges are carried, buyers targeted, duration, selling process, government regulation, taxes, subsidies, minimum wages, price ceilings, legality of exchange, liquidity, intensity of speculation, size, concentration, exchange asymmetry, relative wages, volatility and geographic extension.

A Solapur market center has 162.77 centrality index of area of influence. All types of agricultural commodities come from all tahsils of the Solapur district and also near from Vijapur and Gulberga district of Karnataka state. The result obtained with the help of Prakash Rao's modified method for all tahsils market centers in the study region and it is depicted in table no.1. It indicates that Solapur, a first rank market center, has a highest range (12.75kms) of service area. The reason behind this is that, the Solapur city is the headquarter of the district. It is the hub of education, industrial and administrative facilities in the study region. The second, third and fourth rank market centers are Barshi, Pandharpur and Akluj. Service areas of these market centers ranges from 6.5kms, 5.44 Kms, and 4.89Kms respectively. And remaining fifth, sixth, seventh, eighth, ninth and tenth rank market centers like Akkalkot, Kurduwadi, Karmala, Sangola, Mohol and Mangalwedha respectively are included.

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