

A Geographical Analysis of Occupational Structure in Nagapattinam District, Tamil Nadu

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ABSTRACT

The earth surface has different inhabitants. Man is one of the important inhabitants in the development of any kind of activities in various forms of earth surface. The development of human civilization the work based communities are originated. Demographic study's is much studied phenomenon now a day due to its importance that has been given by researchers throughout the world and in India. The population study can plays in many roles. For this in case of population censuses both main workers and marginal workers are considered while in case of NSSO (national sample survey organization) employment-unemployment surveys, both the principal and subsidiary activity status are to be taken into consideration and there was not much variation between the proportions of elderly persons working as obtained from these two sources for almost all the population categories. The occupational pattern has the important aspects, not only in economic context but in geographic perspective also. The area taken for this study is Nagapattinam district in Tamil nadu. In this analysis the main workers population is considered and again this is sub divided into agricultural laborers, cultivators, household industrial workers and other workers. From the analysis it is identified that the household industrial laborers and other workers share is low compared to the state share. The share of cultivators and agricultural laborers and Marginal workers comparatively low to the state proportion. The result of the analysis is brought out through maps and is prepared by using arc GIS platform.

1. Introduction

The occupational structure of population forms an important component of human resource assessment. The proportion of people gainfully employed in economic activity and the share of different occupational groups in the total employment are of vital importance in development planning. Workers may simply be defined as participation in any economically production may be physical or mental in nature. Work involves not only actual work bit also effective supervision and direction of work. in this tern workers denotes the total main workers and marginal workers.

A population census is the major source of data. A population census is of great relevance to the economics, political and socio-cultural planning of a country. Reliable and detailed data on the size, distribution and socio-economic and demographic characteristics of a country's population is required for planning, policy intervention and monitoring of development goals (Census Enumerator's Manual, 2006). Occupation is a very significant social attribute of population. Occupational structure plays an important role in a diversity of studies, including those related to the level of economic development and social inequalities. Since occupation reflects the individual's position in a technical division of labor, it is taken to be a central determinant of current and future economic opportunities in modern societies (Mills, 1956; Rose and Pevallin, 2001).

"The name of the function which a person performs by engaging himself in that particular branch of gainful economic activity which is his industry". The term occupation structure indicates the unitary relationship pattern of the three occupational components of the working population. These components include primary, secondary and tertiary activities of urban settlements. (Kadam, P. B and Rathod, S.B (2013). Working force is the economically active part of the population engaged in the production of goods and services. The other part is of economically non-active category called non-workers. The size and spatial pattern of the working force International Journal of Scientific Research in Science and Technology (www.ijrst.com) 140 provides the basis for discussing occupational structure (Ram Pratap Singh, 2015).

2. Data Base and Methodology

The base map has been prepared by using Survey of India toposheet in the scale of 1:50000. The block map is collected from the Tamil Nadu government web GIS portal and Census of India statistical handbook of Nagapattinam district then geo-referenced and converted into vector format by using GIS software. The data regarding the occupational characteristics are collected from the census of India 2011. The simple statistical technique has been applied and the results are brought down cartographically by using Arc GIS.

3. Aim and Objective

The main aim of the study is to study the spatial pattern of the occupational characters in the Rasipuram block. To achieve this aim following objectives are adopted.

1. To identify the spatial Structure in work participation rate in the block.
2. To analyze the different occupational characters in the block.

4. Study Area

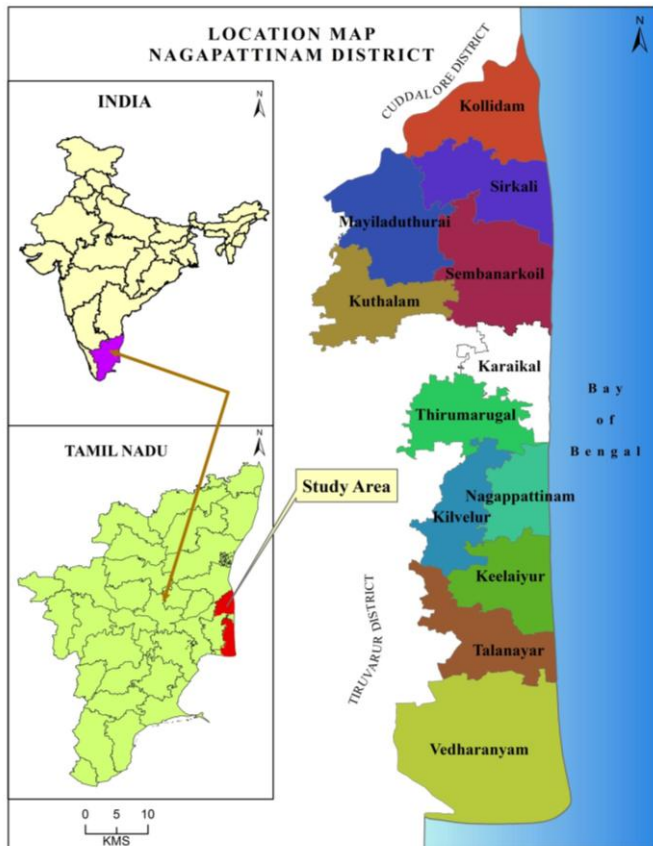


Figure-1

Nagapattinam is a coastal district situated on the eastern side of Tamil Nadu. The district lies on the east coast to the south of Cuddalore district and another part of the Nagapattinam district lies to the south of Karaikkal and Tiruvarur districts. This district lies on the shores of the Bay of Bengal between 10°35' and 11°25' North latitudes and 79°35' and 79°50' East longitudes. The district town spreads over an area of 2715.83 sq. km. It is one of the richest regions of biodiversity in the country. The district which is divided into eight taluks, namely, Sirkali, Mayiladuthurai, Tharangambadi, Nagapattinam, Kilvelur, Thirukkuvalali, Vedaranyam, and Kuthalam. Administratively Nagapattinam district has 11 blocks and 519 panchayat villages. The major rivers flowing in the Nagapattinam district are Cauvery and kollidam. The major crops found in this district are sugarcane, Coconut, Paddy, Cotton, Blackgram, Sugarcane, Cotton, Groundnut, Gingelly, Vegetables and Greengram. The block is characterised by sub-tropical climate with moderate temperature. The average maximum temperature of the district as a whole is about 32°C and the average minimum temperature is 24.6°C. The Southwest winds sets in during April, it is strongest in June and continues till.

5. Results and Discussion

In this present analysis I have included all the aspects of occupational characters found in Nagapattinam district to study the urban and rural differences over the study area.

Table -1: Nagapattinam District –Work Participation Rate & Occupational Structure (In %)-2011

S.NO	NAGAPATTINAM BLOCK	TOTAL MAIN WORKERS %	CULTIVATORS %	AGRICULTURAL LABOURES %	HOUSEHOLD INDUSTRY WORKERS %	OTHERWORKER %	MARGINAL WORKERS %
1	NAGAPATTINAM	70.98	2.99	11.41	0.59	14.65	11.65
2	KEELAIYUR	77.19	4.90	16.76	0.36	7.42	18.27
3	KILVELUR	85.67	4.16	25.49	0.46	7.60	10.21
4	THIRUMARUGAL	79.11	3.85	20.74	0.55	9.05	10.68
5	THALAINAYAR	67.48	4.03	17.60	0.37	6.48	20.41
6	VEDARNYAM	65.14	8.01	13.48	0.29	7.33	14.57
7	MAYILADUTHURAI	71.33	3.28	14.94	0.57	10.34	13.04
8	KUTHALAM	75.33	5.00	19.34	0.50	9.28	7.05
9	SEMBANARKOIL	73.85	2.74	15.98	0.41	12.03	11.50
10	SIRKALI	71.74	2.88	14.89	0.46	10.78	13.68
11	KOLLIDAM	71.13	2.86	14.26	0.51	11.21	13.39
	DISTRICT TOTAL	72.92	4.03	16.31	0.46	9.95	12.73

Source: Compiled by Investigator from 2011 census report, Nagapattinam District

5.1 Total Main Workers

A Person is considered as a main worker or full time worker if he/she had for a minimum of 183 day or more. However, the work participation rate varies from one block.

Nagapattinam district as a whole (72.92%) of the total population are engaged in various kinds of fishing and economy based activities. it may be worth noting that Nagapattinam district has a higher work participation rate than

Tamil nadu as a whole (38.7%).within Nagapattinam district. Kilvelur block (85.67%) and have higher work participation (more than 79%) which is clearly shown in (fig.1.2).The Thirumarugal block (79.11%) Keelaiyur block (77.19%),Kuthalam block (75.33%),Sembanarkoil block (73.85%),Sirkali(71.74%),Mailaduthurai (71.33%),Kollidam (71.13%)and Nagapattinam block (70.98%)have a moderate share and almost equal to the district average. Thalainayar

block (67.48%) and Vedarnyam block (65.14%) has a comparatively minimum share of (less than 70%) in work participation as per 2011 census (table.1).the total main workers is further subdivided into 4 major categories. The four main occupational groups taken for the present study are Cultivators, Agricultural laborers, Household industrial workers and other workers.

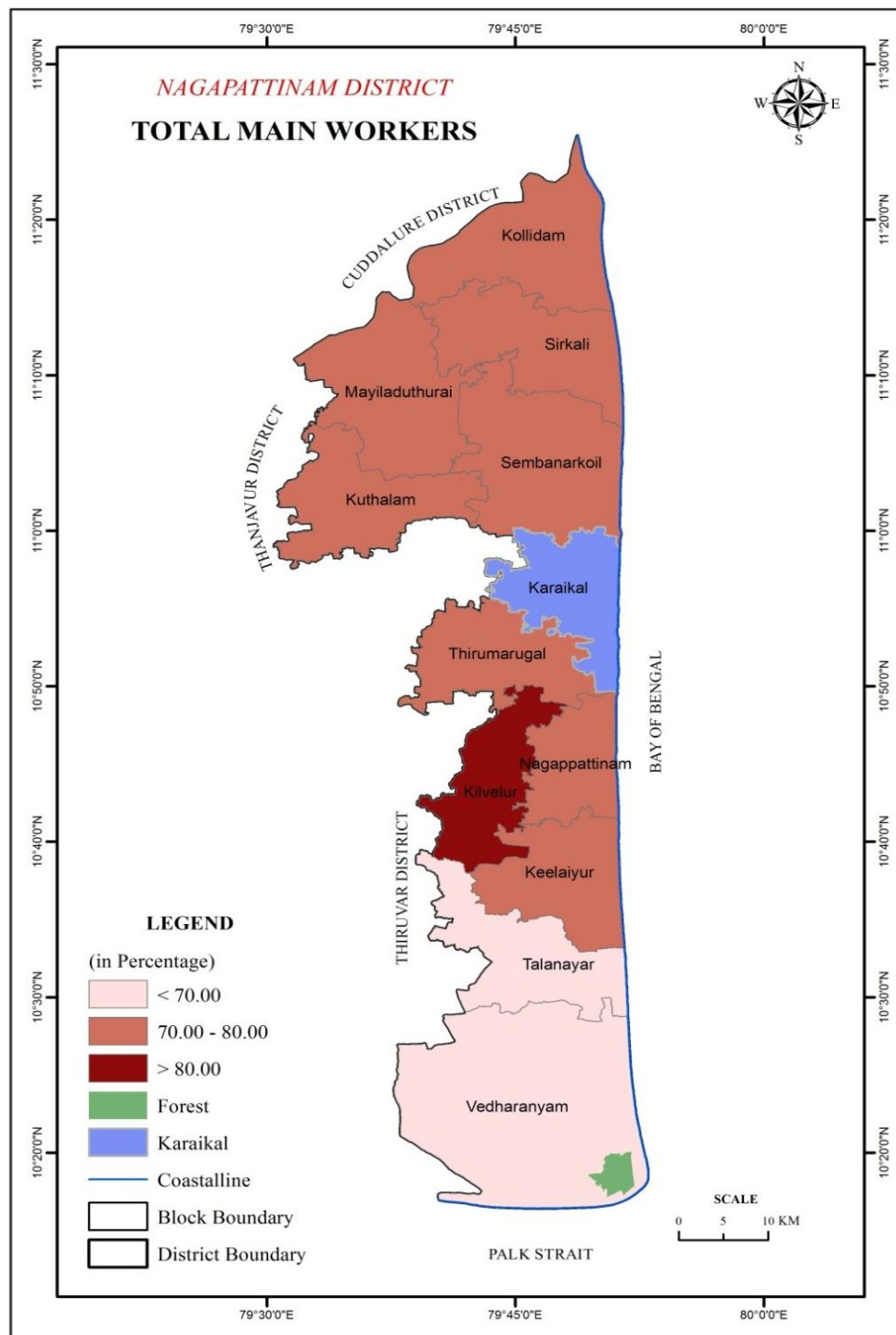


Figure-2

5.2 Cultivators

A Person is considered as cultivator, if he/she is engaged in cultivation of land owned or taken on lease from government or from private persons of institutions for payment in money.

The average share of cultivators to the total main workers is about (4.03%) for the district as a whole. It is comparatively lower than the share of cultivators to the main workers for Tamil Nadu state (12.9%). The have high share of cultivators in in

Vedarnyam Block (8.01%). while a medium share Kuthalam (5.0%), Keelalyur (4.90%), Kilvelur (4.16%), Thalalnayar (40.3%) Thirumarugal (3.85%) and Mayiladuthurai (3.28%).The lowest cultivators in blocks Nagappattinam (2.99%), Sirkali

(2.88%), Kollidam (2.86%), Sembenarkoil, (2.74%) All other blocks in the district have considerable share of population to the district.

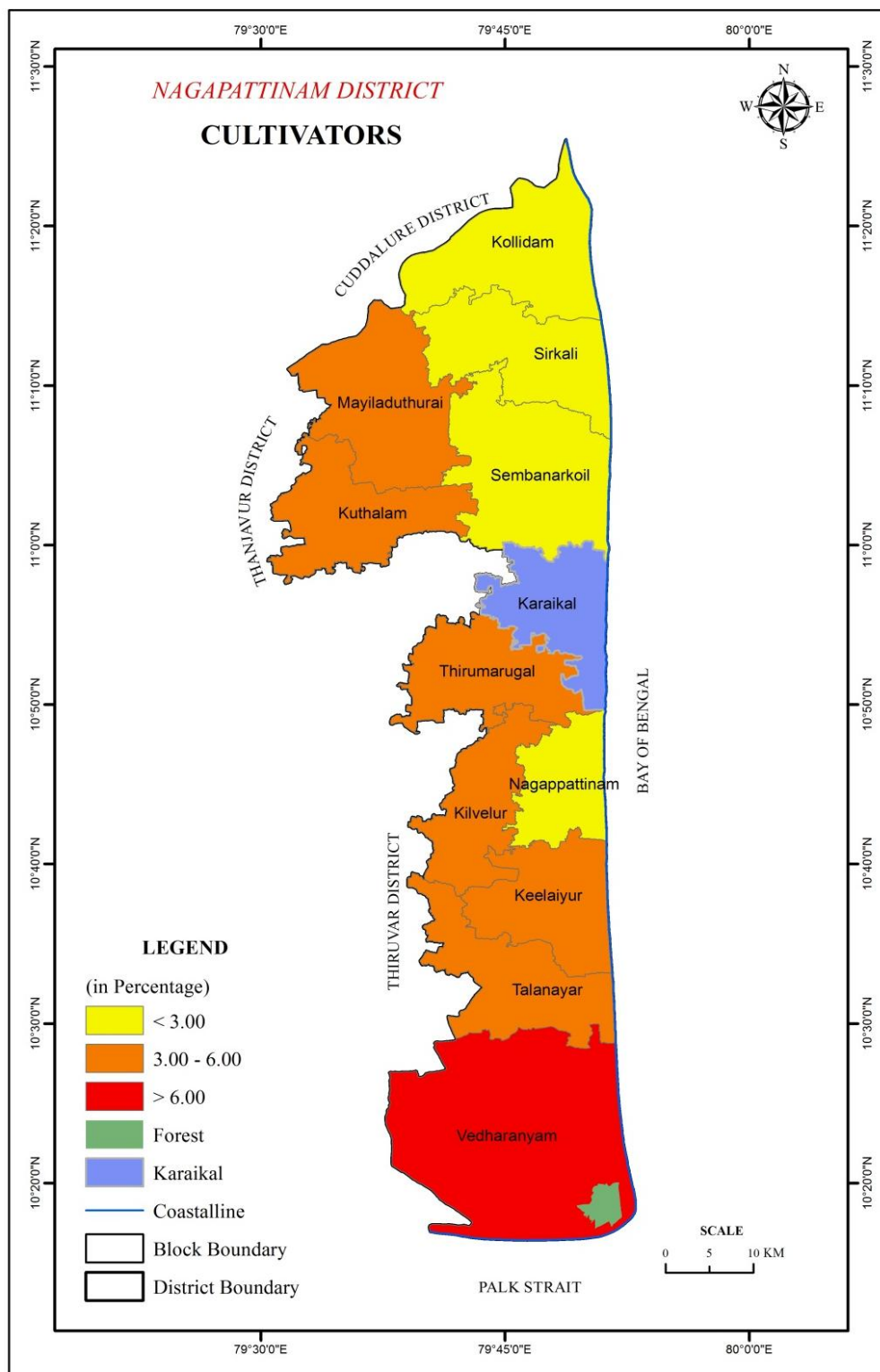


Figure-3

5.3 Agricultural Labourer

A Person who workers on another person’s land for wages, kind or share should be considered as agricultural worker or labourer. He/ She merely works on another Person’s

land for wages. Agricultural laboruers have no right or contract on land on which he/she workers. In general the proportion of workers engaged as agricultural labourers for the district as a whole is (16.31%) in Tamil Nadu State the Agricultural workers

category has a share of only 29.2. This indicates that in the district agricultural based activities are high Kilvelur (25.49%),Thirumarugal (20.74),kuthalam(19.34%),Thalainayar (17.60%),Keelaiyur (16.76%).while a medium share Sembanarkoil (15.98%), Mayiladuthurai (14.94%), Sirkali (14.89%), Kollidam (14.26%),Vedarnyam (13.48%),(11.41%) Nagapattinam blocks the lowest is because Nagapattinam is the headquarters for the district.

5.4 Household Industrial Workers

The proportion of workers engaged in household industry has the least share of occupational structure of the district.

The average share of house hold industry workers in the district is 0.46%, whereas Tamil Nadu State average is 4.2% as per roll census. The household industrial worker is high Nagapattinam block (0.59%), Mayiladuthurai (0.57%), Thirumarugal (0.55%) and Kollidam (0.51%). They have a medium household industrial worker in Kuthalam (0.50%), Kilvelur (0.46%), Sirkali (0.46%), Sembanarkoil (0.41%), Thalainayar (0.37%) and keelaiyur (0.36%). The lowest share is noticed Vedarnyam (0.29%). This is mainly because of fisher industries and Shrimp Farming for which this block is very farmhouse.

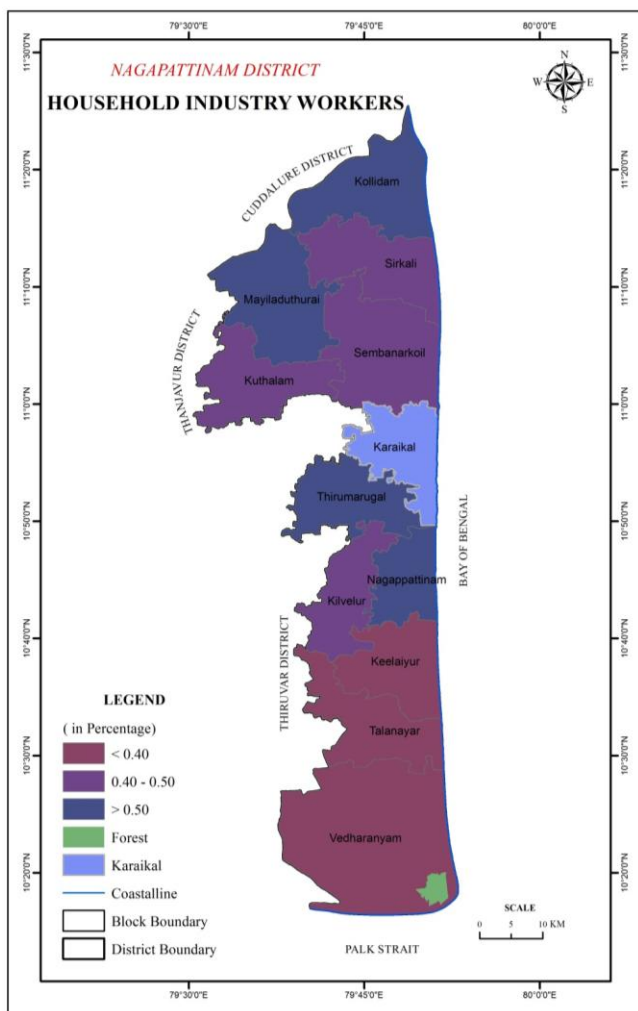


Figure-4

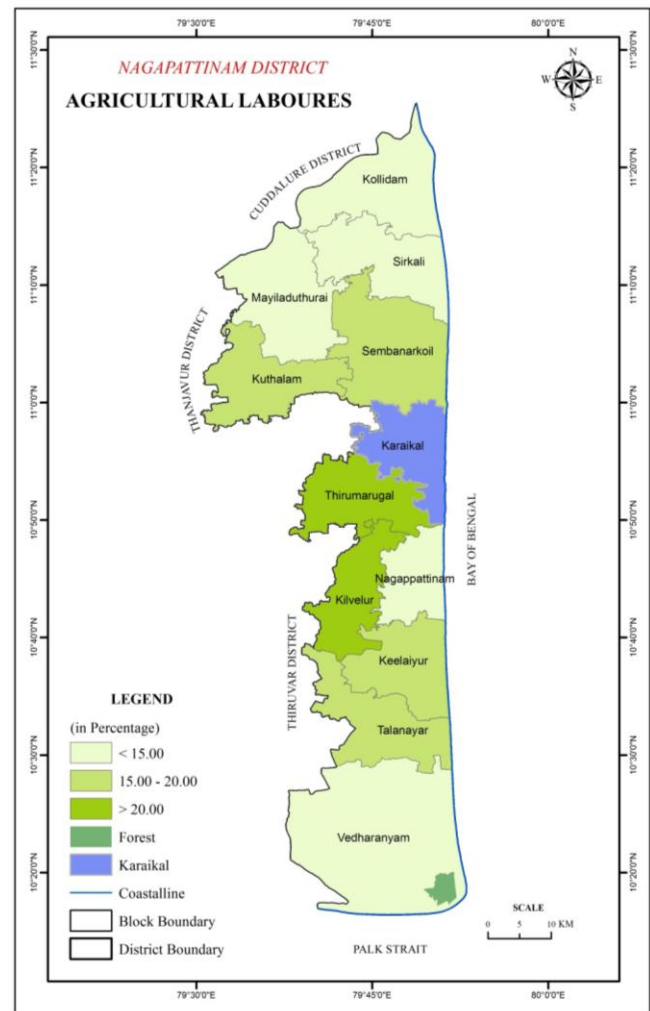
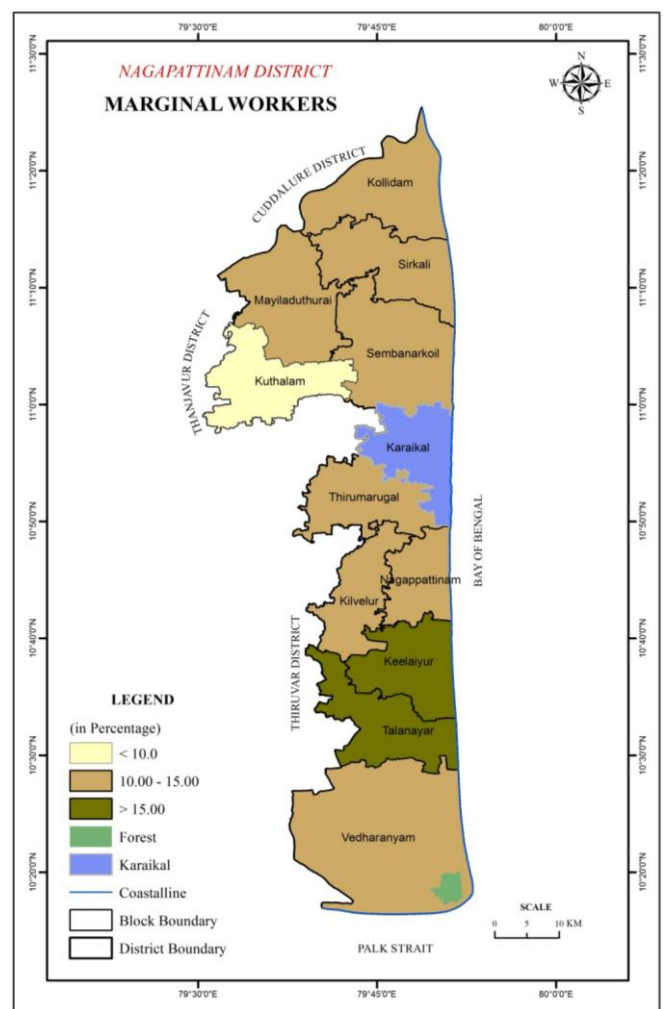
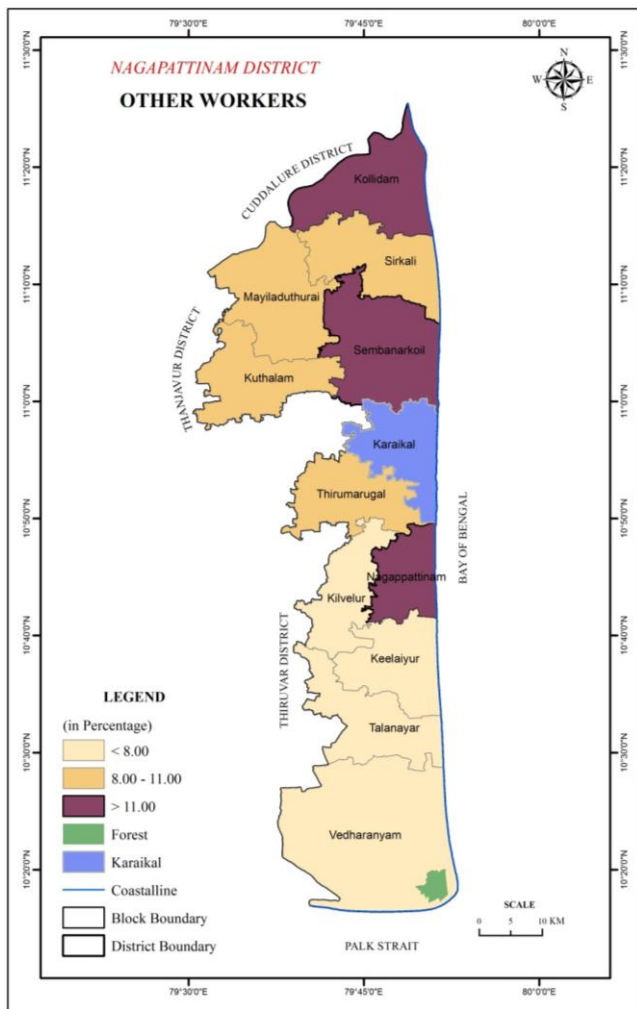


Figure-5

5.5 Other Worker

Other workers include the workers engaged not only in trade and commerce, transport, administration storage activities. These types of work are basically more in urban areas, the average share of other workers category is about (9.95%) for the district, which is lower than the state average of 53.7%. There other workers category are concentrated more in (14.65%). Nagapattinam blocks the lowest share is noticed

in Thalainayar (6.48) because the block is basically rural in nature and Keelaiyur (7.42), Kilvelur (7.60), Thirumarugal (9.05), Vedarnyam (7.33), Mayiladuthurai (10.34), Kuthalam (9.28), Sembanarkoil (12.03), Sirkali(10.78), Kollidam (11.21), all other blocks in district are found between the shares of this workers.



5.6 Marginal Workers

A person is considered as marginal worker, if he/she had worked for a maximum of six months (183 days) or less. In Tamil Nadu state the average share of marginal workers category is 15% while in Nagapattinam district marginal workers participations only (12.73%). Thalainayar (20.41%), Keelaiyur (18.27%), Sirkali (13.68%), Kollidam (13.39%), Mayiladuthurai (13.04%) and blocks in the comparatively higher share than other blocks. They have a medium marginal worker in the Nagapattinam (11.65%), Sembanarkoil (11.50%), Thirumarugal (10.68%), Kilvelur (10.21%) and Kuthalam (7.05%) block have low than marginal workers category (fig.1.7) shows that the northwestern parts Nagapattinam (11.65%) have a moderate share in this category.

6. Conclusion

The proportion of main workers population in the district is higher than the state proportion. The average share of cultivators to the total main workers and agricultural labourers is about 4.03 % and 16.31% respectively which is higher than the state average. The average share of household industry workers in the district is 0.46% and other workers participation rate is 9.95% when considering to the state proportion household industry workers and other workers rate are comparatively lower than the state average. Marginal workers in the district 12.73%. This kind of occupational structure analysis will bring a clear picture about the area and it will be helpful for the government to take necessary steps to initiate primary, secondary and tertiary activities wherever it is possible. GIS plays a major role to provide solution to this kind of analysis.

References

1. Census Enumerator's Manual, National Population Commission, Abuja, Nigeria, 2006
2. Kadam, P. B., Rathod, S.B. 2013. "Study of Occupational Structure in Nanded City", Indian Journal of Applied Research, Volume 3, Issue 4, April, pp. 195-196
3. Mills, W. White collar, 1956. The American middle classes, New York: Oxford Univ,
4. Momita Goswami, 2014. "Occupational Structure of Scheduled Castes Population in the Brahmaputra Valley, Assam: A Geographical Analysis", Global Journal of Biology,

- Agriculture and Health Sciences, Volume 3, No 1, ISSN 2319 – 5584, pp 78-85.
5. Mukherjee, D. K. and Singh, B. 1954. "A District Town in Transition", A Social and Economic Survey of Georakhapur, p. 172
 6. Rose, D., Pevalin, D. J. 2001. The national statistics socio-economic classification: unifying official and sociological approaches to the conceptualization and measurement of social class. Colchester: University of Essex, ISER Working Papers. p. 4.
 7. Sanjeev Goel. 2014. "Regions of Demographic Dynamism in Haryana", Journal of Studies in Dynamics and Change, Volume 1, No 4, ISSN: 2348-7038, pp. 196-207,
 8. Shinde, S. D., Pore, A. V., Lokhande, T.N. "Occupational Structure of Urban Centres in Solapur District", Research Front, Special Issue 1, August, pp. 275-280, 2016.
 9. Singh, Ram Pratap, 2015. "Spatial Pattern of Occupational Structure in Haryana", Indian Journal of Research, Volume 4, Issue 6, ISSN 2250 – 1991, pp. 418-420.
 10. Situation Analysis of the Elderly in India, Central Statistics Office Ministry of Statistics & Programme Implementation, Government of India, June 2011.