



“FUNCTIONAL CLASSIFICATION OF URBAN SETTLEMENT: A GEOGRAPHICAL REVIEW OF SOLAPUR DISTRICT”

Dr. D. N. Ligade

*Assistant Professor, Department of Geography (UG & PG),
Walchand College of Arts and Science, Solapur.*

ABSTRACT:

This paper has been focused on the functional classification of urban centers in Solapur district. Solapur is one of the major district in Maharashtra which contribute the highest number of sugar factory. Some people of this district engaged in various economic activities. Majority of people in rural area are engaged in the agriculture. So except the urban area in study region people also shows interest in the all economic activities. (a) Cultivators, (b) Agriculture, (c) Livestock, forestry, fishing, hunting and plantation, (d) House hold industry (e) Manufacturing industry, (f) Construction, (g) Trade and Commerce, (h) Transport, Storage and Communication and (i) other groups are major activities in study region. Overall major economic activities in Solapur district is cultivator and agriculture. According to the Nelson's method cultivation is major activity in Malshiras tahsil which contribute the highest percent in study region. In agriculture labor Sangola tahsil plays vital role to contribute highest percent in this region. Nelson's method is very useful for the classification of urban centers using mean and S.D. In the year 2017. Primary economic activities are major economic activities in Solapur district.



KEY WORDS: *function, civilization, spearing, netting, angling, globalization, urban sprawl.*

INTRODUCTION:

The purpose of this study is to make of functional classification of urban settlement in Solapur district. Though the towns have been classified on the basis of various features viz, age, population, geographical location, area etc. The most significant classification has been made on the basis of maximum of functions which the town's peoples performs. These functions are of course, non- agricultural or tertiary in nature and lead of specialization of certain activities which differentiate towns from each other. Urban centers being the focus of human population perform certain essential functions. These functions are naturally influenced by the site, situation, the environmental conditions of urban centers which they located. The functional interpretation of towns has become significant aspect of urban study as it provides a good basis for the regional planning for planners.

In 2017 the maximum urban centers of Solapur district performs the primary economic activities. Solapur is one of the city in North Solapur tahsil which had leads the tertiary and quaternary activities, because it is the district headquarters. So maximum people and educated family are concentrated in this area due to education and job opportunity.

STUDY AREA:

Solapur district lies to the south western part of Maharashtra state which is the fifth largest district in terms of area and seventh largest in terms of population in Maharashtra. The Solapur district is located between 17°07' N to 18° 33' N latitudes and 74°37' E to 76°26' E longitudes. The average height of Solapur district from MSL varies from 500 to 800 meters. It is bounded by Sangli district to its southwest, Satara district to its west, Pune district to its northwest, Ahmadnagar district to its north, Osmanabad district to its

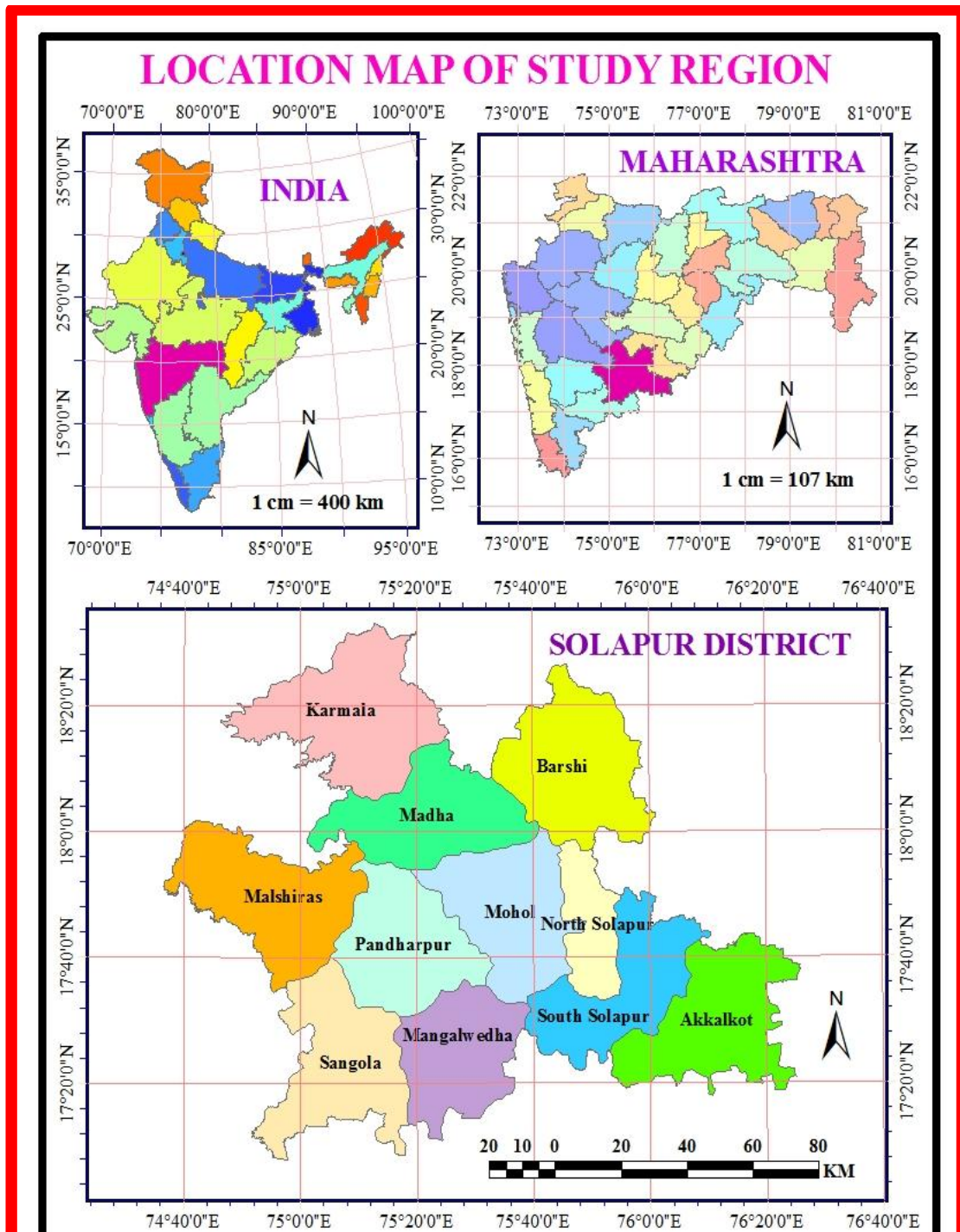


Figure No.1

east and Bijapur district in the Karnataka to the south. The total geographical area of study region is 14,895 sq. km. with a population of 4,31,7756 according to 2011 census. For administrative purpose Solapur district is divided in to 11 tahsils i.e. Akkalkot, Barshi, Karmaia, Madha, Malshiras, Mangalwedha, Mohol, North Solapur, Pandharpur, Sangola and South Solapur and constitutes 20 percent of the total geographical area of Pune division and 4.8 percent of the state of Maharashtra.

OBJECTIVES:

The main objectives of study are:

1. To determine the functional classification of urban settlements.
2. Find out the major activities of urban centers in study region.

DATABASE AND METHODOLOGY:

This study entirely based on secondary sources of data. The data regarding various types of workers have been obtained through daily newspapers, socio-economic abstract of Solapur district 1991 and 2015. Solapur District Handbook and Gazetteers since 1991 to 2011 are also used for this research. Following formula is used for classification of urban settlement using Nelson’s method for the purpose of the study.

$$1. \text{ Mean} = \frac{\sum X}{N} \qquad 2. \text{ SD} = \sqrt{\frac{\sum (X - \text{Mean})^2}{N}}$$

Functional classification of Urban Settlement Solapur district:

By using Nelson’s method, the classification of urban settlement in the study region is presented in following table. The Mean and Standard Deviation is calculated for the (a) Cultivators, (b) Agriculture, (c) Livestock, forestry, fishing, hunting and planation,(d) House hold industry (e) Manufacturing industry, (f) Construction, (g) Trade and Commerce, (h) Transport, Storage and Communication and (i) other activities groups in Solapur district occupation groups.

1. Cultivators:

The cultivators are any of several types of farm implement used for secondary tillage. One sense of the name refers to frames with teeth (also called shanks) that pierce the soil, which are dragged through it linearly. In another sense it refers to machines that use rotary motion of disks or teeth to accomplish a similar result. In this study region around the 18

Table No.-1: Classification of Cultivators Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Barshi, Solapur, Pandharpur.
2	Average Towns	Karmala, Madha, Mohol, Sangola, Mangalwedha, Akkalkot.
3	S.D.one Towns	Malshiras
4	S.D.two Towns	-
5	S.D.three Towns	-

Source: Compiled by the Researcher

percent of workers are engaged in cultivating. In Solapur district there are eight towns where majority of people are engaged in as like cultivators. In 2017, the cultivating activities the followings towns classified on Nelsons method.

2. Agriculture:

Agriculture is major activities in study region which produce the foods and goods through farming. Agriculture (Farming) was the key development that led to the rise of human civilization, with the husbandry of domesticated animals and plants (i.e. crops) creating food surpluses that enabled the development of more densely populated area. In comparison to the other district of Maharashtra, the Solapur district lies in drought prone area. This district is now booming in industrial development. In the year 2017, Solapur district Agricultural towns are classified as following table.

Table No.-2: Classification of Agriculture Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Solapur, Pandharpur.
2	Average Towns	Karmala, Madha, Barshi, Mohol, Malshiras, Akkalkot.
3	S. D. one Towns	Sangola, Mangalwedha.
4	S. D. two Towns	-
5	S. D. three Towns	-

Source: Compiled by the Researcher

3. Livestock, forestry, fishing, hunting and plantation activities:

Livestock are domesticated animals raised in an agricultural setting to produce commodities such as foods, fibers and labors. This article doesn't discuss poultry or farmed fish, although these, especially poultry, are commonly included within the meaning of "livestock". Livestock are generally raised for profit. Raising animals (animal husbandry) is a component of modern agriculture. It has been practiced in many cultures since the transition to farming from hunter-gather lifestyles. **Forestry** is the art, Science and craft of creating, managing, conserving, and repairing forests and associated resources to meet desired goals, needs and values for human benefit. Forestry is practiced in plantations and natural stands. The main aim of forestry is to create and implement systems that manage forests to provide environmental supplies and services. The challenge of forestry is to create systems that are socially accepted while sustaining the resource and any other resources that might be affected. **Fishing** is the activity of trying to catch fish using various sources. Fish are normally caught in the wild. Techniques for catching fish include hand gathering, spearing, netting, angling and trapping. In study region there are major rivers which are useful for the fishing activities. **Hunting** is the activities which practices of pursuing living organism, usually wildlife or feral animals, by humans for food, recreation or trade. Animals may also hunt other animal species but this is usually called predation. In present-day use, lawful hunting is distinguished from poaching, which is the killing, trapping or capture of the hunted species contrary to applicable law. **A plantation** activity is a long, artificially-established forest, farm or estate, where crops are grown for sale. The plantation term is informal and not precisely defined. Plantations are grown on a large scale as the crops are grown for commercial purposes but not for local consumption.

In Solapur district the majority of people are engaged in Agriculture, due to lack of development in service sector. So this activities helps to people in livestock, hunting etc. In 2017, this types of activity are categorized in following table.

Table No.-3: Classification of Livestock, forestry, fishing, hunting and plantation Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Solapur, Barshi, Malshiras, Pandharpur.
2	Average Towns	Karmala, Madha, Mohol, Sangola, Mangalwedha, Akkalkot.
3	S. D. one Towns	-
4	S. D. two Towns	-
5	S. D. three Towns	-

Source: Compiled by the Researcher

4. Household Industry:

Household industry was defined as an industry conducted by the head of the household himself/herself or by the members of the household at home or within the village in rural areas and only within the precincts of the house where the household lived in urban areas. The larger proportion of workers in a household industry should consist of members of the household including the head. The industry should not be run on the scale of a registered factory.

The main criterion of a household industry was the participation of more than one members of a household. This criterion also applied in urban areas. Even if the industry was not actually located in the house but was located somewhere within the village limits in the rural areas, there was greater possibility of the members of the household participating in the industry. In the urban areas where organized industry was more prominent, the household industry was to be confined to the precincts of the house where the participants lived.

A household industry is one that is engaged in production, processing, servicing, repairing or making and selling (but not merely selling) of goods and commodities. It does not include professions such as those practiced by a pleader or doctor or barber, musician, dancer, dhobi, astrologer etc. or merely trade or business, even if such professions, trade or services are run at home by members of the household.

In the year 2017, this types of activities of towns are classified in following table.

Table No.-4: Classification of House Hold Industries Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Karmala, Madha, Barshi, Mohol, Pandharpur, Malshiras, Sangola, Mangalwedha, Akkalkot.
2	Average Towns	-
3	S. D. one Towns	-
4	S. D. two Towns	-
5	S. D. three Towns	Solapur

Source: Compiled by the Researcher

Examples of household goods include air conditioners, baby items, baking dishes, beds/bedframes, blankets, bedding, linens, towels, blenders, mixers, bookcases, books, bureaus, dressers, wardrobes, cabinets, can openers, chairs, clothes dryers, coffee makers, computers, cooking utensils, couches, sofas, loveseats, sectionals, sofa beds, curtains, curtain rods, drapes, decorative items, desks, dishes, dishwashers, entertainment centers, fans, freezers, (drinking) glasses, hand tools, hutches, irons and ironing boards, lamps, lawn chairs, (table) linens, love seats, mattresses, (home) medical equipment, microwave ovens, mirrors, pillows, pots and pans, refrigerators, rugs, sewing machines and notions, silverware (flatware), sheets, sofas, sectionals, sofa beds/futons, space heaters, stereos and radios, tables toasters and toaster ovens, tools, towels, toys, televisions, vacuum cleaners, and washer/dryers.

5. Manufacturing Industry:

Manufacturing is the production of goods and commodities for use or sale using the man and machine. Simply it means the process of transformation from raw material to finished goods on a large scale. This finished goods may be also used for other manufacturing product such as aircraft, in household industries and other complex products.

Table No.-5: Classification of Manufacturing Industries Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Karmala, Madha, Mohol, Sangola, Mangalwedha, Akkalkot.
2	Average Towns	Barshi, Pandharpur, Malshiras.
3	S. D. one Towns	-
4	S. D. two Towns	-
5	S. D. three Towns	Solapur

Source: Compiled by the Researcher

Manufacturing industry refers to any business that transforms raw materials into finished or semi-finished goods using machines, tools and labors. Manufacturing sectors include production of food, chemicals, textiles, machines and equipment.

Industry mainly perform secondary activities of transforming raw materials into manufactures goods. Such towns provide facilities for power, raw materials, labour, market and efficient network of communication. Table No.5 shows the manufacturing towns in Solapur district.

6. Construction :

Construction is the process consists of the building or assembling of infrastructure. In this activity including the architecture, civil engineering, supervisor and labors are plays the major role in building the construction and design the map of building. The term construction refers to the act of building or erecting up something. This term can also be used to refer to a group of words that form a component of a sentence and are considered a single unit.

In Solapur district excepting the Solapur city there were no major construction activities in remaining cities in study region in 2017. In this activity following towns are included.

Table No.-6: Classification of Construction Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Karmala, Madha, Mohol, Malshiras, Sangola, Mangalwedha, Akkalkot.
2	Average Towns	Pandharpur.
3	S. D. one Towns	Barshi.
4	S. D. two Towns	Solapur.
5	S. D. three Towns	-

Source: Compiled by the Researcher

7. Trade and commerce:

Trade means the exchange of goods from one person to another person. It's some time called commerce or financial transaction. When the network allows to trade it simply called markets. The barter is the example of original trade which exchange the goods and services. Trade depends on the skill of labor, which provides the small aspect of production. It also exists between region to region because of it has comparative advantage in the production. Trade is sometimes loosely called commerce or financial transaction. A network that allows trade is simply called a market. Later one side of the barter were the metals, precious metals (poles[clarification needed], coins), bill, papers money. Trade between two traders is called bilateral trade, while trade between more than two traders is called multilateral trade.

Table No.-7: Classification of Trade and Commerce Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Karmala, Madha, Mohol, Pandharpur, Malshiras, Sangola, Mangalwedha, Akkalkot.
2	Average Towns	-
3	S. D. one Towns	Barshi.
4	S. D. two Towns	-
5	S. D. three Towns	Solapur.

Source: Compiled by the Researcher

Commerce is the whole system which is an economy that constitutes an environment for business. This system includes legal, economic, political, social, cultural and technological systems that are in operation in any country. Thus, commerce is a system or an environment that affects the business prospects of an economy or a nation-state. It can also be defined as a component of business which includes all

activities, functions and institutions involved in transferring goods from producers to consumers. In Solapur district Solapur city is major source of trade and commerce followed by Barshi in study region. Following tables shows the classified towns of trade and commerce in the year 2017.

8. Transport, Storage and Communication:

Roads, Railway, Waterway, cable, pipeline and space are the modes of transport. Transportation is important for the trade and communication in any region. The development of any region depend on the capabilities of network which provides the ultimate source for supply the product in region. In India the roadways are important to connect the villages. In Solapur district the road network is going to develop in all tahsil. Rail network is less developed because all tahsil in Solapur district is not connect by the railway. Except some major tahsil the process of development of rail network on the way of process. Some region in this study region enjoying the pipeline and waterway for communication. Transport or transportation is the movement of people, animals and goods from one location to another location.

In this category following mentioned towns are included in 2017.

Table No.-8: Classification of Transport, Storage and Communication Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Karmala, Madha, Mohol, Malshiras, Sangola, Mangalwedha, Akkalkot.
2	Average Towns	-
3	S. D. one Towns	Pandharpur, Barshi.
4	S. D. two Towns	-
5	S. D. three Towns	Solapur.

Source: Compiled by the Researcher

Communication is the activity which conveying information through the exchange of thoughts, messages or information by speech, visuals, signals, writing or behavior. It is the meaningful exchange of information or knowledge between two or more persons. Communication may be intentional or unintentional, may involve conventional or unconventional signals, may take linguistic or non-linguistic forms, and may occur through spoken or other modes.”

9. Others activities:

Remaining all functional activity include in this activity. Following towns are included in 2017.

Table No.-9: Classification of other activities Towns

Sr. No	Classification of Towns	Name of Towns
1	Diversified Towns	Karmala, Mohol, Malshiras, Sangola, Mangalwedha, Akkalkot.
2	Average Towns	Madha
3	S. D. one Towns	Pandharpur, Barshi.
4	S. D. two Towns	Solapur.
5	S. D. three Towns	-

Source: Compiled by the Researcher

Above classification shows the city included in name of towns help of Nelson’s method. And following table shows Average and Standard Deviation of major activity groups and classifies towns by Nelson’s method.

Table No.10
Average and Standard Deviation for each of nine activity groups in Solapur district. And Classification of towns by Nelson’s Method.

Sr. No.	Activity	Average	Standard Deviation(SD)	Classify Towns By Nelson’s Method
1	Cultivator	27.38	7.64	Malshiras
2	Agriculture	25.07	7.07	Sangola
3	Livestock, Forestry, Fishing, Hunting andplantationactivity	15.40	5.85	Karmala
4	Household Industry	3.03	1.31	Solapur
5	Manufacturing Industry	7.15	4.81	Solapur
6	Construction	1.33	0.84	Solapur
7	Trade and Commerce	9.23	5.03	Solapur
8	Transport, Storage and communication	6.52	3.20	Solapur
9	Other activity	4.89	2.89	Solapur

Source: Compiled by the Researcher

CONCLUSION:

By applying Nelson’s method the the town Malshiras, Sangola and Karmala are basically depend on primary activities viz. The town Malshiras forward cultivator, Sangola in agricultural and Karmala in Livestock, forestry, fishing and hunting. The town Solapur is one of the town which all remaining activities forward in this city. The city Madha, Barshi, Mohol, Pandharpur, Mangalwedha, and Akkalkot does not come under any category.

REFERENCES:

1. Anantapadmanabhan, N. “Functional classification of urban centres in Madras state” Bombay Geographical Magazine. 1965, 13.
2. Brush, John,E. “Spatial patterns of population in Indian cities,” Geographical Review, 58, 1968, 362.91.
3. Dann, R., “Urban Geography with special Reference to South Indian Cities,” Journal of the Madras Geographical Association,5,1931, 149-59.
4. Dixit, K.R., “The concept of functional zones,” National Geographical Journal of India, 7, 1961, 191-200.
5. Dr. K.B.Kankure (1986)- “Marathawada: A study of settlement Geography, Unpublished Ph.D Thesis University of Pune.
6. Hall R.B.(1934), Cities of Japan, Notes on distribution and inherited form, Annals of theAssociation of American Geographers, Vol.24.Pp.183.
7. Konge, G.H., “Functional classification of large towns of Karnataka,” The Deccan Geographer, XVI,(2), 1978, Pp-450-60.
8. Mukherjee, M., “Functions and functional classification of towns in Bihar,” Unpublished Ph.D Thesis, Patana University, Patana.
9. Singh,K.N., “Functions and functional classification of towns in U.P.,” National Geographical Journal of India, V(3), 1959,Pp.121-148.
10. Solapur District Census Handbook 2011.
11. Socio Economic Abstract of Solapur District.
12. http://en.wikipedia.org/wiki/Solapur_district



Dr. D. N. Ligade

*Assistant Professor, Department of Geography (UG & PG),
Walchand College of Arts and Science, Solapur.*