SPATIAL AND SOCIO-DEMOGRAPHIC RELATIONSHIPS OF LARGE VILLAGES AND URBAN CENTRES IN MYSORE STATE, 1961

by

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Submitted in partial fulfilment of
the requirements for the Degree of
MASTER OF POPULATION STUDIES

CENTRE FOR THE STUDY OF REGIONAL DEVELOPMENT

SCHOOL OF SOCIAL SCIENCES

JAWAHARLAL NEHRU UNIVERSITY

NEW DELHI

NOVEMBER 1976

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I certify that the dissertation entitled "Spatial and Socio-Demographic Relationships of large villages and urban centres in Mysore State, 1961" submitted by Shri Anantha Ram.S , in fulfilment of six credits out of the total requirement of thirty credits for the Degree of Master of Population Studies(M.P.S) of the University, is, to the best of my knowledge, his original work and may be placed before the examiner for evaluation.

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ACKNOWLEDGEMENT

I am greatly indebted to my Supervisor Dr. M.K.Premi for his invaluable guidance and for his painstaking interest in going through the matter several times. But for his continuous encouragement and suggestions this study might not have been completed so early.

I am grateful to Dr. A.Mitra, Dr. S.K.Nangia and Dr. K.M.Kulkarni for their ready help wherever I contacted them. Thanks are also due to Shri. M.S.Ramachandra, my collegue for going through the text and for his suggestions.

I thank Registrar General, India, New Delhi, Director and Deputy Director of Census Operations, Karnataka, Bangalore for providing me an opportunity to takeup this course. Finally I thank Sri. A.Shankara Subramanya and Sri. S.Raman my collegues for their neat typing and cartographic work respectively.

(ANANTHA RAM.S)

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INTRODUCTION

0.1 Problem

According to the Census of India, during 1961 there were 2700 Urban areas, ie. Cities, Towns and Town groups and 567,338 Villages. Of these 2700 Urban areas 1936 ie. 72 percent had a population of less than 20,000. On the other hand amongst the Villages there were 4169 villages with a population of more than 5000. These urban and large sized rural settlements were found distributed all over the country. In an agricultural country where the surpluses are to be marketed at a central place settlements with large populations function as market places at the first instance. These central places further acquire importance as store houses of raw material and grow as industrial centres or service centres. The distribution of these market centres is quite uneven in India, especially because of the variations in physical characteristics of the natural regions into which this vast country can be divided. Though all human settlements with a population of 5000+ may be classified as towns with justification, it is interesting to note that in this country there were, till recently 23 acts governing declaration of local bodies[1]. It was in 1961 that an attempt was made by Census to define an urban area on an uniform basis throught the country.

A proper distribution of urban centres is imperative for the economic development of any given region. In an area well provided with marketing facilities disposal of surpluses by producers is economical due to the low costs involved in transportation. In India

1. Report of the Rural-Urban Relationship committee Vol.II PP 139 . 140, June 1966, Ministry of Health & Family Planning, Government of Indi

where bullock carts still hold a large share as a means of transport, location of market centres at convenient places (within easy reach of the farmers) is of vital importance. A study of spatial distribution of such centres and their correlates therefore forms a basis ofor the preparation of development plans for regions.

0.2 Review of Literature

There is no dearth of literature on India's urbanisationor or on regional studies. The problems concommitant with rapid urbanisation have focussed the attention of academecians as well as planners and Administrators as a result of which a number of studies have been carried out in recent years. At the same time we have settlement geography which studies the distribution of settlements over space. These have been studied in detail by several scientists in so far as it touches their fields. Some of the studies done in this field are: (1)Market Towns and spatial development by National Council of Applied Economic Research, (2)A case for small towns in Regional Planning in India by Kashi.N.Singh[2]. Some of the metropolies of India like Calcutta Delhi, Bombay have been studied in detail by scholars, with an emphasis on the sociological & historical aspects of the enormous growth registered by such metropolitan centres. Some of the studies emphasising the geographical aspects have limited their scope to one state or the other within Indian Union. For example,

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2. Applied Geography edited by R.L.Singh.

Prakash Rao[3] & Learmonth[4] have studied Mysore State. Prakash Rao has studied the regional disparities in urbanisation and occupational structure in respect of all the urban centres. S.R.Patil[5] & M.S.Viswanathan[6] have studied the distribution of urban centres in different regions of Mysore State. Several studies have been undertaken by NCAER to understand and analyse the influence of transport net work on settlement pattern.

When we examine the earlier studies we find that none covers crop pattern, soil type and topography of different regions. In a predominently agricultural economy market centres arise at vantage places to fulfil the needs of farmers of the surrounding country side in quickly and profitably disposing of their agricultural surpluses. The nature of this surplus is also of relavance, for the need for a market at a short distance from the production centres is very great in respect of perishables. So also if the region is hilly and transportation is difficult there will be a greater necessity to have marketing centres located at short distances. In the case of non-perishable goods the farmer can afford to cover greater distances and pick the market which offers him a better price. In the plains where transport is easier the marketing centres tend to be located at greater distances. These aspects have so far not been dealt with in detail.

3.Towns of Mysore State by V.L.S.Prakash Rao

4.Mysore State, An Atlas of resources, A.T.A.Learmonth & L.S.Bhat

5."A Comparative study of Rank-size Relationships of Urban settlements of Mysore State". S.R.Patil, Indian Geographical Journal, Vol.44, 1969.

6."Growth pattern and Heirarchy of Urban centres in Mysore", M.S.Viswanathan, Indian Geographical Journal, Vol.48, January - March, 1972.

In addition to towns and cities classified as urban by Census authorities it is note worthy that large sized villages also function as marketing centres.

0.3 Objectives of the present study

Growth of population in settlements may be attributed to several factors. It has among other things a direct relationship with the dominent functions the settlement discharges to its hinterland, the interrelationships that develops over a period of time between such a settlement and its surronding countryside. The transport linkup and facilities available determine the scope of its development. This study aims at an understanding of the role of urban centres and large sized villages in different regions of the country & the interrelationships subsisting among such centres. The emergence of large sized settlement is conditioned by the need for a centre of commercial activity for other smaller settlements around it. If a given region has numerous large sized settlements in close proximity the role played by each such settlements becomes insignificant as compared to a settlement of similar size in a region where small sized settlements are found in general. The distribution pattern of the settlements chosen for this study as well as their demographic, economic & functional characteristics are analysed in this study. The availability of different amenities in each settlement and as also the position of settlements on the transport net work helps us in understanding the infrastructure.of the region. This study attempts to portray the regional imbalances noticeable in a particular area of the country and may thus be considered as a tool for future planning. Lastly, the concept of a Census town

adopted for the 1961 Census which led to large scale declassification of the erstwhile towns in different regions is also examined.

0.4 Study area

The area selected for this study is whole of India except Kerala State. The universe for this study is all urban centres and villages with population 5000+ . In North east region all villages with population 2000+ has been studied while in Jammu & Kashmir (in the valley area) all villages are taken up for study. This thesis limits itself to Mysore State its existance in 1961. This is a cross sectional study for a particular point of time, the point of time studied being 1961.

Mysore State came into existance in its present form on 1st November, 1956 as a result of the reorganisation of States on linguistic basis. According to G.S.Ghori[7] "In its climatic and other physical aspects, Mysore can be considered as 'Miniature India' ". In topography, soil type, crop pattern and climatic conditions wide variations are noticeable in different parts of the State.

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7. "The concept of Regional Planning as applied to Mysore State, G.S.Ghori, in Applied Geography edited by R.L.Singh,PP,244.

Table 0.1

Distribution of Districts in different Regions

Name of District	State to which it belonged before 1956	Region	Major Cereals crop	Major soil type	Rainfall (Normal) in mm.
1	2	3	4	5	6
South Kanara	Madras	Coastal	Rice	Mixed	3870.8
North Kanara	Bombay	Malnad	Rice	Laterite	2714.4
Chikmagalur	Old Mysore	-"-	Rice	-"-	1890.7
Shimoga	-"-	-"-	Rice	-"-	1461.0
Coorg	Coorg	-"-	Rice	-"-	2702.7
Belgaum	Bombay	Inland Karnataka	Jowar	Black	684.4
Dharwar	-"-	-"-	-"-	-"-	791.7
Bidar	Hyderabad	North Maidan	-"-	-"-	857.0
Bijapur	Bombay	-"-	-"-	-"-	569.9
Gulbarga	Hyderabad	-"-	-"-	-"-	717.7
Raichur	-"-	Central Maidan	-"-	-"-	579.3
Bellary	Madras	-"-	-"-	-"-	571.7
Chitradurga	Old Mysore	Southern Maidan	-"-	Red Soil	777.3
Bangalore	-"-	-"-	Ragi	-"-	566.8
Hassan	-"-	-"-	-"-	-"-	1015.2
Kolar	-"-	-"-	-"-	-"-	720.9
Mysore	-"-	-"-	-"-	-"-	757.5
Mandya	-"-	-"-	-"-	-"-	687.9
Tumkur	-"-	-"-	-"-	-"-	668.7
STATE					1189.8

SOURCE:- Mysore State in Maps, 1966
Director of Statistics, Government of Mysore.

As this study mainly aims at an understanding of the impact of crop & soil type on the emergence and growth of urban & large sized rural settlements, regions exhibiting homogeneity in those aspects form the units for analysis. The analysis of the State done by K.Balasubramaniam[8] & A.Mitra[9] has been adopted for grouping the various districts into regions in the above table. A brief description of the different regions of the State is given below:-

Coastal Region:- This region situated in the western parts of the State, comprises South Kanara district. The rainfall is heavy and the terrain is hilly but for a strip of coastal plains between the Arabian sea and the western ghats. The soil type is mixed and rice is the main crop.

Malnad Region:-This region has 4 districts namely North Kanara, Chikmagalur, Shimoga & Coorg. Laterite soil noted for its low fertility predominates in this region. The Northern portion of the region is covered by forests while the Southern by Coffee plantations. Malnad region was centaminated until recently with malaria. The terrain is hilly and rice is the principle food crop grown in the plains.

Inland Karnataka:- This area comprises of two Districts Belgaum & Dharwar and is characterised by the prevalence of Medium Black soil to a large extent. Vast plains dotted with sporadic hills

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8. Census of India, 1961, General Report, Part I A Volume X, Mysore, K.Balasubramaniam.
9. Census of India, 1961, Levels of Regional Development, Part I A(i), Volume I, India.

characterise the landscape of this region. Water resources are scanty though in certain pockets well-irrigation is also prevalent to some extent. Because of the scarcity of water resources and the human tendency to settle down at places having enough water, the settlements here are comparetively large sized. In this region regulated markets have came up at several places during the recent past.

North Maidan:- This region consists three district viz. Bidar, Gulbarga & Bijapur. Major soil type is deep Black in Gulbarga & Bijapur while in Bidar it is laterites. The rainfall is not only low but is also of a low reliability. The area is subjected with frequent failure of crops and famines.

Central Maidan:- This region formed of the two districts of Raichur & Bellary shares the same characteristics as that of North Maidan. However, Thungabhadra river flows in this region and with the construction of a dam in 1957 the water resources of the area has greatly improved and economic development of the region is fast picking up.

Southern Maidan:- This region is a large zone comprising of 7 districts accounting for about 1/3rd of area of the State. Though soil type and crop pattern are more or less homogeneous the rainfall varies from one sub-region to the other. On the one hand the district of Hassan & Mysore get a larger rainfall while Kolar & Tumkur are always dificient in rainfall. The difference between the Northern Maidan & Southern Maidan lies in the availability of water for drinking purposes in the latter region. Fruits & Vegetables are grown allover. In this region there are

numerous small and large tanks which provide ample supplies of water for irrigation. As a result of reliable and timely rainfall as well as the existance of tanks and canals this region has not experienced any serious droughts for the last 70 years.

0.5 Frame and Data Base

For purposes of this study 401 settlements of which 228 are urban centres & 173 are large sized villages are taken. These are distributed in 19 districts & 172 taluks of the State. Table below gives the distribution of settlements in different classes.

Table No. 0.2

Distribution of settlements in different Class sizes

Class size of Towns	Population of class size	Number of settlements
1	2	3
I	1,00,000 +	6
II	50,000 to 99,999	9
III	20,000 to 49,999	32
IV	10,000 to 19,999	80
V	5,000 to 9,999	64
VI	Less than 5,000	37
T O T A L		228

There were 173 large sized villages with population 5000 + .

The study has been done on the basis of secondary data culled from the Census Volumes, mainly District Census

....10/-

Hand Books of 1961. For studying the spatial distribution the Road map of the State prepared by the Survey of India has been utilized.

0.6 Plan of Study & Methodology

In Chapter I, the spatial distribution of settlements in different regions is analysed on the basis of "Near Neighbour distance" technique as revised by N.B.K.Reddy[10], with reference to soil type & crop pattern.

Chapter II deals with different economic basis and dominant functions of the settlements in different regions of the State. The economic base is analysed with reference to male workers only. For determining dominant functions of the settlements triangular co-ordinate system as adopted by A.Mitra[11] is followed. C

Chapter III deals with different demographic characteristics like growth rate, Sex-raio, Literacy rate & Dependency ratio of different regions. The relationships among the demographic variables and the functional characteristics of the settlements analysed there.

Chapter IV deals with transport net work & availability of social amenities in the large sized village settlements only. Their impact on Literacy, Sex-ratio and dependancy ratio is analysed.

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10. Refinement of the techniques of the "Near Neighbour" &"Reflexive Neighbour" analysis. N.B.K.Reddy. The Indian Geographical Journal. Vol.XLVIII June 1973, No.1.

11. Internal Migration & Urbanisation in India. A.Mitra. ECAFE expert working group on problems of Internal Migration & Urbanization. Bangkok, Thailand 24 May - 5 June 1967.

Chapter V deals with declassification of towns in 1961 in different regions.

Chapter VI gives a summary of the study & it enumerates the fields that could not be covered in this study. Scope for further research in this field is also touched upon.

CHAPTER I

SPATIAL DISTRIBUTION OF SETTLEMENTS

I.1 Factors

"Settlement pattern denotes the arrangement of the units according to natural or man made features or designs such as streams, spring lines, ridges, canals & Roads"[1]. As per chrisholm an agricultural settlement has two sets of space relationship (1) to its land or resources & (2) to its links with outside world[2]. In Mysore State where mineral resources play an insignificant role in the economy agricultural settlements prepondarate. So the primary need for urban centres has always been service & market centres. Some scholars opine that the system of land holding plays an important role in the settlement pattern. Historically Mysore State was under different systems of administrations during the pre-independance days:- Old Mysore region comprising of 9 districts was a princely State; 4 districts of Bombay Karnataka, the district of South Kanara, Bellary & Coorg were directly under the British rule; and the 3 districts of Hyderabad Karnataka were under the rulership of the Nizam of Hyderabad. Zamindari system was encouraged in several areas as it assured the administrators of the revenue collection from the land. This system however hindered the progress of the region as tiller was not the owner of the land and a few who enjoyed their life at the expense of the hard labour of many did not evince interest in the developmental works. Besides land tenure system the other major factors which affect the location of settlements are (a)Soil type and (b) Crop pattern.

1. "A Geography of Mankind", by Jan.O.M.Brooke & Jone.W.Webb PP 358.
2. "An appraisal of location theories of rural settlements", by R.C.Tiwari, National Geographer, Vol.8 1973 PP 72 - 83.

I.2 Regions

Any Geographical analysis covering a large tract has perforce to divide the area under study into viable units namely regions which are homogeneous. On the basis of physiographic features, soil type, rainfall & crop pattern the state can be divided into 6 regions(see introduction).

Table I.1

Distribution of Settlements by regions

Region	Percentage of area to total area	Towns by Class						Large sized Villages	Total	Percentage of Settlements in the region to total
		I	II	III	IV	V	VI			
1	2	3	4	5	6	7	8	9	10	11
Coastal	4.27	1	-	1	6	5	-	19	32	8.0
Malnad	16.86	-	2	5	9	12	13	6	47	11.9
Inland Karnataka	14.14	2	1	5	19	3	-	78	108	27.0
Northern Maidan	20.20	-	2	8	15	4	-	39	68	17.0
Central Maidan	12.53	-	3	-	6	8	-	18	35	9.0
Southern Maidan	32.00	3	1	13	25	32	24	13	111	27.5
Total	100.00	6	9	32	80	64	37	173	401	100.0

A glance at the above table pointsout the striking regional imbalance in the distribution of Class VI towns & large sized villages. The predominance of villages in Costal, Inland

Karnataka & North Maidan regionas is very clear. The presence of Class VI towns in Malnad & Southern Maidan calls for a through examination of the very concept of town especially because no class VI town is found in the other 4 regions. It may also be noted that all the districts except North Kanara(were no class VI town exists incidentaly), the Malnad & Southern Maidan regions were ruled by Indian princes during British regime. The other factor worth mentioning is that perishable agricultural produce like fruits & vegetables are grown to a considerable extent in these regions of the state. Though Ragi is the major food crop of Southern Maidan region, rice is also grown in small patches of land wherever water resources are available either in the form of tanks or rivers.

It would be interesting to test by applying X^2 test whether there is any significant association between distribution of settlements by size class & regions. For this purpose Class I is clubbed with Class II while Class V & VI are combined together so that we have only 4 groups to consider. The X^2 value worksout to 42.8 with 15 degrees of freedom. Evidently, there is a significant association between size class distribution of settlements & regions.

Since there are a large number of small towns in the population ranges of 5,000 - 9,999, below 5,000 & villages with a population of 5,000 + it would be interesting to examine their region-wise distribution. Table I.2 shows that the towns having less than 5000 inhabitants are concentrated to the extent of 65 percent in Southern Maidan which coveres 32.00 percent of the geographical

area of the state. Malnad which accounts for 16.86 percent of the area contains the remaining 35 percent of such towns.

Table I.2

Distribution of small towns & large sized villaged by regions

Region	Area of the region as a percentage of the State area	Percentage distribution of small towns & large sized village settlements by Population ranges		
		5000 - 9999 (Towns)	Less than 5000 (Towns)	5000 + (Villages)
1	2	3	4	5
Coastal	4.3	10.0	----	11.0
Malnad	16.9	7.5	35.0	3.5
Inland Karnataka	14.11	34.0	----	46.0
North Maidan	20.20	18.5	----	22.5
Central Maidan	12.5	11.5	----	10.0
Southern Maidan	32.00	19.0	65.0	7.0

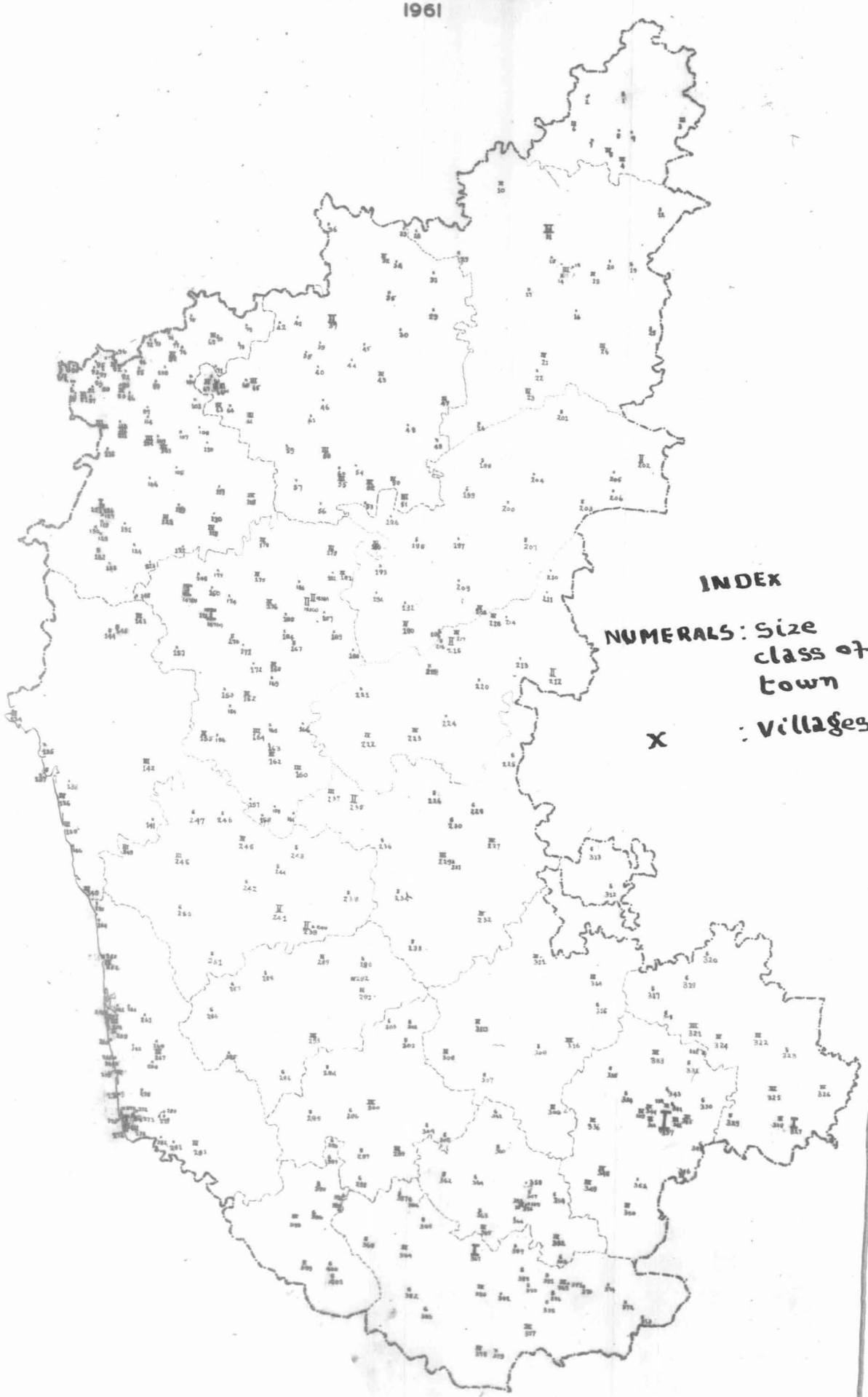
Towns in the population range 5000 - 9999 & villages of similar size ranges are found distributed in all regions of the State. Eventhough no specific pattern is discernible it is of interest to note that Inland Karnataka which covers only 14.1 percent of total area of state has the highest proportion of small towns & large size villages.

I.3 Near Neighbour Distance

Map 1 gives the spatial distribution of the settle-

KARNATAKA

Villages With Population 5000+
And All Urban Centres
1961



ments under study. A preliminary examination of this map reveals a relatively heavy clustering of settlements in Belgaum, Dharwar & South Kanara District ie. In Inland Karnataka & the Coastal region. Clusters also exist around Bangalore City and Mandya Town in the South. In order to understand the nature of distribution of these settlements over space it would be appropriate to adopt the technique of 'Near Neighbour Distance' as modified by Reddy[3].

"The Near Neighbour analysis is an effective device for quantifying distributions and discerning distribution patterns of statistical-geographical populations such as settlements, manufacturing and mining centres which could be located as points on maps on a particular scale".

In this technique all settlements in a region are taken into consideration and their nearest neighbours are determined. The values are summed up for ap particular region. Then we have,

$$R = \frac{\bar{r}a}{\bar{r}e}, \text{ where } \bar{r}a = \frac{\text{Total nearest distance between settlements in the region.}}{\text{Number of settlements in the region.}}$$

& $\bar{r}e = \frac{1}{2}$ X Squareroot of (N/A) Where

A = Area of the State

N = Number of Settlements in the State

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3. "Refinement of techniques of the 'Nearest Neighbour' and 'Reflexive Neighbour' analysis", N.B.K.Reddy; The Indian Geographical Journal, Vol. 48, June 1973 No.1.

The pattern of distribution of settlements is expressed as follows on the values of R,

Value of R	Type of Distribution
1.00 +	Dispersion
1.00	Uniform
0.90 - 0.99	Almost uniform
0.60 - 0.89	Low concentration
0.40 - 0.59	Moderate Concentration
0.10 - 0.39	High Concentration
0.00 - 0.09	Absolute Concentration

The results obtained by application of this technique to 6 regions of Mysore State are presented in Table I.3.

Table I.3

Value of R for Regions

Region	Value of R for all Towns & large-sized (5000+) rural settlements	Type of distribution	Value of R for settlements with a population of 5000+ only	Type of distribution
1	2	3	4	5
Coastal	0.56	Moderate Concentration	0.54	Moderate Concentration
Malnad	1.49	Dispersion	1.66	Dispersion
Inland Karnataka	0.87	Low Concentration	0.83	Low Concentration
North Maidan	1.39	Dispersion	1.32	Dispersion
Central Maidan	1.56	Dispersion	1.49	Dispersion
Southern Maidan	1.30	Dispersion	1.07	Uniform

The visual impression one gains by a glance at map is confirmed statistically, for the coastal region and Inland Karnataka has 'Moderate Concentration' & 'Low Concentration' respectively. Within the universe of study however, if the regions are ranked in order of decreasing intensity of Concentration the first 3 places are occupied by Coastal, Inland Karnataka & Southern Maidan regions respectively. In Southern Maidan if the settlements with population less than 5000 are excluded the value of R decreases considerably and the distribution pattern gets shifted from 'dispersed' to 'uniform'. It is in this region that most of the urban centres with very low populations are found. This fact therefore highlights the effect of classification of such settlements as 'Urban' on the distribution pattern of urban areas as a whole.

A detailed examination of the data shows that, in the coastal region ie. South Kanara district, the urban and the large sized villages are concentrated in a narrow strip of coast line, covering a short distance. In the 'Inland Karnataka' region the value of R worksout to 0.74 & 1.08 respectively for the districts of Belgaum & Dharwar while the regional average is 0.87. The pattern of 'Low Concentration' is thus more applicable to Belgaum district than to Dharwar where an 'Uniform' pattern is discernible. In so far as the districts of Malnad region are concerned it is seen that Coorg district with its R value of 0.90, suggestive of 'Almost Uniform' pattern differs from the rest which have a 'Dispersed' pattern of distribution. In Southern Maidan, the R values (as indicated in parenthesis) for the

the districts of Bangalore(1.01), Mysore(1.02) & Mandya(0.92) are lower than the regional values. Though for the region as a whole the pattern is 'Dispersion' for the above mentioned 3 district the pattern is 'Uniform'. Evidently, in the pattern of distribution of settlements there are inter-regional and, more so, intra-regional variations. There seems to be no direct relationship between physical characteristics of a region (as constructed on the basis of administrative units such as districts) and the pattern of spatial distribution of settlements.

In order to analyse the implication of the pattern distribution of settlements it is hypothesised that trading & commercial activities dominate in districts having 'Dispersion' while other activities dominate in districts noted for 'Clusters'. This is based on the reasoning that due to the proximity of many urban centres the importance of trading & commercial activity at anyone of such place gets diminished. For this purpose the 19 districts may be grouped into two sets: One with R values exceeding 1.1 & the other, below 1.1 so that the former group represents 'Dispersal' while the latter represents 'Concentration' or 'Clustering'. Twelve districts of the State covering 67.1 percent of the area having 189 ie. 47 percent of the settlements come under the 'Dispersal' category. In the other group we have 7 districts(Bangalore, Belgaum, Coorg, Dharwar, Mandya, Mysore & South Kanara) with 212 settlements in the remaining 32.9% area of the State. Table I.4 gives a distribution of the settlements in these two groups according to the extent of participation of the male workers in trading

and Commercial activities as returned at the 1961 Census.

Table I.4

Settlements by extent of participation of Male workers in Trade & Commerce

Region having	Number of settlements where male workers engaged in Trade & Commerce constitute				Total Settlements
	Less than 5%	5 - 9.9%	10 - 20%	20+ %	
1	2	3	4	5	6
Dispersion	30	32	75	52	189
Cluster	64	44	65	39	212

It may be seen that in the areas characterised by dispersion 27.5 percent of the settlements have more than 20 percent of their Male Workers in Trade & Commerce as against to only 18.4 percent of such settlements in the area noted for clustering. If for these two areas the percentage of settlements having more than 10 percent of workers in Trade and Commerce is considered the picture is all the more clear; such settlements constitute 67.2 percent in 'Dispersion' group in contrast to only 49.5 percent in 'Clustering' groups. Evidently, the foregoing details lend ample support to the hypothesis stated above.

I.4 Soil Type

In order to understand the distribution of settlements soil type is an important factor. Availability of Natural resources, particularly water, also requires a careful consideration.

In a country depending mainly on agriculture urban centres emerge and grow-up either as market centres or as service or administrative centres. In an area where surpluses are non-perishable goods urban centres donot grow fast especially as compared to another area where perishable goods are in surplus. It is worthwhile to test this hypothesis in the case of Mysore State.

Learmonth[4] has divided the State into 7 soil types. However, one of the groups namely, Red loams, has been clubbed with red soil due to its low representation. The resultant six soil types are: (1)Deep Black, (2)Medium Black, (3)Red, (4)Laterites, (5)Mixed and (6)Mixed Red & Black. A brief discription of the important characteristics of the areas belonging to the different soil types is given below to facilitate the analysis taken up thereafter.

(1) Black Soils:- This has been splitup into two parts, Medium & Deep. The whole of Northern part of the State except for Bidar comprising 7 districts has this type of soil. This soil has less water eontent but at the same time has greater moisture retention power. The soil breaksup into deep fissures during hot seasons and permits circulation of air in the subsoil and hence doesnot need regular ploughing. The soil is of average fertility. Except for small areas where either river or well irrigation is practiced, in a major portion of this region the crops grown are Jowar, Bajra and Groundnuts, Cotton, a non-food crop, is also grown extensively with the establishment

4. "Mysore State: An Atlas of Resources" A.T.A.Learmonth and L.S.Bhat.

of a chain of Regulated markets a very good marketing system exists in this area. Out of 155 regulated markets in the State, 108 ie. nearly 70% fall in this area comprising 7 districts. Dharwar has 34 markets in 16 Taluks while Belgaum has 24 in 11 Taluks. As cotton and groundnut are the chief commercial crops which in recent years are fetching good profits due to rising prices the regulated markets have been flourishing. The other factor which may be noticed in this region regarding the settlement pattern is that the largest settlement of taluk is not necessarily the taluk Head Quarter town a fact which denotes that the trading & commercial function promotes growth to a greater extent than the Administrative function. Out of 21 cases where the largest settlement of a taluk not being the Head Quarter in the State 13 are found in this zone.

(2) Red Soil:- The whole of Southern Maidan except for small pockets is covered with Red Soil. This area with its average height of about 3000 ft. MSL enjoys a good climate. Plenty of water is available through rivers, tanks and wells for purposes of irrigation allover the region. Main crops of this region wherever irrigation facilities are available are Paddy and Sugarcane. Ragi is grown in other places while fruits & vegetables are also grown in large quantities. To some extent this explains the existence of small towns in this area as these perishable goods are to be marketed quickly at the nearby centre.

(3) Laterite Soil:- Major part of the area having this Soil is found in the Malnad region. This soil is also found in Bidar

district. So this soil region can be splitup into two parts; Northern and Southern. The Soil is of low fertility & the region is generally a hilly tract which enjoys a heavy rainfall. The Northern portion of the Southern part is thickly covered with forests while in the Southern portion coffee plantations are found. Owing to the difficult terrain and the prevalance of Malaria in the past this area has by and large remained undevelopped. The forest activities and coffee plantations are pickingup. Since all lands are not suitable, agriculture is confined to certain parts such as valleys and low-lying plains. Net area sown in these districts is less than 30% of the total area. In North Kanara during 1964-65[5] the net area sown was as low as 12 percent. The main crop grown is Rice. Orange, a perishable fruit, is grown in large quantities in Coorg District.

(4) Mixed Soil:- We find the Mixed soils in the Coastal region. This zone is flourishing with its post activities and fishing industry is also prosperous. Coconut is a major crop and areacanut plantations are found allover expecially in the eastern portion. Rice is the main crop in this area. The intensity of cultivation is very high. In 1969-70[6], the area sown more than once amounted to 80,500 hectares and in relation to the net area sown of 1,89,234 the area sown more than once formed 45 percent. The soil is of a high fertility.

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5. "Mysore State in Maps, 1966", Department of Statistics, Government of Mysore, PP. 15.
6. "Statistical abstract of Mysore, 1970-71", Bureau of Economics and Statistics, Government of Mysore.

(5) Mixed Red & Black Soil:- This soil is found mainly in three small pockets in the Southern Maidan region which is by and large covered with Red Soil. Except for its influence an crop pattern where Jowar and Cotton are grown no difference exists in this region compared to that region which has Red Soil.

The following Table I.5 gives a distribution of the settlements by Soil Type Regions.

Table I.5

Settlements by Soil - Type Region

Soil Type	Percentage of area to total State area	Number of Towns by Size-class						No.of Villages 5000+	TOTAL	No.of settlements 5000+ only
		I	II	III	IV	V	VI			
1	2	3	4	5	6	7	8	9	10	11
Deepblack	16.6	—	3	3	14	7	--	31	58	58
Medium Black	24.3	1	3	7	20	5	1	85	122	121
Red	41.2	3	2	12	28	36	32	29	142	110
Laterite	12.0	1	-	7	6	8	3	5	30	27
Mixed Red & Black	3.4	1	-	1	9	6	-	21	38	38
Mixed Bed & Black	2.5	-	1	2	3	2	1	2	11	10
Total	100.0	6	9	32	80	64	37	173	401	364

The distribution of Class V towns is not proportional to area for about 60% of the Class V towns are found in Red Soil region covering only 41.% of the area while the Mixed Soil region covering 3.4 percent of the area has about 10% of the towns. There is a clear relationship between soils and Class VI

towns perhaps due to the crops grown in the region. The Hypothesis that the production of goods like Rice, Fruits & Vegetables for domestic consumption as well as sale of surplus encourages market centres allover the place finds support in this State where we look at the distribution of Class VI Towns. Southern Maidan and Malnad specialize in such goods for domestic consumption & quick sale at nearby centres for Industry like cotton and groundnut that can be preserved & transported over long distances. Due to scarcity of drinking water resources people cluster at a place in regions with Black Soil. Hence, we find 116 large size villages in Black Soil against 29 in Red Soil though the areas covered by them are equal(about 40%). The disparity is glaring if the settlements with population 5000+ only are considered, for 179 such settlements are found in Black Soil area against 110 only in Red Soil area. The fertility of land and Coastal activities appear to be the reasons for 10% of the total settlements of the State to be found distributed in only 34% of area of the State comprising the Mixed Soil Region.

I.5 Crops

Cropping pattern (as disclosed by major cereal crop) has been already mentioned as a factor which influences the settlement pattern in the soil type regions. Table I.6 gives a distribution of districts by major soil type and cropping pattern for the State.

Table I.6

Distribution of Districts by Crop and Soil Type[7]

Soil Type	CROPS			
	RICE	JOWAR	RAGI	TOTAL
1	2	3	4	5
Black	---	6	---	6
Laterite	4	1	---	5
Red	---	1	6	7
Mixed	1	---	---	1
TOTAL	5	8	6	19

The relationship between soil types and crops is quite high. Except for Bidar with laterites having Jowar the major crop of Black Soil and Chitradurga with Red Soil also having Jowar the relationship is total. If the geographical areas of the districts represented by the major crop regions are computed and the distribution of settlements is examined the picture shown in Table I.7 emerges.

Table I.7

Distribution of Settlements by Crop region

Crop	Area	Number of Towns by Size-Class						Number of large sized Villages	TOTAL	Percentage of settlements to total
		I	II	III	IV	V	VI			
1	2	3	4	5	6	7	8	9	10	11
Jowar	52.6	2	7	15	42	18	-	136	220	55.0
Ragi	26.3	3	-	11	23	29	24	12	102	25.0
Rice	21.1	1	2	6	15	17	13	25	79	20.0
Total	100.0	6	9	32	80	64	37	173	401	100.0

7. "Mysore State in Maps, 1966", Department of Statistics, Government of Mysore.

When we consider all settlements we find by comparing Col. 2 & 11 of the above table that they are evenly distributed over the crop region as a whole. In Table I.8 the expected frequencies of the settlements in relation to area under different crops is given.

Table I.8

Expected frequencies and settlements by crops regions in proportion to area covered

Crop	Number of Towns by Class Size						Villages large sized 5000+	TOTAL
	I	II	III	IV	V	VI		
1	2	3	4	5	6	7	8	9
Jowar	3	5	17	42	34	19	91	211
Ragi	2	2	8	21	17	10	45	105
Rice	1	2	7	17	13	8	37	85
Total	6	9	32	80	64	37	173	401

The two tables I.7 & I.8 display a similarity in distribution pattern for the first 4 classes of towns if one were to ignore the absence of Class II towns in the Ragi growing area. The differences are glaring in the case of settlements of lower size viz. Class V, Class VI towns & large size villages. If all these three are taken in one group it is noteworthy that there are no significant difference at all. In the case of settlements in the population group 5000 - 9999 irrespective of their urban/rural status the Jowar region has 154 settlements against 125(expected frequency) while Ragi & Rice regions have 41 & 42 settlements

against 62 & 50 (expected frequency) respectively. There is thus a definite trend of non nuclei of large sized settlements in Red Soil area ie. the Ragi region. In Black soil region with Jowar as main crop large sized villages seem to emerge in greater numbers due to the congregation of Population in fewer places where water facilities are available.

I.6 Natural Resources

Agricultural land is the most important of the natural resources of Mysore State. The mineral wealth is comparatively low and is confined mainly to Gold, Iron and Mangenese. Gold is available in Kolar district and has been responsible for the founding and growth of Kolar Gold Fields City which however has in recent years been losing its population due to deplection in Gold ores. Iron ore is being mainly exploited in Chikmagalur district and these ore is processed in Bhadravati Town of Shimoga district. Manganese is mined in Dandeli area where a cluster of three towns has recently emerged. Except for these instances Mineral resources as such do not exert much influence on the settlement pattern in the State. Forests are found along with the western ghats as also in the interior South. In North Kanara a number of saw mills have sprung up to process the forest produce. However, this district is undevelopped & hence it exerts practically no influence on the distribution pattern of settlements.

I.7 Conclusions

From the above analysis it is evident that the Coastal

region & Inland Karnataka have clustered distributions. This phenomenon is due to Soil type which also plays a dominant role in determining the settlement pattern. The Other factor namely crop-pattern which too has been examined in view of the direct relationship it bears to soil-type plays a passive role. Mineral resources due to their insignificant role in the State economy do not cast much influence on the settlement pattern.

CHAPTER II

FUNCTIONAL ANALYSIS AND ECONOMIC BASE

II.1 Methodology

The functions carried out by a settlement are very important in its economic development and also its population growth. Many methods of locating the dominant functions have been evolved. The first attempt was made by Harris[1], who classified American Cities into 9 categories by taking arbitrary values for different functions. Nelson[2] improved this technique by taking the average value of all the towns and Standard deviation in each functional group. The method adopted in this study is however different from the above. On the basis of the classification of workers into 9 industrial categories (1961 Census) Mitra[3] has derived a procedure, generally termed as triangular co-ordinate Method, which has been described.

As a first step settlements having more than 50% of their workers engaged in Agriculture are excluded as they are predominently agricultural in their economic function. In the case of others ie. non-agricultural settlements too the agricultural workers(Categories I & II) are not to be taken into consideration. Then, the workers in categories III to IX are regrouped as follows:-

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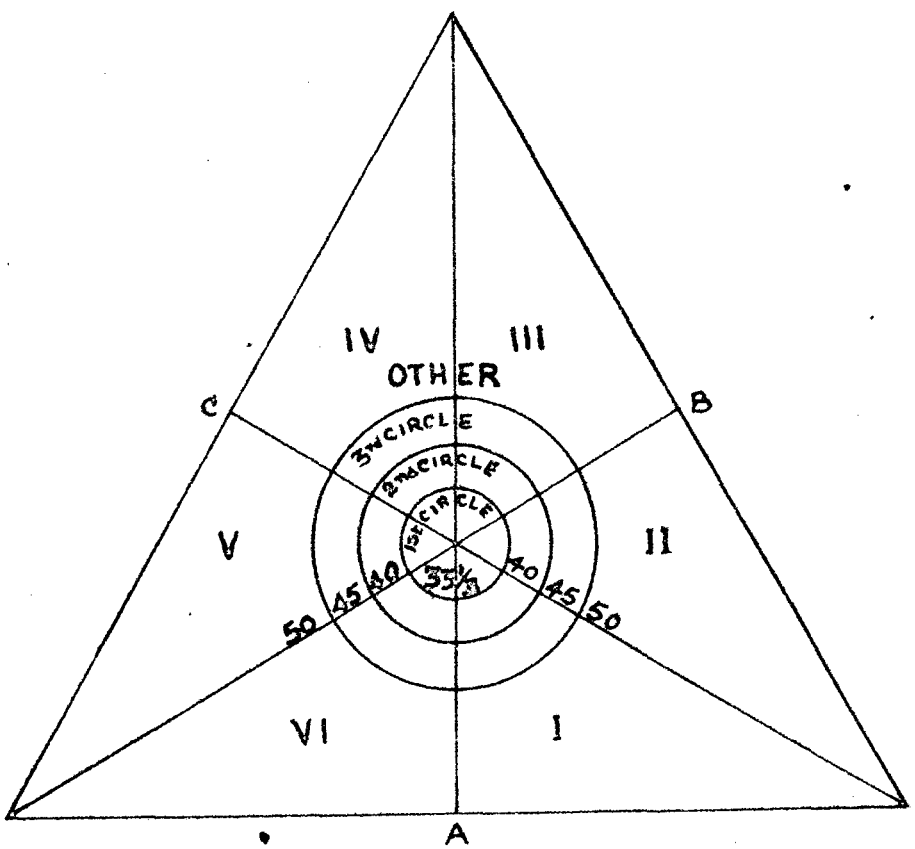
1. "A Functional classification of Cities in U.S.A." C.D.Harris, Geographical Review, XXXIII (Jan.1943) PP. 86 - 99.
2. "A Service classification of American Cities", H.J.Nelson, Economic Geography XXXI (July, 1955), PP. 189 - 210.
3. "Ecafe expert working group on problems of Internal Migration and Urbanisation, Bangkok, Thailand", 24th May - 5 June 1967, Asok Mitra.

DIAGRAM NO: 1.

TRIANGULAR CO-ORDINATE



A. Manufacturing	Categories III, IV, V & VI
B. Trade, Commerce and Transport	Categories VII & VIII
C. Service	Category IX

and the percentage of workers in A, B & C groups are worked out so that A + B + C = 100.

These points A, B, C are plotted as triangular Co-ordinates. The point of intersection of the perpendiculars represent the value 33 1/3 %. Three concentric circle are drawn with the point of intersection as centre and with radii $6\frac{2}{3}$, $11\frac{2}{3}$ & $16\frac{2}{3}$ units, such that the three circles cut the perpendicular axis at 40%, 45% & 50% respectively. The settlements which fall in first circle have functions highly balanced, those in the second circle are moderately balanced, those in third circle are ill-balanced while those fall outside the circles have a predominant function of a pronounced character.

II.2 Analysis

Out of 401 settlements considered here for study 232 can be analysed as in the remaining 169 more than 50% of their workers are engaged in agriculture. The breakup of the 169 settlements shows that 132 are large sized villages, 12 are Class VI towns, 7 are Class V towns & 18 are Class IV towns. All the 18 Class IV towns, it may be incidentally noted, are either in Inland Karnataka, North Maidan or Central Maidan. The regions have clustered settlement pattern have very large agricultural settlements for in these areas the settlements lose their prominence as marketing centres. The hinter-

land to be served by such centres usually tends to be quite small. When towns with population 5000+ only are considered it is seen that there is no agricultural town in Coastal and Malnad regions. Southern Maidan has 2 out of 98 towns forming a very negligible proportion of such towns; North Maidan has 17% of urban agricultural centres while Inland Karnataka and Central Maidan have more than 1/3rd of Urban Centres which are predominantly agricultural. In all 1/3rd of the Class VI towns are agricultural with their predominance in Southern Maidan. All the Urban centres of Malnad region are non-agricultural in charecter with the exception of two towns.

An examination of the distribution of non-agricultural workers by industrial categories to determine the predominent function of each ane of the 232 non-agricultural settlements indicates the position setout in Table II.1.

Table II.1

Predominant functions of Non-Agricultural Settlements by Regions

Region	Service		Industries		Trade & Commerce
	Accentu-ated	Diversi-fied	Accentu-ated	Diversi-fied	Diversi-fied
1	2	3	4	5	6
Coastal	4	1	14	2	--
Malnad	22	7	10	5	--
Inland Karnataka	3	6	10	8	2
North Maidan	10	3	22	3	--
Central Maidan	6	4	3	--	--
Southern Maidan	18	19	40	8	2
TOTAL	63	40	99	26	4

There are a large number of settlements in the State that are predominantly industrial in their functional character. Further more in about 80% of such settlements the manufacturing function is accentuated. The settlements categories as service settlements are also quite numerous. However, about 40% of these settlements discharge diversified functions. The predominantly Commercial settlements numbering only 4 in a total of 232 occupy an insignificant place in the above distribution. Of the 232 settlements 2/3rds have accentuated functions. Nearly 85% of the settlements in Coastal and North Maidan regions show their dominant functions in an accentuated form against only 45% in Inland Karnataka. As such it is not possible to conclude whether clustering of settlements has any impact on either accentuation or diversification. Industrial settlements dominate in Coastal, North Maidan and Southern Maidan regions while service towns dominate in Malnad & Central Maidan.

Whether there is any significant relationship between the population size of a settlement and the predominant function it discharges on the one hand and the degree of functional diversification on the other may be examined with the Table given below.

Table II.2

Distribution of Settlements by their predominant functions and size-class, Mysore, 1961

Class of Towns	Service		Industrial		Trade and Transport
	Accentuated	Diversified	Accentuated	Diversified	Diversified
1	2	3	4	5	6
I	--	2	3	1	--
II	2	3	2	2	--
III	6	6	15	5	--
IV	14	14	27	4	3
V	20	9	21	7	--
VI	11	4	8	2	--
Villages	10	2	23	5	1
TOTAL	63	40	99	26	4

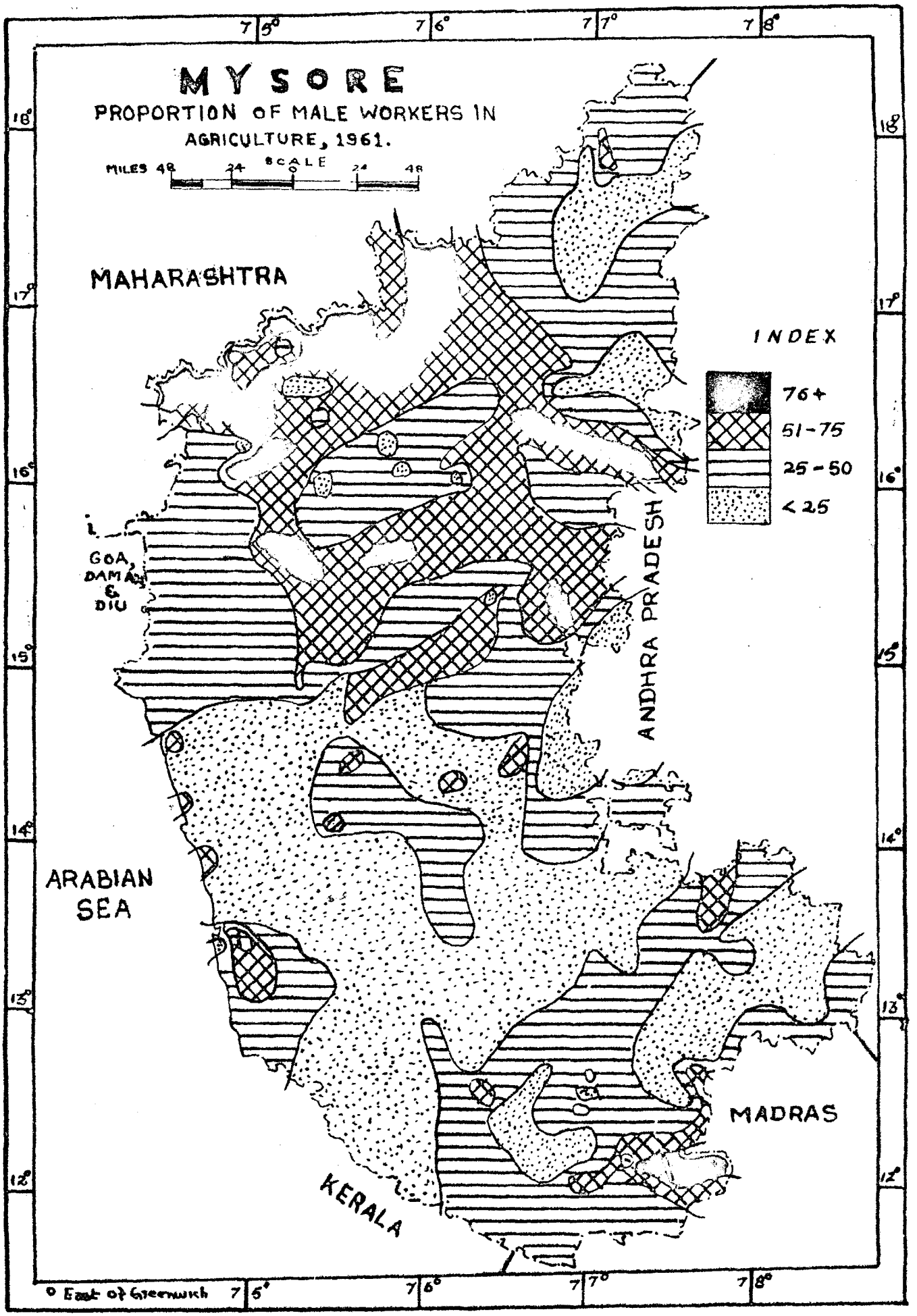
In the case of Service towns, both the Class I towns and 3 out of the Class II towns are diversified; 12 Class III and 28 Class IV towns are evenly distributed between the 2 categories of 'Accentuated' & 'Diversified'. Amongst the 29 Class V towns as many as 20 are 'Accentuated'. Likewise, the emphasis on accentuation in the case of Class VI towns(11 out of 15) and the large size villages (10 out of 12). Thus, the towns with larger populations tend to get more and more diversified. In the case of industrial towns the pattern is somewhat divergent, in all the classes of towns the emphasis is clearly on 'Accentuation'.

II.3 Agricultural Activity

Agriculture has always been the most important economic activity of the Indian population. Most of the large sized centres have came up mainly as market centres for disposal of his surpluses by the farmer. The process of economic development in the advanced countries has evolved through phases from 'Primary activities' stage 'tertiary(services)' stage. In the initial stage primary sector, mainly agriculture, rule high. With technological development and industrialisation secondary sector namely, manufacture, mining and construction, took over. Finally, 'Tertiary Sector' took over after an optimum stage had been reached in the 'Secondary Sector'. In the case of India, with the dawn of Independance and the goal of establishing welfare State, secondary and Tertiary sectors are gaining in importance while the primary sector is losing its pre-eminence. This phenomenon is by and large true of Mysore State also.

The proportion of male workers in Primary sector, particularly in agriculture serves as an index to assess the importance of agriculture in the urban centres spread over different regions of the State. Map No.2 and Table II.3 present such a distribution. It may be noticed from the map that in the Northern portion of the State the proportion of workers engaged in agriculture is quite high even in the larger urban centres. Due to the clustering, the selected settlements of this region show more of an agricultural outlook than

MAP NO: 2


MYSORE
PROPORTION OF MALE WORKERS IN AGRICULTURE, 1961.
MILES 48 24 0 24 48
SCALE
MAHARASHTRA
GOA, DAMAN & DIU
ANDHRA PRADESH
ARABIAN SEA
KERALA
MADRAS
INDEX
76+
51-75
25-50
< 25
° East of Greenwich
75°
76°
77°
78°
18°
17°
16°
15°
14°
13°
12°

of other activities. It is only in the Southern tip of the State, especially, in the Cauvery delta region that a larger proportion of workers are engaged in agriculture.

Table II.3

Distribution of Towns according to the proportion of Male workers engaged in Agriculture, Mysore, 1961.

Region	Number of Towns according to percentage of Male Workers engaged in Agriculture				Total
	Less than 25	25-49.9	50-74.9	75+	
1	2	3	4	5	6
Coastal	12	1	---	---	13
Malnad	29	10	1	1	41
Inland Karnataka	10	11	7	2	30
North Maidan	15	10	4	---	29
Central Maidan	4	10	3	---	17
Southern Maidan	51	36	11	---	98
TOTAL	121	78	26	3	228

Inland Karnataka which has 'Clustered' distribution has 30% of its towns having more than 50% of Male workers in agriculture. Though the Settlements in the Coastal region are 'Concentrated' it is significant that none of the 13 towns display a pronounced agricultural character. In this region fishing is also an equally important activity. In the Malnad region where the distribution pattern is 'dispersal' only 5% of the towns have more than 50% of their male workers in agriculture. But in the Maidan region as a whole 12.5% of the towns

have 50 to 75 percent of their male workers in agriculture. Southern Maidan has 11 out of its 98 towns(about 11%) having 50 to 75 percent of male workers engaged in agriculture. By and large, the villages settlements are predominantly agricultural in character. Out of the 173 settlements under consideration, male agricultural workers exceed 50% in the case of 70% settlements. However, in 8 villages ie. 4.6 percent, Male agricultural workers form less than 25%.

A distribution of 401 settlements according to the proportion of agricultural workers in them is presented in Table II.4.

Table II.4

Distribution of settlements by participation of Male Workers in Agriculture

Class of Town	Number of settlements according to percentage of Male workers engaged in agriculture				Total
	Less than 25	25 - 49.9	50 - 74.9	75+	
1	2	3	4	5	6
I to III	44	3	--	--	47
IV & V	61	64	17	2	144
VI	16	11	9	1	37
Villages	8	42	52	71	173
TOTAL	129	120	78	74	401

It may be easily seen that agricultural participation rate increases as the size of settlements decreases and that there is a marked difference between rural and urban centres.

II.4 Plantation, Mining and Quarrying

Mysore State doesnot have large mineral resources except for Iron ore in Shimoga & Chikmagalur, Gold in Kolar and Manganese in Dandeli. Kolar Gold Fields City is the only town where mining is the predominant function. In the Coastal belt fishing & plantation are of some importance while in the Malnad region forestry or coffee plantation are important activities even in respect of urban centres. There are 23 settlements which have more than 10% of Male workers engaged in the above group. Of these, 8 are in Malnad and 9 are in Coastal region.

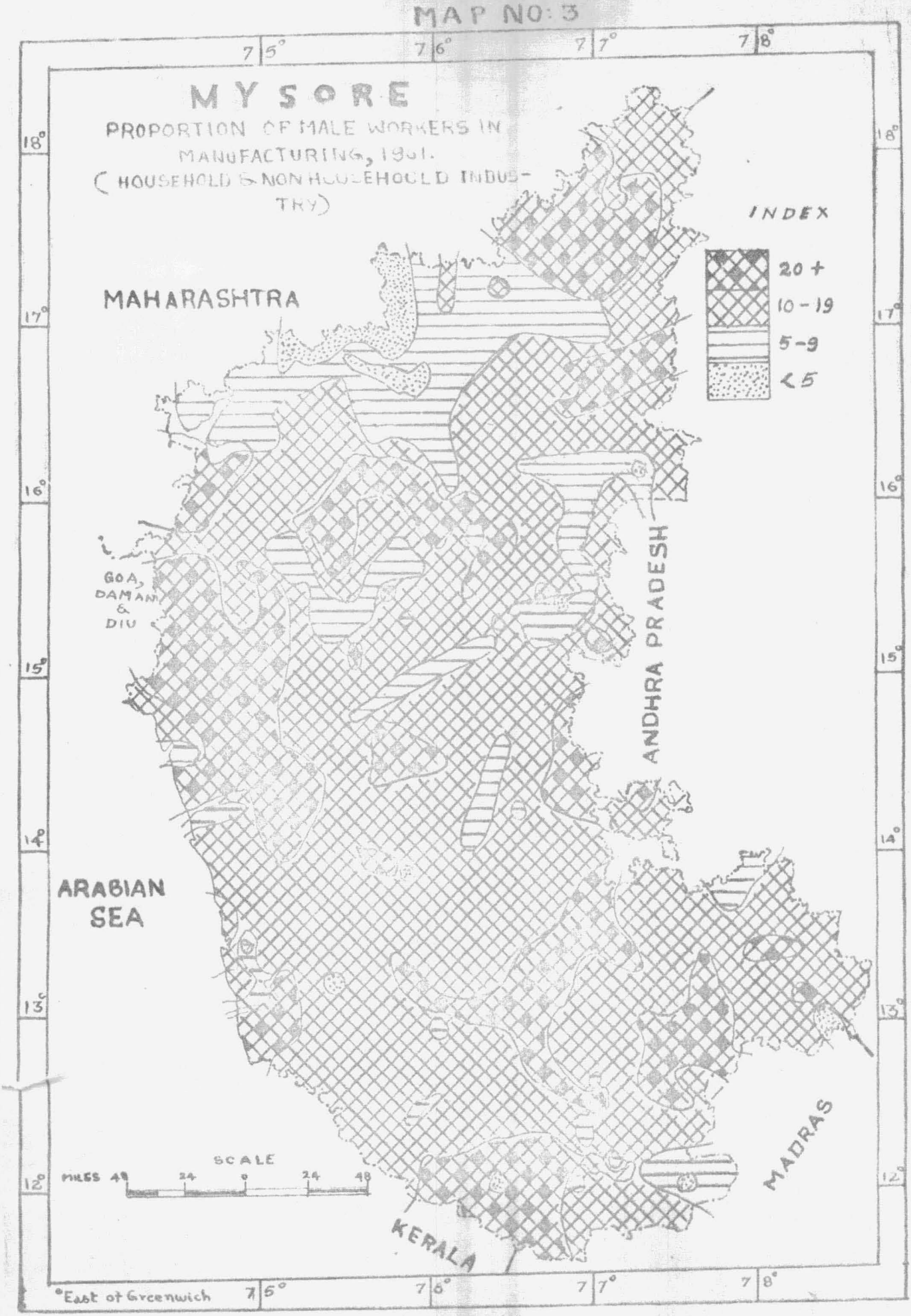
II.5 Manufacturing(Household & Non-household Industry)

As already indicated, out of 401 settlements under study 125 settlements have Industry as their predominent function. Both Household and Non-Household Industry are well represented in the State. Map No.3 depicts the predominance of Manufacturing activity in the urban centres of the State. These towns are met with in all the natural regions eventhough the spread is not uniform and the importance of manufacturing industry also varies considerably. As very few large sized villages have functions other than agricultural production (only 8 villages out of 173 have male participation in agriculture below 25%), it has not been possible to discribe the manufacturing activities in the rural settlements. Hence, the following discussion on manufacturing activities is confined to urban areas only.

MAP NO: 3

MYSORE

PROPORTION OF MALE WORKERS IN MANUFACTURING, 1961.
(HOUSEHOLD & NON HOUSEHOLD INDUSTRY)



*East of Greenwich

Table II.5 gives a regionwise distribution of the towns according to the proportion of workers engaged in Household Industry.

Table II.5

Distribution of Towns according to proportion of Male Workers engaged in Household Industry

Regions	Percentage of Male Workers engaged in Household Industry				Total
	Less than 5	5 - 9.9	10 - 19.9	20+	
1	2	3	4	5	6
Coastal	7	5	1	--	13
Malnad	22	16	3	--	41
Inland Karnataka	4	14	8	4	30
North Maidan	5	12	1	11	29
Central Maidan	9	5	3	--	17
Southern Maidan	25	42	19	12	98
Total	72	94	35	27	228

If 20% participation rate is taken as the cut off point then it is evident th ıone of the towns in the Coastal, Malnad and Central Maidan qualify to be classified as an Industrial town belonging to the Household sector. On the other hand in North Maidan, about 38% of the 29 towns and in Southern Maidan as well as in Inland Karnataka about 13% of the towns belong to the Household industry category. The prevalence of cotton handloom weaving in the North Maidan and Inland Karnataka and of silk reeling and weaving in the Southern Maidan appear to be responsible for such a phenomenon.

Between Household industry and Non-household industry, it is the latter that is more important in the State, for, as indicated in Table II.6 in 100 towns at least 20% of the workers are engaged in Non-Household industry.

Table II.6

Distribution of Urban centres according to proportion of Male Workers engaged in Manufacturing

Regions	Percentage of Male Workers engaged in Manufacturing				Total
	0 - 9.9	10 - 19.9	20 - 29.9	30+	
1	2	3	4	5	6
Coastal	1	3	4	5	13
Malnad	5	22	11	3	41
Inland Karnataka	6	11	9	4	30
North Maidan	3	9	9	8	29
Central Maidan	3	11	3	--	17
Southern Maidan	6	48	19	25	98
TOTAL	24	104	55	45	228

A comparision of Table II.5 & II.6 provides a clear picture of the importance of Household Industry and Non-Household Industry activities in different regions of the State. Coastal and Malnad regions which had low rates in Household Industry have very high rates with regard to Non-Household Industry thereby indicating the predominance of Non-Household industrial sector. Central Maidan has no significant part either in Household Industry or Non-Household Industry. Southern Maidan region shows a definite change in the distribution of

urban centres while the other two regions donot show large variations. Only two centres, Kolar Gold Fields which is a mining town and Heggadadevanakote a forest taluk Head Quarter have less than 5% of Male workers engaged in manufacturing.

II.6 Trade and Transport

According to the functional classification based on the Triangular co-ordinate method there are only 3 towns and 1 village in the State which are predominant in trading, commercial and transport activities. But, this group of activities is found in each and every town even though, as may be noted from Table II.7, its importance varies from town to town.

Table II.7

Distribution of Towns according to the proportion of Male workers engaged in Trade & Transport

Regions	Percentage of Male workers engaged in Trade and Transport				Total
	Less than 5	5 - 9.9	10 - 19.9	20+	
1	2	3	4	5	6
Coastal	--	--	6	7	13
Malnad	2	3	14	22	41
Inland Karnataka	3	5	11	11	30
North Maidan	--	5	10	14	29
Central Maidan	1	2	10	4	17
Southern Maidan	6	12	54	26	98
Total	12	27	105	84	228

Trade and Transport has a high representation in Coastal and Malnad regions. In Malnad where the settlements are scattered every large settlement has a large hinterland and moreover transportation is some what difficult in this region due to its hilly terrain. As a result trading activities in such centres gain more importance than in a settlement of corresponding size in the plains. There are 18 urban centres in Southern Maidan with less than 10% of workers in Trade and Transport. Of these it is noteworthy that 9 are Class VI towns having a population of less than 5000. In Inland Karnataka comprising the districts of Belgaum and Dharwar where towns exhibit a clustering tendency in 22 out of 30 towns the percentage of workers in this activity exceeds 10%. It has already been pointed out that in this tract the marketing activity, has developed to a great extent as may be witnessed by the number of and distribution of regulated markets.

Trade, Commerce and Transport functions are discharged by large villages too, and in fact it is this group of activities that provide the basis for a sustained growth of such centres. Table II.8 highlights the extent to which this function is important in the 173 villages located in various regions of the State.

Table II.8

Distribution of large-sized villages according to proportion of Male workers in Trade & Transport activity

Regions	Percentage of Male workers in Trade and Transport				Total
	Less than 5	5 - 9.9	10 - 19-9	20+	
1	2	3	4	5	6
Coastal	2	13	3	1	19
Malnad	1	2	2	1	6
Inland Karnataka	43	18	14	3	78
North Maidan	17	10	10	2	39
Central Maidan	8	6	4	--	18
Southern Maidan	9	2	2	--	13
Total	80	51	35	7	173

If 10% participation rate is taken as the cut off line in the case of rural areas it is observed that nearly 25% of the 173 settlements are eligible to be included amongst the settlements where Trade and Transport are of considerable importance. Malnad has the smallest number of large villages viz. 6 and of them 50% are trading-cum-transport centres. In North and Central Maidan the proportion of such settlements come to only 31% and 22% by respectively. This is closely followed behind with about 21% by Inland Karnataka and Coastal region. The lowest proportion,, of only 15%, of such settlements is witnessed in Southern Maidan. At this juncture it is worthwhile to note that in Malnad as well as Southern Maidan region the proportion of Class V and VI towns is very high, which suggests that in these areas, mainly belonging to Old Mysore a number of large and even smaller settlements have

already been classified as towns perhaps in view of their importance as commercial or administrative centres while it is not so in the case of North Maidan and Coastal region which became parts of the State in 1956.

II.7 Services

Withc the launching of developmental activities by the Government, one can very easily appreciate a comparatively greater utilisation of workers in services activities. The proportion of male workers in service activity varies considerably. A distribution of the 228 Towns according to the proportion of male workers engaged in this activity is given in Table II.9.

Table II.9

Distribution of Towns by the proportion of Male Workers engaged in services

Regions	Percent of Male Workers engaged in Services				Total
	Less than 10	10 - 24.9	25 - 49.9	50 +	
1	2	3	4	5	6
Coastal	--	6	7	--	13
Malnad	3	7	30	1	41
Inland Karnataka	5	17	8	--	30
North Maidan	4	14	11	--	29
MCentral Maidan	--	9	7	1	17
Southern Maidan	2	46	49	1	98
TOTAL	14	99	112	3	228

In Malnad region more than 75% of the towns have a participation rate exceeding 25%. This fact highlights the importance of service function in small towns for in Malnad there are a large number of Class V and Class VI towns. The towns are also spreadout either uniformly or in low clusters. Next in order is the Southern Maidan towns where about 50% of them have a similar participation rate. In this region too, small towns are quite numerous. The main contribution to service sector comes from government and other industrial employees. In order to exploit the resources in Malnad and also to improve administration, provide greater educational, medical and other facilities to the population large number of workers are being deployed by the Government to this area. In Inland Karnataka and North Maidan fewer towns have a participation rate exceeding 25% and this appears to be due to the relatively greater importance of commercial, manufacturing and agricultural activity in these regions.

II.8 Conclusion

In brief it may be concluded that a large number of settlements are agricultural in nature expecially in Inland Karnataka & North Maidan regions. Among the Non-agricultural settlements those with the predominance of manufacturing industry are comparatively more numerous than with the predominance of service. The accentuation in the case of Industrial settlements is high compared to that of service settlements. In the case of regions having clusters, with exception of Coastal region, agriculture dominates. Northern part has a higher par-

ticipation rate in Household Industry compared to Southern Maidan, Coastal and Malnad regions which have a Non-Household Industrial base. Malnad and Southern Maidan towns have high participation rates for male workers in Trade and Transport .

Service towns dominate in Malnad, Central and Southern Maidan regions. Irrespective of their location in different terrains and soil type regions, as also the differences in proximity to nearest town and the tendency to cluster around or remain widely dispersed, the large sized villages have more or less retained their predominantly rural character with an emphasis for agricultural activity. Other sectors of economy are represented on a minimal scale.

CHAPTER III

DEMOGRAPHIC PROFILE

III.1 Demographic Features

After discussing the spatial distribution of settlements and their economic base it would be useful to examine their demographic characteristics. It is very clear that these characteristics of settlements depend on a number of factors. Here an attempt is made to understand the different demographic characteristics of the settlements in relation as disclosed by the 1961 Census to their spatial distribution, by natural regions, crop, type and soil type & also according to their predominant functional characteristics. The demographic features that can be studied are Growth rate, Sex-ratio, Literacy rate and Dependency ratio.

III.2 Growth Rate

Growth rate of a settlement is influenced by several dependant and independant factors like the functional characteristic, rural/urban characteristic, crop-pattern, migration etc. In this section the Growth rate of each settlement has been considered in relation to crop zones in which settlements lies as also the functions which they perform. Further, this discussion is confined to the growth rate registered by the settlements between 1951 and 1961. Out of 401 settlements which are taken up for the present study 25 came into existance during the fiftees. Hence, the 1951 population data are available for 376 settlements

only for which the decadal rate of change has been computed individually. Before entering into discussion it is necessary to look into the growth of population in different regions over the previous period as the regional influence on settlements is more effective compared to other factors like crop, soil etc.

Table III.1

Growth of Population by Regions, 1901 - 61.

Regions	1901 to 1911	1911 to 1921	1921 to 1931	1931 to 1941	1941 to 1951	1951 to 1961	Density per sq. Km.
1	2	3	4	5	6	7	8
Coastal	4.82	4.50	8.04	10.38	13.41	17.50	186
Malnad	-4.24	-4.71	4.07	4.84	20.20	43.60	82
Inland Karnataka	-5.82	0.49	9.99	11.52	16.68	22.10	145
North Maidan	12.71	-7.02	10.21	10.99	15.03	17.70	96
Central Maidan	3.12	-9.67	9.45	10.32	14.67	16.70	83
Southern Maidan	6.63	3.36	10.42	12.81	24.25	19.60	158
STATE	3.60	-1.09	9.38	11.09	19.36	21.57	123

There is a very clear regional pattern in the growth rates within the State over last sixty years. Coastal, North Maidan and Central Maidan regions regions have been below the State growth rate all through the last 40 years(1921-61). Southern Maidan had higher growth rate upto 1951 but just below the State average in 1951-61. The Malnad region has gained high growth rates between 41-61 while Inland Karnataka has

growth rate same as that of the state average. It is very evident from the above table that any attempt to relate the growth rate with factors like transport connectivity and soil type is foiled as coastal region which is in most advantageous position in both the factors has experienced lower growth rate than the state average while Malnad region which is poorer in terms of the above two indicatershas experienced a faster growth rate during the last two decades, especially during 1951-61. This is due to the large influx of people into Malnad region due to coffee estates, forest industries while large scale outmigration is found in Coastal region. It may be pointed out that the density per sq.Km. given in Table III.1 gives an indication of the push & pull factors that might have been playing a role in the growth rate of regions.

It is reasonable to assume that the relationship between the cropping pattern and growth rate is quite significant. In the State there are three major crops namely Rice, Ragi and Jowar and Table III.2 gives a distribution of 376 settlements according to their growth rates during the decade 1951-61.

Table III.2

Distribution of settlements by their growth rates during 1951-61

Crops	GROWTH RATE						Total
	100+	66-99.9	36-65.9	16-35.9	0-15.9	-ve	
1	2	3	4	5	6	7	8
Rice	1	3	12	20	18	6	60
Ragi	1	4	16	35	35	5	96
Jowar	4	2	20	131	59	4	220
Total	6	9	48	186	112	15	376

At the outset it may be noted that in six settlements population has doubled during the decade and of these as many as 4 are in Jowar region, the other two being located in Rice & Ragi regions respectively. In relation to the total number of settlements in these three zones also the performance of Jowar region is significant. 1.8 percent of the settlements have achieved this rate as compared to 1.6 percent & 1.0 percent respectively in the case of rice and ragi regions. The settlements with a negative growth rate also disclose a similar trend; a higher proportion of 10 percent and 5.2 percent of the settlements in rice & ragi regions as compared to only 1.8 percent in Jowar region have registered a depletion in their numbers. However, on the whole the table does not indicate any consistent relationship between growth rate distribution and the crop regions. In order to test the hypothesis that crop region influences the growth rate a two way analysis of variance table given below will be helpful.

Table III.3

Two way analysis of variance table for growth rate & Crop regions

Variation due to	Sum of squares	Degrees of freedom	Mean square	F	$F_{0.5}$
1	2	3	4	5	6
Crop	536.09	2	268.05	0.73	
Size-class	4380.78	5	876.16	2.37	
Interection	10433.97	10	1043.40	2.82	1.85
Error	131922.21	357	369.52		
Total	147283.05				

The hypothesis that crop region and size class have

impact on growth rate is acceptable at 5% level of significance.

III.3 Sex-ratio

In India, Sex-ratio is defined as number of females per thousand males. A study of Sex-ratio over the past 6 decades for Mysore State depicts regional pattern as shown in the following table.

Table III.4

Sex-ratio for regions 1901 - 1961
(Total Population)

Regions	SEX - RATIO						
	1901	1911	1921	1931	1941	1951	1961
1	2	3	4	5	6	7	8
Coastal	1072	1072	1060	1076	1080	1091	1082
Malnad	903	914	918	896	908	909	907
Inland Karnataka	981	970	960	953	948	957	951
North Maidan	987	982	969	969	959	984	980
Central Maidan	981	965	970	973	968	975	974
Southern Maidan	995	993	971	966	956	956	947
STATE	983	981	969	965	960	966	959

On the one hand there is the coastal region with a consistently high sex-ratio while on the other there is Malnad with an equally consistent very low sex-ratio. This characteristic does not seem to be applicable for rural/urban areas separately as these two sectors depict completely different patterns altogether. In 1961, sex-ratio for rural and urban areas of the State was 973 & 913 respectively. It would be of interest to

examine the sex-ratio of largesized villages under study in comparision to the urban sex-ratio of the different regions so that an idea may be had regarding the extent of urbanisation of these villages. Sex-ratio generally decreases as the degree of urbanisation increases.

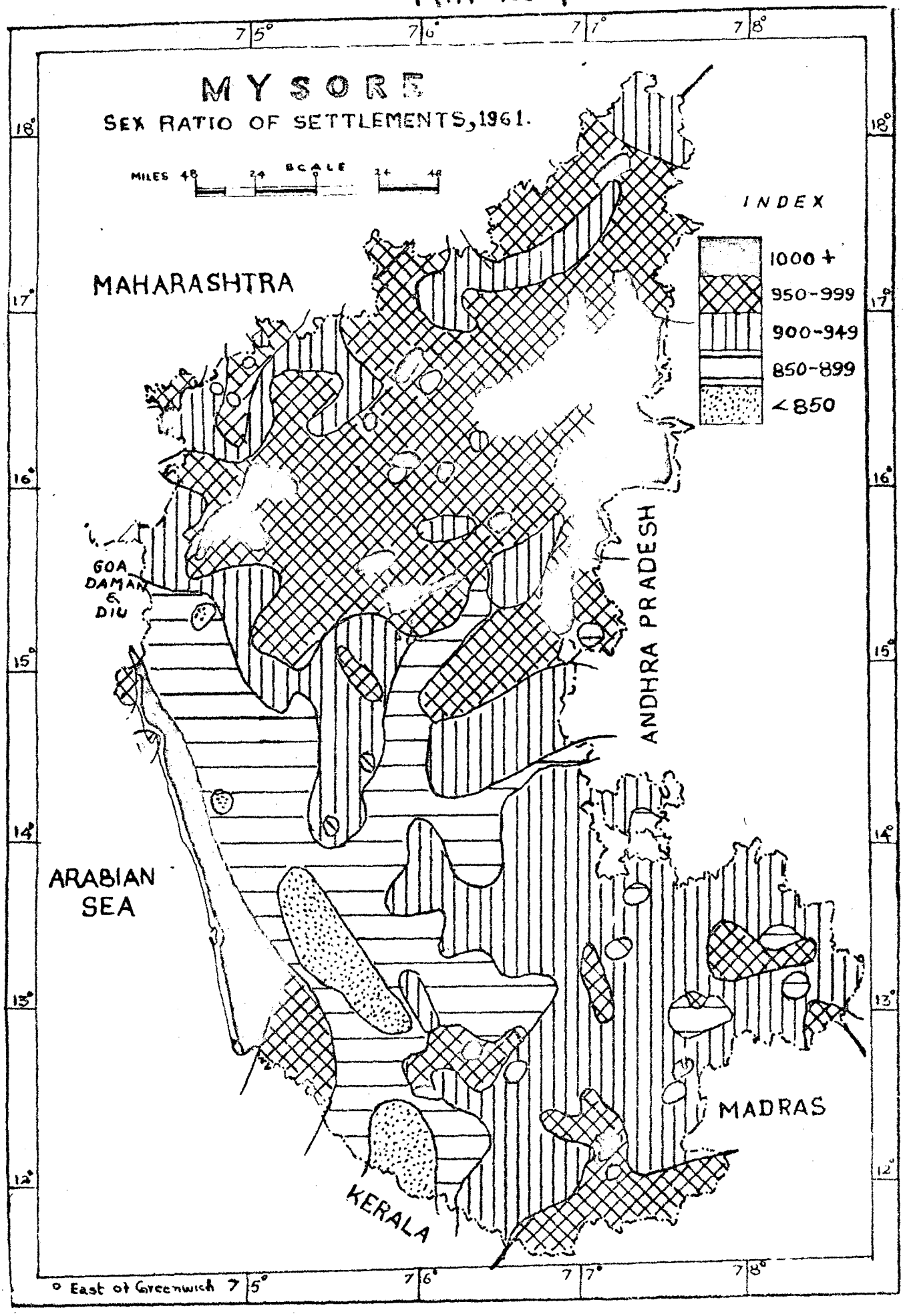
Table III.5

Sex-ratio of large sized villages by regions

Regions	Urban Sex-ratio	Sex-ratio				Total
		1000+	950-999	900-949	Less than 900	
1	2	3	4	5	6	7
Coastal	1009	14	5	--	--	19
Malnad	869	3	--	--	3	6
Inland Karnataka	922	9	37	27	5	78
North Maidan	945	12	18	9	--	39
Central Maidan	926	8	7	2	1	18
Southern Maidan	899	1	7	5	--	13

In the coastal region there are 5 villages forming a little more than 25% which have a lower sex-ratio than the urban average for the region. In Inland Karnataka region such villages constitute less than 10%. The three villages of Malnad region with sex-ratio of less than 850-900 are the mining areas viz. Mavinkere, B.R.Project and Kondli. However, in every region a large number of villages have sex-ratios much higher than the regional average urban sex-ratio. It may therefore be generalised that the large sized villages donot conform to the urban pattern

MAP NO: 4


MYSORE
SEX RATIO OF SETTLEMENTS, 1961.
MILES 48 24 0 24 48
SCALE
INDEX
1000 +
950-999
900-949
850-899
< 850
MAHARASHTRA
GOA DAMAN & DIU
ANDHRA PRADESH
ARABIAN SEA
KERALA
MADRAS
° East of Greenwich
75°
76°
77°
78°
18°
17°
16°
15°
14°
13°
12°

in so far as sex-ratio is concerned. The regional trait of sex-ratio as applicable to total population is so powerful that any analysis of the settlements where regional characteristics are not taken note of nullifies any hypothesis which can be formulated in this regard.

III.4 Literacy rate:-

In the absence of detailed data on educational attainment of the population at the level of each settlement, level of literacy is the only indicator of some educational qualification of the people. In the Indian Census, literacy is defined as ability to read and write a simple message with understanding. The literacy rate $\left\{ \frac{\text{No. of literates}}{\text{Total population}} \times 100 \right\}$ depends on several factors, such as availability of educational facilities, population size and economic base of the settlement.

It is hypothesised that (i) larger the population of a settlement higher the literacy rate and, (ii) higher the participation rate of male workers in agricultural activity lower the literacy rate. In other words there is a direct correlation between urbanisation and literacy rate. According to 1961 Census the literacy rate is 25.4 percent for the state as a whole. For urban and rural areas the literacy rate is 44.2 percent and 20.0 percent respectively. In both urban and rural areas the literacy rate of the males was observed to be much higher than that of the females. A distribution of the 401 settlements by literacy rate and size-class is presented in Table III.6.

Table III.6

Literecy rate by size-class

Size Class	LITERECY RATE						Total
	57+	47 - 56.9	37 - 46.9	27 - 36.9	17 - 26.9	Less than 17	
1	2	3	4	5	6	7	8
I	2	3	--	1	--	--	6
II	--	2	5	2	--	--	9
III	1	11	13	5	2	--	32
IV	3	7	31	29	10	--	80
V	--	11	26	17	8	2	64
VI	3	8	12	12	2	--	37
Villages	--	2	23	59	58	31	173
Total	9	44	110	125	80	33	401

Thirty three percent of the towns having a high literacy rate, exceeding 56% have a population exceeding 20,000. Similarly, 36 % of the settlements having moderately high literacy rate of 47% to 57% are large settlements. But, in the literacy nate ragge of 37% to 47% representing the slab in which the average for the urban areas is located, only 16% of the settlements have a population of 20,000 or more. The trend continues in respect of the literacy rate ranges 27% to 37%, 17% to 27% and less than 17% for the proportions of large settlements with a population of 20,000+ work out to 6%, 2% and nil, respectively. The incidence of high literacy rate in 2 very small towns(less than 5000), namely Sringeri and Lakshmipuram may be ascribed to relegions centre for former & an extension of the main Arasikere

town in Hassan district. On the other hand, a very low literacy rate is noticed in 2 Class V towns namely, Devanahalli and Mugur. These are however exceptional cases and do not undermine the validity of the hypotheses that large population centres tend to have higher literacy rates.

If settlements in each population size-class are examined it is seenx that one Class I town ie. 17%, viz. K.G.F. has a literacy rate which is much lower than the average for the urban areas of the State. This is a mining town having a high proportion of manual workers, mainly belonging to Scheduled Castes. In the case of Class II towns, 22% have literacy rates lower than the average. This percentage remains at the same level in respect of Class III towns also. This proportion of towns with literacy rates lower than the average suddenly jumps to 49% in the case of Class IV towns, which class incidentally constitutes the largest single group containing as many as 84 towns in a total of 228. Thereafter the proportion declines to 42% in respect of Class V towns and 38% in the case of Class VI towns. If population size alone were to be the crucial factor in fixing the literacy rate of a settlement the proportions of towns with lower literacy rates ought to have steadily increased, beyond the 49% level for class IV towns, in the case of Class V and Class VI towns. Since this is not the pattern disclosed by the towns of Mysore evidently there are other factors which vitally influence the rate of literacy in urban areas. Incidentally,it is to be noted that there are 18 Class IV towns of Agricultural predominance in this region while there is no Class IV town in Southern Maidan which is predominantly agricultural. If some allowances are made for the .

interplay of such factors as the location of a settlement in different regions of the State, agricultural or non-agricultural base of its economy and its predominant functional characteristic the foregoing details lend considerable support to the hypothesis postulating a definite and direct relationship between population size and literacy rate.

Table III.7 given below helps one to understand the nature of relationship between agricultural participation rate in town and the rate of literacy.

Table III.7

Literacy rate by agricultural activity for Towns

Percentage of Male workers engaged in x agriculture	LITERACY RATE					Total
	50+	40 - 49.9	30 - 39.9	20 - 29.9	less than 20	
1	2	3	4	5	6	7
Less than 25	33	55	25	6	--	119
25 to 49	2	23	34	19	1	79
50 to 74	--	2	14	9	2	27
75 +	--	--	1	2	--	3
Total	35	80	74	36	3	228

One can see that the towns which are more agricultural have low literacy rate as children begin to work in the fields at an early age thus reducing the probability of their attending school. High agricultural participation conveys the prevalence of rural attitudes and aspirations besides an economically undeveloped stage which calls for the utilization of all the available manpower- including youngsters in farmwork. Though the

literacy rate for the State as a whole is 25.4 percent, due to historical as well as socio-edonomic factors there are significant regional differences. The following table presents a regionwise distribution of 401 settlements by range of literacy rate.

Table III.8

Distribution of settlements by Literacy rate in different regions

Region	Literacy rate for the region	LITERACY RATE						Total
		57 +	47 - 56.9	37 - 46.9	27 - 36.9	17 - 26.9	Less than 17	
1	2	3	4	5	6	7	8	9
Coastal	32.30	3	3	12	12	2	--	32
Malnad	30.35	3	17	15	8	3	1	47
Inland Karnataka	30.24	1	3	27	45	20	12	108
North Maidan	19.12	--	1	6	25	26	10	68
Central Maidan	18.00	--	--	3	10	18	4	35
Southern Maidan	39.69	2	20	47	25	11	6	111
STATE	25.40	9	44	110	125	80	33	401

The regional disparity is well seen in the selected settlements also. In coastal region only 6% of settlements have Literacy rate less than 27% while corresponding figures for Malnad and Southern Maidan workout 9% and 5% respectively. In Central Maidan region which has the lowest literacy rate, 62% of the settlements considred here have a low literacy rate of less than 27% . In North Maidan and Inland Karnataka 53% and 30% of the settlements respectively returned a low literacy rate. It may therefore be

inferred that the settlements of a region reflect fully the literacy rates prevailing in that region.

III.5 Dependency Ratio:-

In the study of Demographic profile dependency ratio carries an important role. Dependency ratio is defined as the Quotient obtained by dividing Non-Workers by Workers multiplied by 100.

$$\text{Dependency Ratio} = \frac{\text{Non-Working Population}}{\text{Working Population}} \times 100$$

This ratio is low in those regions where agriculture dominates and is vice versa in regions where services dominate. In areas where entry into working force is regularised the tertiary sector dominating, the ratio is large. The data setout in Table III.9 permits an analysis of the relationship between dependency ratio and natural regions.

Table III.9

Distribution of Towns & Large-sized Villages according to Dependency ratio by regions

Region	DEPENDENCY RATIO						Total
	282+	232-281	182-231	132-181	82-131	less than 82	
1	2	3	4	5	6	7	8
Coastal	--	1	4	17	10	--	32
Malnad	1	1	13	22	8	2	47
Inland Karnataka	--	4	22	38	41	3	108
North Maidan	--	5	6	22	31	4	68
Central Maidan	--	--	5	16	13	1	35
Southern Maidan	2	8	52	36	16	1	111
STATE	3	19	102	147	119	11	401

The three settlements with exceptionally high dependency ratios are Lakshmipuram(285) & Sugar Town(302) which are parts of Arasikere & Mandya Town groups respectively and Bhatkal(341) a town in North Kanara district of Malnad region. It is to be noted here that all the three are urban centres. At the other end of the scale there are 11 settlements having a dependency ratio of less than 82. It is significant that as many as 8 of these are large sized villages. The three urban centres of this group are Gokak(Class III), Sulibhavi(Class IV) and Kumsi(Class VI) town. Kumsi has more than 50% of workers in agricultural sector. The dependency ratio of 37% of the settlements lie in the range 132 - 181; that of 32 % lie below 132 while in the case of the remaining 31% the dependency ratio of town exceeds 181. Keeping 132-181 as the middle range the regionwise dependency ratio of towns and villages may be separately compared so as to bringout significant variations if any between the regions. Such a distribution of towns and villages is given in Table III.10 and III.11 respectively.

Table III.10

Distribution of Towns by regions & dependency ratio

Region	Dependency ratio			Percentage		
	182+	132-181	Less than 132	182+	132-181	Less than 132
1	2	3	4	5	6	7
Coastal	4	7	2	30.0	54.0	16.0
Malnad	13	20	8	31.0	49.0	20.0
Inland Karnataka	10	9	11	33.0	30.0	37.0
North Maidan	8	13	8	27.5	45.0	27.5
Central Maidan	4	8	5	23.5	47.0	29.5
Southern Maidan	60	31	7	61.0	31.5	7.5

Towns with a high dependency ration (182+) are concentrated in Southern Maidan which has a tally of 61.0%. Inland Karnataka having 33% of its towns in this category ranks next. Central Maidan has the lowest proportion of towns with high dependency ratio and it may incidentally be noticed that the proportion of 29.5% returned by this region for towns with a low dependency ratio (Less than 132) is the highest amongst 6 regions. Higher dependency ratio may be attributed to the relative importance of the non-agricultural base of the economy of the towns concerned which implies a lower proportion of workers in the population and a high earning capacity of industrial workers.

Table III.11

Distribution of large-sized villages by regions and dependency ratio

REGION	Dependency ratio			Percentage		
	182+	132-181	Less than 132	182+	132-181	Less than 132
1	2	3	4	5	6	7
Coastal	1	10	8	5.0	53.0	42.0
Malnad	2	2	2	33.0	34.0	33.0
Inland Karnataka	16	29	43	18.0	33.0	49.0
North Maidan	3	9	27	8.0	23.0	69.0
Central Maidan	1	8	9	3.5	44.5	50.0
Southern Maidan	2	1	10	15.0	7.5	77.5

Large sized villages in Southern Maidan have low dependency ratios followed by their counterparts in North Maidan and Central Maidan regions. The villages in Malnad region have higher dependancy ratio as compared to the other regions. This phenomenon may be due to the high fertility of the soil of this region and also the nature of crops grown especially areea, coffee, etc in plantations besides rice in rainfed fields. This region depends to a considerable extent on seasonal migrant labourers. In Coastal region 53% of the settlements have a moderate dependancy ratio ie. in the range 132-181 while another 42% have a low dependency ratio. Southern Maidan depicts a picture close to that of Coastal region.

III.7

In brief, it may be summarised that there exists a strong regional differential in growth rate, Sex-ratio and

Literacy rate. An attempt to club the settlements irrespective of their regions is futile due to the regional influences. The sex-ratio of large sized villages doesnot depict any urban characteristics. There is a definite relation-ship between size class and literacy rate. Smaller the population size of a town lower the literacy rate. If the economic base of settlements were to be considered it is found that lower the agricultural activity higher the literacy in urban centres. Dependency ratio is high for urban centres which are non-agricultural compared to those that are agricultural. Dependency ratio is not very much regional in character.

CHAPTER IV

TRANSPORT NETWORK AND SOCIAL AMENITIES

IV.1 Transport network

Since mobility of men and materials are an essential condition of modern life it is quite natural to find that transport lines have an impact on the settlement pattern in any region. Transport network exerts influence on economic and demographic characteristics of large villages and towns which generally tend to be located along major routes or their tributaries. However, in the 1961 Census report of the State of Mysore it is said that "Transport network has no impact on settlement pattern as it was only a recent phenomenon, particularly in post-independance period"[1].

A glance at Map No.5 depicting the National Highways, State Highways, other roads and the Railway lines shows that there exists a marked regional disparity in the matter of transport network. National Highways are found in Eastern part of Southern Maidan, Inland Karnataka and one district of North Maidan region. The other three have no National Highways at all. As such, State Highways which are well dispersed over the State are equated with National Highways together called Highways for purposes of the present discussion. This treatment of data gives a better picture as inter-regional comparision becomes possible.

It would be interesting to examine the distribution pattern of urban and large sized villages settlements on Highways and other roads between regions by size-class. Table IV.1 indicates such a distribution of 401 settlements under study.

1.Census Of India,1961,vol.X Mysore,General Report,Part IA(i) pp.252.

MAP NO: 5

TRANSPORT MAP
MYSORE
1961

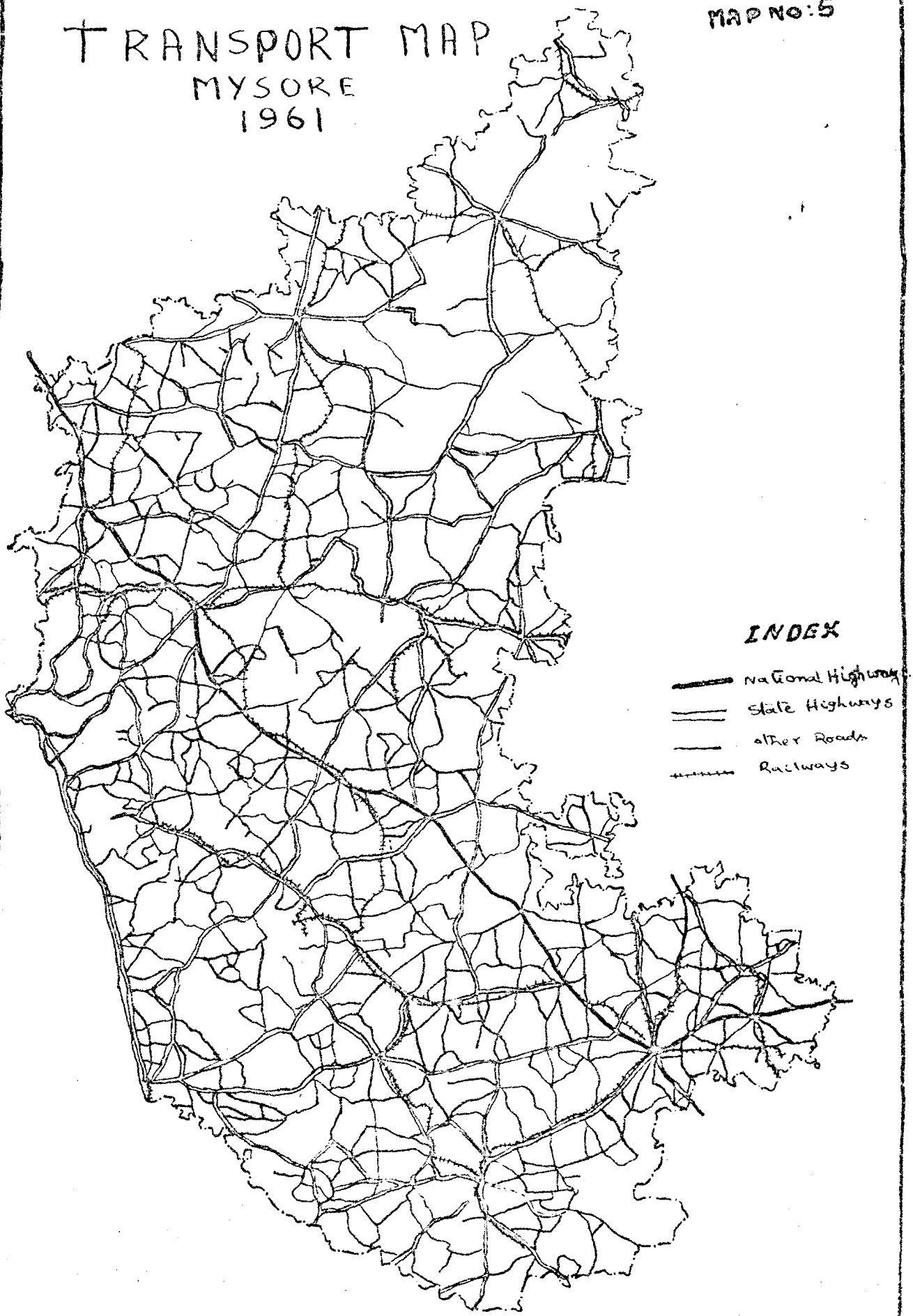


Table IV.1

Distribution of Settlements on Highways by regions

Region	Number of Towns by Size-class						Vill-ages	Total	
	I	II	III	IV	V	VI		On High-ways	Settlements in the region
1	2	3	4	5	6	7	8	9	10
Coastal	1	--	1	6	3	--	13	24	32
Malnad	-	2	4	8	6	3	4	27	47
Inland Karnataka	2	1	3	4	--	--	16	26	108
North Maidan	-	2	2	5	--	---	12	21	68
Central Maidan	-	3	-	3	7	--	9	22	35
Southern Maidan	2	1	9	17	19	7	2	57	111
Total No. of Settlements located on High ways	5	9	19	43	35	10	56	177	---
Number of settlements in size-class	6	9	32	80	64	37	173	---	401

Of the 6 Class I towns except K.G.F. a mining city, the others are located on highways. All the Class II towns are located on Highways while the proportion of such towns decrease to 60% for Class III towns, 55% for Class IV & V towns, 27% for Class VI towns and 32% for large-size villages. Since, the population size of class VI towns are smaller than in the large-sized villages in this study it may be inferred that the larger the population of a settlement greater are the chances of its location on a highway. Regionally, 75% of the settlements in Coastal region

are located on highways followed by 63% in Central Maidan. Malnad and Southern Maidan regions have about 50% of the settlements are there on highways while the other two regions have very low percentages.

IV.2 Connectivity Index

In order to analyse the impact of the transport linkage on settlements and on their Demographic characteristics it would perhaps be more proper to study the same with the help of connectivity Index. This Index which aims at giving weightages to settlements on the basis of their location gives a wider scope for analysis. In this study the weightages given are as below:

	Points
1) National Highway	4
2) State Highway	2
3) Other roads	1
4) Railway(Broad-gauge)	4
5) Railway(Metre-gauge)	2
6) Railway(Narrow-gauge)	1

Hence, a settlement can have a minimum of one point & a maximum of 14 points though such instances are very rare. In Mysore State it is only Bangalore City that enjoys the advantage of having 14 points.

Table IV.2

Distribution of settlements by connectivity Indes & regions

Region	Connectivity Index					Total
	8 to 14	6 & 7	5 & 4	2 & 3	1	
1	2	3	4	5	6	7
Coastal	---	1	---	23	8	32
Malnad	---	---	7	15	18	47
Inland Karnataka	2	2	12	16	76	108
North Maidan	---	3	7	18	40	68
Central Maidan	---	4	4	15	12	35
Southern Maidan	3	9	27	26	46	111
Total	5	19	58	118	201	401

It is obvious from Table IV.2 that half of the settlements are situated on Local roads as 201 settlements have connectivity Index 1; 29.5% have connectivity Indix 2;or 3; 14.5% 4 o# 5. Proportion of ssettlements with low connectivity Index are comparatively high in Coastal, Malnad and North Maidan regions, compared to the ther three regions. It is hypothesised that higher connectivity Indix leads to higher growth rate. The data given in Table IV.3 helps are to understand the relationship between growth rate and connectivity Index.

Table IV.3

Distribution of Settlements by Growth rate & Connectivity Index

Growth rate	Connectivity Index			Total
	High	Medium	Low	
1	2	3	4	5
50.0 +	2	16	13	31
30 - 49.9	5	31	32	70
20 - 29.9	7	49	52	108
Less than 20	9	68	90	167
Total	23	166	187	376

Largest number of settlements are in the group representing a growth rate of less than 20%, and about 54% of these settlements have a low connectivity Index. The next growth rate of 20 - 29.9 percent two, consists of a large number of settlements. In this case the proportion of settlements with low connectivity Index cames to 48%. The growth rate group of 30 to 50 percent consists of 70 settlements of which 46% have a low connectivity Index. The settlements having highest growth rate of 50% and above, numbering only 31, have only 13 settlements ie. 40% with a low connectivity Index. In contrast, if one considers the high connectivity Index and growth rate it becames evident that as the growth rate increases the proportion of settlements in each group shows a declining trend. But, this tendency is not reflected by the settlements with high growth rate, perhaps on account of their relatively smaller number. The inference as growth rate increases proportion of settlements with low connectivity Index decreases and vice versa is true.

IV.3 Social amenities in Large-sized villages

The availability of different social facilities and amenities enjoyed by a settlement has a significant influence in the Demographic characteristics of the settlement. It is quite natural that a village having a high school has a higher rate of literacy, a higher dependancy ratio compared to a village having a Primary School or none at all. The rural community in general being agricultural the chances of a boy or girl going to a school is more if an educational facility exists at his door steps than if he were to travel some distance even if it be quite short. The other important facilities are drinking water & Medical treatment.

At the outset it may be mentioned that though this study covers 173 villages with population above 5000 data on social amenities are not available for 7 villages. The analysis given below is therefore based on 166 villages. The factors taken up for examination can be divided into three groups for their impact are different.

(a) Schools, (b) Drinking Water,&(c) Medical facilities.

(a) Schools:- By examining the location of villages with various levels of educational facilities, in different regions details as shown in the following table may be derived.

Table IV.4

Distribution of Villages with levels of Educational facility by regions

Region	No School	Primary level	Middle level	Higher level	Total
1	2	3	4	5	6
Coastal	1	4	10	4	19
Malnad	--	--	--	4	4
Inland Karnataka	3	22	29	24	78
North Maidan	--	12	19	7	38
Central Maidan	--	2	8	8	18
Southern Maidan	--	4	3	2	9
TOTAL	4	44	69	49	166

Malnad region due to its low number of villages exhibit a higher order of educational facility as all the 4 have high schools with one of them having even a college. Central Maidan comes second with 45% of the villages with high schools and another 45% with middle schools. The other regions have a similar pattern in distribution of educational facilities.

Two hypothesis may be formulated regarding the impact of availability of schools of different order in villages:-

(1) Higher the order of school, higher the literacy rate,
(2) Higher the order of school higher the dependancy ratio.

Table IV.4 (a)

Literacy rate by educational facility for large sized villages

School available	Literacy rate				Total
	40 +	30 - 39.9	20 - 29.9	Less than 20	
1	2	3	4	5	6
High School and above	9	21	14	5	49
Middle School	7	14	25	23	69
Primary School	1	8	21	14	44
No School	1	2	1	--	4

The hypothesis that villages with higher order school have higher literacy rate is true very clears as far as High Schools are concerned and not very distinct between Middle and Primary Schools. Hence, the hypothesis is acceptable. Even though there is a large regional differential in literacy rate this is not reflected here as the level of facilities is considered here.

Table IV.5

Dependency ration by Educational Facility

Educational Level	Dependency ratio				Total
	Less than 100	100-149	150-199	200+	
1	2	3	4	5	6
High School & above	1	23	19	6	49
Middle	13	45	6	5	69
Primary	9	25	9	1	44
No School	1	1	2	--	4

The Table above shows that more than 50% of the villages with high schools have a dependency ratio of above 150 while for

those with Middle Schools and Primary Schools the proportion is about 20% only. More than 20% of villages with lower order of educational facility have a dependency ratio of less than 100. In the case of those with High School it is as low as 2%. Hence, it may be concluded that villages with higher educational facility tend to have a higher dependancy ratio.

(b) Drinking Water Supply:- Out of 166 villages taken up for study 141 have pucca wells providing drinking water. In the remaining 25 villages the water supply is from kutcha wells or river or tank. As water for drinking purposes is a vital need it is generally found that people prefer to settle at close quarters of the water supply sources in larger numbers. In regions where such sources are scarce the population densities are large.

Table IV.6

Density of Villages by Drinking Water facility

Drinking water	Density (per sq.mile)				Total
	2000+	1000-1999	500-999	Less than 500	
1	2	3	4	5	6
Pucca Wells	23	17	33	66	139
Kutcha Wells	3	5	8	8	24
Total	26	22	41	74	163

As seen from the above tabbe there seems to be no relationship between drinking water facility and density in the 163 villages analysed.

(c) Medical and Communication facilities:- Details about the existance of (a) Dispensary (b) Rural Health Centre (c) Medical Practitioner and (d) Maternity and child welfare centre for Medical while for communications availability of Post Office was taken

from District Census Handbooks. In order to understand the heirarchy of these in different regions composite index is evolved.

IV.4 Composite Index

Each of the facility is taken individually. Its weightage is calculated by dividing total number of villages by the number of facilities as a whole and the Quotient is taken as its weight.

The Weightages thus arrived are:-

FACILITY	WEIGHTAGE(Units)
Post Office	1.12
Dispensary	2.21
Rural Health Centre	4.15
Medical Practitioner	3.25
Maternity & Child Welfare Centre	4.74

Each settlement gets the total weightage according to the availability of different facilities in it. The composite Indices are grouped into 3 classes as high, medium & low. The villages in the group with high indices have at least three madical facilities and a post office, in the middle group we have a Post Office and two medical facilities while in the low group we have a Post Office, or a Medical facility or both of them. Table IV.7 gives a distribution of large sized villages in different regions.

Table IV.7

Distribution of Villages by Regions and composite Index

Region	Composite Index			Total
	High	Medium	Low	
1	2	3	4	5
Coastal	2	8	9	19
Malnad	4	--	--	4
Inland Karnataka	11	43	24	78
North Maidan	4	23	11	38
Central Maidan	4	9	5	18
Southern Maidan	1	4	4	9
Total	26	87	53	166

One finds that in Malnad all the villages have high composite Indices while in all the other regions those villages with high composite Index does not exceed 15% in any case. Coastal region and Southern Maidan have large proportion of villages in low group compared to other regions. There is a large inter-regional differential in the distribution of Medical facilities in the State.

IV.5 Summery

There is regional imbalance in the distribution of National and State highways in the State. The influence of Highways on the settlements enroute is not very significant. The growth rate trends if more regional than the result of location on transport network. In large-sized villages regional variation exists in literacy rate & dependancy ratio. The availability of educational facilities locally have direct impact on these two characteristics. Lastly, there is a heirarchy of distribution of Medical & Postal facilities in the State in different regions.

CHAPTER V

DECLASSIFIED TOWNS IN MYSORE, 1961.

V.A Census concept of Town & Village

It has been a tradition of the Indian Census to present its results under two naturally exclusive heads: Urban and Rural. India is predominently an agricultural country and villages constitute its backbone. A village happens to be the smallest administration unit for Census purposes and its boundaries are well defined. When the population concentration of any village exceeds a certain limit and when its agricultural economy gives way to make and more non-agricultural economy or else where certain civic administration measures are undertaken the village acquired the status of urban area. However, when viewed in a historical perspective, it becames clear that the concept of an urban area is not precise and over the decades the definations varied from region to region within the country. Appendix No.4 provides a general idea as to what contribute to an urban area according to the Census concept from 1872 to 1961. It is evident that all areas administered by local bodies like Municipalities, Contanments, Sanitary Boards, Town Committees have all along been classified as towns irrespective of the presence or otherwise of are are or more of the urban traits. These are statutory towns and their civic administration status automatically confers an unquestionable claim to urban status. In addition, an the eve of every Census, the superitendents of Census were vested with discretionary powers to classify any place, deemed to be locally important by district authorities as a town. In the connection, an extract from Census report is reproduced below.

"The precise stage at which is transformed into a town, or as some times happens, the small town recedes into a village is rather vague and almost always a matter of some controversy. Hutton in his 1931 All India Census Report has remarked that "the distinction between a small town and a large village as far as conditions of life or occupation of its inhabitants is concerned in often meaningless, and the treatment of any place as urban rather than rural does not necessarily imply any degree of industrialisation and only the minimum degree of corporate life distinct from that of ordinary village". And from this point of view, the distinction between the small town and the large village becomes yet more difficult(if not meaningless) in this state, where Municipal Administration, on lines familiar in most other parts of India, was a thing almost unknown till very recently. Yet another disadvantage in this regard is the fact that the procedure prescribed for the seperation of the rural from the urban areas not only differed from Census to Census but the actual seperation was also not in comformity with the procedure specified....." 1.

In 1961, the situations under went a drastic change.

For the first time an attempt was made to apply an uniform definition throughout the country and an economic criterian was also introduced in addition to minimum population size and density in respect of all erstwhile non-statutory towns. The discretionary power, however, was retained. At this juncture it is useful to recall that the state as it existed in 1961

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* 1. P.229 COI 1951. Vol IX Hyderabad, Part IA Report.

comprised of areas that were being administered differently, especially with regard to local self Governments, in accordance with the rules and regulations framed much earlier by different Governments. As yet not uniform set of laws had been passed, the disparities based on the former administrative regions could continue to exist in 1961.

V

V.2 Declassified Towns

In 1951, in the country as a whole, there were 3060 towns unevenly distributed over the 6 population size-classes. The application of criteria laid down in the definition of a town in 1961 resulted in the declassification of as many as 810 (ie 26%) of the erstwhile towns. Evidently, those that might have acquired urban status in 1951 by virtue of population size alone and failed to satisfy economic criterian suffered most in this process. In Mysore State, 85 towns(ie. 29%) lost their urban status and this included 17 project camps of Thungabhadra project. Since these camps were purely transitory for all practical purposes only 68 places may be considred to have actually suffered 'declassification'.

A distribution of the declassified towns according to their location in different geographical regions is given in Table V.1.

Table V.1

Distribution of declassified towns by regions, Mysore 1961

Region	Number of Towns in 1951	Declassified Towns in 1961 with 1961 population		Total	Percent of declassified towns to total in 1951
		Less than 5000	5000+		
1	2	3	4	5	6
Coastal	7	---	1	1	14.3
Malnad	36	---	6	6	16.7
Inland Karnataka	65	2	30	32	49.2
North Maidan	47	1	16	17	36.2
Central Maidan	27	1	11	12	44.4
Southern Maidan	90	---	--	--	--
STATE	272*	4	64	68	25.0

* Excludes 17 towns of which were project camps.

At the outset it is clear that 64 out of 68 declassified towns satisfied minimum population limit stipulated for a town in 1961. Of the 4 places with less than 5000 inhabitants it may be noted that Gegipet(Dharwar District) which had a population of 6436 in 1951 suffered a -ve growth rate of 40% during the dedade while the other 3 had a population of less than 5000 in 1951 also. The fact that a regional disparity exists in the distribution of declassified towns in Mysore State is obvious from the above table. Southern Maidan with its largest number of towns in the State interestingly enough has no declassified town. The reason for this phenomenon is perhaps

that all the 90 (except those in Bangalore Metropolitan area town group) were statutory towns in 1961.

The effect of declassification is quite marginal in Coastal region and Malnad regions where only 16.3% & 16.7% of the 1951 towns suffered. These two regions it may be noted together represent the rice-growing region. Inland Karnataka stands out as the region that has been affected most in this prosess, for in this region, ane in two of the 1951 towns has been declassified. Central Maidan with 44.4 percent follows closely behind while North Maidan has 36.2 percent of 1951 towns declassified. Incidentally, these three regions represent Jowar growing regions. From the crop-region perspective, it is clear that ragi-region has not at all been affected by declassification. Out of 68 declassified towns, 61 lie in a region of vast plains with relatively low rainfall and scrarcity of drinking water. This might be conducive for the growth of large sized villages.

V.3 Towns and their Classification

It would be worthwhile to examine the distribution of of declassified towns with reference to the year in which they appeared for the first time as a town.

Table V.2

Distribution of Declassified Towns according to the Year in which they were first classified as towns

Regions	Classified for the first time in						
	1951	1941	1931	1921	1911	Earlier	Others
1	2	3	4	5	6	7	8
1.Inland Karnataka	22	--	--	1	--	7	2
(a) Belgaum	18	--	--	--	--	1	1
(b) Dharwar	4	--	--	1	--	6	1
2.North Maidan	13	1	1	--	1	--	1
(a) Bidar	1	--	1	--	--	--	1
(b) Bijapur	9	--	--	--	1	--	--
(c) Gulbarga	3	1	--	--	--	--	--
3.Central Maidan	3	6	2	--	--	1	--
(a)Bellary	--	2	1	--	--	1	--
(b) Raichur	3	4	1	--	--	--	--
4.Malnad (North Kanara)	6	--	--	--	--	--	--
5.Coastal Region (South Kanara)	--	--	--	--	--	--	1
STATE	44	7	3	1	1	8	4

Interestingly enough nearly 63% of the towns declassified had sprungup in 1951 only. About 20% of the declassified towns were towns for at least more than 3 Censuses and can therefore be termed old towns. 10% of the declassified towns had been towns in 1941 as well as 1951. If those classed as towns for

the first time in 1951 are considered, Malnad had also the towns declassified in this group while Inland Karnataka, North Maidan followed with larger share in this category. Central Maidan had only 25% of its declassified towns coming in this category.

There is considerable intra-regional disparity in the distribution over their apperance as town for the first time. In the case of Inland Karnataka, Belgaum District has 90% of the declassified towns appearing 1951 only while for Dharwar it is as low as 33%. Thus a very high proportion of new towns in Belgaum came to be declassified in 1961 Census as compared to its other component district Dharwar of the same region. Neighbouring district Bijapur also has 90% compared to that Belgaum while Bidar doesnot confirm to the pattern in North Maidan.

Out of 44 towns 37 are found in Bombay Karnataka administration region. The other 7 cases one in Hyderabad Karnataka. As already noted in the definition adopted by the regions over emphasis might have been for population size rather than urban characteristic. It can be further noted that in no report the urban characteristic has been speltout so that further analysis could be made.

CHAPTER VI

SUMMARY

Major findings of this study on Urban centres and large sized villages of Mysore State can be summarized as below:

There has been a large regional differential in the distribution of the settlements under study. This has been largely due to the Soil type and in turn the crop pattern differentials between the regions. The other major factor is the impact of different administrations in different parts of the State before 1956. Due to lack of data a deeper probe into this factor could not be made. Natural resources doestnot have an important role in the spatial distribution of settlements.

The large sized villages continue to have a rural outlook irrespective of the region, and spatial distribution. In Inland Karnataka and North Maidan regions proportion of agricultural towns is comparatively larger over that of other regions. There exists inter-regional variations in the distribution of Service & Industrial Towns. There is a definite indication that the economic base of settlements is more agricultural in regions where the distribution is clustered compared to the regions where the distribution is dispersed.

In general, demographic characteristics viz. growth rate, sex-ratio and literacy rate are regional in character. There exists a clear relationship between size-class and literacy rate. Dependency ratio is not regional in character. There has been no impact of transport network on the growth rate of settlements due to the stronger regional influence on the settle-

ments. Availability of educational facility has a direct impact on the literacy rate and dependency ratio of villages.

The distribution of declassified towns in different regions clearly shows how far the definition of urban area has been vague in Indian Censuses. This conclusion could be drawn due to the different authorities who were incharge of the affairs in different areas of the State before 1956. This calls for positive steps in the formation of a definition of an Urban area in future.

Area for further Study

It is suggested that a study should be takenup where-in proportionate number of villages are selected in different regions so that a clear understanding is possible on the influence of Urban centres and the rural / urban characteristics of large sized villages with the availability of 1971 Census volumes the work should not be much difficult as village directory of District Census Handbooks contain quite an amount of data for exploitation. This study had to be done for ap particular point of time as the 1951 economic classification was not comparable, with the publication of 1971 census data it is worthwhile to look into the changes in the Economic structure of towns in different regions with a particular attention towards their spatial distribution.

APPENDIX I

LIST OF SETTLEMENTS & SOME OF THEIR DEMOGRAPHIC CHARACTERISTICS

Sl.No.	Name of Settlement	Size-Class of Town	Growth Rate	Literacy Rate	Dependency Ratio	Percentage of Male Workers engaged in				Connecting Index
						Agriculture	Manufacturing	Trade & Transport	Services	
1	2	3	4	5	6	7	8	9	10	11
1.	Bhalki	5	24.1	27.9	168	33.0	13.0	21.5	24.4	5
2.	Hulsur	V	31.8	15.0	133	59.7	19.8	9.7	10.5	1
3.	Bidar	3	3.4	44.2	280	6.2	12.0	35.9	40.9	7
4.	Chitaguppa	4	2.4	22.5	157	22.8	23.8	18.6	29.8	1
5.	Humnabad	4	7.9	30.7	242	16.9	15.6	23.3	41.8	7
6.	Basava-Kalyan	4	22.7	22.9	175	17.8	33.6	30.0	14.6	1
7.	Rajeswar	V	9.0	15.5	155	60.1	18.8	14.8	5.9	4
8.	Dubbulgundi	V	3.7	20.2	113	40.5	28.6	12.7	17.4	*1
9.	Hallikhed	V	9.0	13.7	139	36.8	28.4	17.5	16.2	1
10.	Aland	4	15.4	24.4	139	37.2	29.3	13.0	15.1	1
11.	Gulbarga	2	25.8	39.7	257	6.3	28.3	28.0	31.0	7
12.	Chincholi	5	13.0	32.3	157	39.0	10.8	12.3	29.8	1
13.	Chitapur	4	0.5	20.7	141	33.6	17.5	22.9	27.8	5
14.	Rawoor	V	32.3	18.5	173	10.6	9.5	19.6	21.5	1
15.	Bhankoor	V	164.7	36.0	264	19.3	66.6	3.2	9.2	1
16.	Nalwar	V	6.3	15.6	128	37.2	9.1	12.6	24.9	1
17.	Halkatti	V	21.4	16.8	123	30.4	7.1	21.3	39.8	1
18.	Shahabad	3	23.6	24.5	213	11.0	37.0	20.8	22.3	5
19.	Sedam	5	1.7	32.7	167	29.4	10.5	25.5	31.3	5
20.	Malkhed	V	41.2	--	82	72.5	11.3	6.6	6.9	.1
21.	Shahapur	4	12.0	27.5	143	29.8	23.3.	20.9	22.3	3
22.	Sagar	V	7.9	18.0	114	58.0	18.2	6.3	16.7	1
23.	Shorapur	4	-3.6	32.5	138	10.8	25.5	18.8	38.7	3
24.	Kakkera	V	12.6	5.5	182	79.8	12.7	1.9	5.4	1
25.	Gurmatkal	5	-0.8	22.6	90	39.8	34.0	7.4	14.2	1
26.	Yadgir	3	16.9	28.3	166	16.1	22.5	21.7	35.0	5
27.	Afzalpur	V	29.4	19.4	187	47.5	10.5	2.4	37.1	.1
28.	Manoor	V	36.2	16.0	117	61.1	6.2	3.3	22.5	.1
29.	Sindgi	V	21.9	33.9	139	57.6	8.3	11.7	17.6	3
30.	Hippargi	V	11.4	30.0	122	72.5	9.9	5.7	6.7	3

Appendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
31.	Almel	V	29.3	27.6	126	70.5	6.4	9.4	8.3	1
32.	Indi	4	80.0	32.4	152	50.3	9.3	14.6	18.3	1
33.	Agar-Khed	V	38.1	16.7	69	91.4	3.9	1.8	2.2	1
34.	Salotgi	V	21.4	21.0	83	82.7	5.0	2.5	3.1	1
35.	Tambe	V	19.4	24.8	102	86.5	6.9	2.7	2.5	1
36.	Chadchana	V	30.3	32.8	140	47.1	19.5	12.4	17.0	1
37.	Bijapur	2	20.0	46.9	250	11.4	19.4	29.1	34.0	5
38.	Bableswar	V	11.6	22.3	114	86.8	7.2	2.2	3.4	3
39.	Salawadi	V	27.2	26.1	113	90.8	3.3	2.1	3.4	2
40.	Kakhandi	V	16.8	17.6	120	86.2	8.0	1.6	2.5	1
41.	Tikota	V	18.1	22.4	131	58.6	6.1	5.2	22.3	2
42.	Honavad	V	13.6	20.1	123	85.5	5.1	4.4	3.3.	2
43.	Bagewadi	4	23.8	23.7	204	59.9	7.5	6.5	19.7	3
44.	Managuli	V	22.6	20.9	137	87.6	4.8	2.0	4.2	3
45.	Ukkali	V	27.3	20.2	83	90.9	4.0	1.0	2.2	1
46.	Kolhar	V	20.0	23.0	118	70.9	9.1	5.1	7.3	1
47.	Talikota	4	26.2	30.8	166	41.9	16.2	23.3	15.6	1
48.	Muddebihal	V	30.3	40.7	204	32.4	13.9	25.2	25.9	3
49.	Natalwad	V	11.8	28.2	89	66.8	14.7	10.0	7.0	1
50.	Hungund	4	29.7	35.4	125	68.9	6.5	7.6	15.0	3
51.	Ilkal	3	16.8	32.3	87	7.1	66.0	14.7	9.8	2
52.	Sulibhavi	4	14.5	32.0	73	31.4	49.7	8.0	9.1	1
53.	Gudur	V	32.9	26.5	88	36.8	43.7	8.3	7.5	1
54.	Kamatgi	V	13.6	27.6	79	33.5	57.0	2.9	5.4	1
55.	Guledgud	3	10.6	41.8	121	8.6	55.3	11.9	10.8	1
56.	Badami	V	34.7	31.4	133	48.6	13.9	15.4	16.8	3
57.	Kerur	V	20.8	31.4	103	42.5	41.2	8.7	5.7	3
58.	Bagalkot	3	23.7	47.3	223	10.6	23.5	32.9	27.0	3
59.	Kaladgi	V	15.7	26.3	119	50.3	201.	17.4	8.7	2
60.	Sirur	V	6.6	26.8	99	78.9	13.9	1.4	4.5	2
61.	Bilgi	V	15.5	30.6	112	64.8	9.8	5.5	11.7	1
62.	Mudhol	4	22.4	30.9	158	41.8	2.3	12.5	17.4	1
63.	Mahalingpur	4	14.8	36.6	118	14.9	55.8	13.1	11.5	1
64.	Belgali	V	21.1	8.1	116	66.6	24.1	1.7	1.1	1
65.	Jamkhandi	3	15.1	40.0	203	19.8	25.4	23.5	24.7	1
66.	Rabkavi-Banhatti	3	39.6	34.9	105	12.0	65.2	11.5	8.9	1
67.	Terdal	4	17.1	22.0	99	60.9	25.9	5.1	5.2	1
68.	Hunnur	V	9.2	25.4	65	38.8	44.1	4.1	6.4	1
69.	Athani	4	14.0	40.0	203	29.7	16.9	21.4	28.1	1
70.	Athani(R)	V	NA	7.9	97	92.3	5.0	0.6	1.7	1

Appendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
71.	Satti	V	20.1	16.2	135	91.6	3.8	0.8	1.8	1
72.	Kagwad	V	37.2	31.1	176	74.9	8.6	6.3	7.5	1
73.	Shedbal	V	22.7	33.3	148	79.2	5.8	4.2	7.0	1
74.	Mangsuli	V	30.6	21.6	97	86.6	7.4	1.4	2.9	1
75.	Maddbhavi	V	23.2	10.5	119	89.1	6.8	0.8	1.6	1
76.	Ainapur	V	13.5	27.6	127	84.3	6.1	3.2	5.1	1
77.	Ugarkhurd	V	46.5	32.8	159	48.3	37.3	3.8	6.2	1
78.	Kokatnur	V	28.0	10.3	103	81.3	7.0	1.4	4.3	1
79.	Algali	V	18.7	15.0	109	79.0	13.1	1.4	9.0	1
80.	Chickodi	4	14.8	42.3	198	32.4	19.4	19.6	24.1	3
81.	Nippani	3	20.8	46.2	200	11.3	27.8	24.8	34.5	3
82.	Sadalga	4	13.4	29.6	155	83.5	7.0	2.4	5.0	1
83.	Hirekudi	V	35.9	20.0	166	88.8	8.0	0.9	2.0	1
84.	Manjari	V	35.0	29.8	105	90.3	4.2	2.5	3.0	1
85.	Ankli	V	17.4	30.2	168	77.3	9.6	6.6	7.0	1
86.	Kerur	V	27.6	15.3	88	89.5	5.8	0.8	1.4	1
87.	Pattenkudi	V	20.4	22.9	158	81.2	11.9	3.0	4.1	2
88.	Khadalkot	V	18.0	27.2	129	79.1	7.5	3.3	5.5	1
89.	Kabhur	V	22.5	14.8	104	84.9	5.8	3.4	4.3	2
90.	Kongnolli	V	11.6	26.0	112	79.2	11.8	2.2	4.3	4
91.	Akol	V	10.4	34.4	128	74.2	6.8	3.3	7.1	1
92.	Examba	V	16.8	32.5	107	86.4	5.6	2.3	3.9	1
93.	Bhoj	V	15.4	38.7	175	84.6	6.9	2.5	4.4	1
94.	Galatga	V	17.3	31.8	82	81.1	4.9	1.5	11.8	1
95.	Karadaga	V	14.0	29.6	119	78.0	8.5	1.9	4.6	1
96.	Borgaon	V	-18.8	28.0	210	86.2	5.3	1.9	3.8	1
97.	Bedkihal	V	55.5	28.6	237	83.1	6.3	3.3	6.0	1
98.	Kudchi	4	35.8	24.4	227	70.7	8.8	8.6	10.6	3
99.	Raibag	V	51.6	28.1	191	65.1	8.9	7.1	16.3	1
100.	Chincholli	V	20.0	20.0	173	71.0	8.4	5.0	10.2	1
101.	Harugeri	V	36.8	14.7	192	84.2	8.2	1.7	4.6	1
102.	Mugalkhod	V	28.6	14.7	172	89.8	6.8	0.5	1.9	1
103.	Gokak	3	23.5	38.8	80	20.5	25.3	27.7	20.3	1
104.	Konnur	3	36.1	27.3	85	26.4	62.0	4.4	5.1	3
105.	Mamadapur	V	19.7	20.2	92	82.4	6.4	2.9	3.7	1
106.	Khengaon	V	23.5	13.7	121	87.2	6.5	1.7	2.8	1
107.	Kallolli	V	24.7	15.5	170	88.3	6.2	1.6	2.4	1
108.	Mudolgi	V	35.2	22.5	152	68.6	13.2	7.5	7.8	1
109.	Konjalgi	V	18.3	18.8	192	81.8	9.6	2.6	3.5	1
110.	Shindi-Kulubef	V	29.8	18.4	139	40.3	48.9	3.1	3.0	1
111.	Hukkeri	4	13.7	37.8	182	48.5	12.9	14.0	21.8	1
112.	Sankeswar	4	14.1	44.2	148	32.0	23.2	21.6	20.4	5
113.	Yelimnolli	V	20.4	22.3	106	85.9	2.9	1.2	4.8	1
114.	Bagewadi	V	12.5	29.9	130	73.2	8.4	10.0	6.1	1
115.	Yamkenmardi	V	13.5	33.0	145	47.6	22.9	16.5	12.3	5

Appxendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
116.	Ramdurg	4	20.9	40.0	96	16.4	48.2	15.4	18.2	1
117.	Katkol	V	9.3	22.2	146	71.0	14.0	6.4	6.5	1
118.	Saundatti-Yellamma	4	22.6	28.5	124	52.2	9.8	13.7	20.3	1
119.	Murgod	V	18.7	27.8	145	63.9	15.4	9.2	9.2	2
120.	Manoli	V	19.9	31.8	177	57.7	21.7	11.4	6.1	2
121.	Bailhongal	4	13.3	41.5	121	34.3	14.2	25.1	22.5	1
122.	Bodwad	V	12.8	24.7	222	81.2	7.0	2.9	4.7	1
123.	Kittur	V	42.7	45.7	152	45.6	26.3	10.2	13.0	4
124.	Mugutkan	V	17.7	30.0	147	73.9	12.3	6.6	5.9	4
125.	Belgaum	4	24.6	58.8	259	5.3	26.2	27.1	38.3	9
126.	Belgaum(R)	V	105.1	41.7	215	10.8	14.4	12.3	46.5	5
127.	Madhanpur	V	27.9	41.3	131	24.7	53.9	6.4	11.3	1
128.	Anagol	V	39.8	46.5	249	24.7	25.4	13.7	25.4	1
129.	Yallur	V	26.0	23.3	140	69.7	9.6	2.9	7.9	1
130.	Majagaon	V	17.7	26.7	112	62.1	15.9	3.3	11.1	1
131.	Bagewadi	V	17.1	34.3	124	52.6	19.5	10.0	10.2	5
132.	Khanapur	5	31.6	48.3	228	22.4	22.9	18.5	29.9	3
133.	N.Mogue	V	NA	42.9	197	34.0	16.9	23.4	20.7	1
134.	Karwar	3	21.0	55.7	196	6.5	14.4	19.9	46.3	2
135.	Ankola	V	NA	46.8	192	40.9	13.9	16.2	26.0	2
136.	Kumta	4	9.0	53.1	225	16.0	22.9	23.9	31.5	2
137.	Gokarn	5	1.7	46.4	166	35.4	9.9	15.1	33.1	1
138.	Kondli(Hegde)	V	8.6	30.3	124	63.9	8.0	8.5	14.7	2
139.	Honnavar	4	7.6	48.7	244	7.1	22.9	21.4	36.9	3
140.	Bhatkal	4	23.9	43.9	342	15.1	16.1	26.6	36.4	3
141.	Kondli (Siddapur)	V	31.6	51.8	159	22.3	27.1	22.8	21.9	3
142.	Sirsi	3	60.6	55.7	182	5.9	23.3	28.6	33.9	3
143.	Haliyal	4	26.4	40.4	178	30.1	15.5	17.5	30.8	3
144.	Dandeli	5	4172.2	44.5	92	0.5	64.5	6.5	12.7	5
145.	Kumbarkop	V	NA	36.7	145	0.1	30.5	17.2	16.3	1
146.	Manki(Honavar)	V	11.8	17.3	139	50.6	6.6	14.3	14.3	2
147.	Hubli-Dharwar	1	26.7	50.3	240	7.3	29.8	28.8	28.4	9
148.	Alnavar	V	31.0	37.0	201	32.2	12.1	26.6	24.1	4
149.	Amminbhavi	V	17.1	19.4	111	83.1	7.8	3.4	3.8	1
150.	Hebli	V	22.4	26.3	131	78.5	11.9	4.5	5.0	2
151.	Kalghatgi	V	22.0	42.0	170	34.2	22.6	19.2	20.2	2
152.	Savanur	4	14.5	29.0	177	53.8	14.4	12.7	14.2	1
153.	Shiggaon	V	28.0	33.4	180	56.7	12.1	8.9	13.6	5
154.	Shahbazar	V	NA	33.7	183	40.5	15.0	17.7	21.0	1
155.	Hangal	4	25.0	37.2	189	46.2	12.8	12.8	24.8	1
156.	Akki-Aluk	V	27.0	41.7	221	55.8	15.8	13.9	13.7	1
157.	Hirekerur	V	25.0	40.0	220	38.1	12.9	26.1	18.9	1
158.	Masur	V	34.1	36.0	142	75.1	5.6	9.2	8.7	1*
159.	Rattihalli	V	22.4	45.1	231	58.8	11.2	18.9	9.8	1
160.	Ranibennur	3	23.8	40.4	183	22.7	29.6	20.6	20.4	7

Appendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
161.	Tumminkatti	V	4.1	37.0	134	36.5	47.7	10.4	6.5	1
162.	Byadagi	4	15.7	42.4	178	23.5	16.2	29.3	26.0	3
163.	Motebennur	V	17.5	35.2	123	72.7	8.0	6.4	6.3	5
164.	Haveri	3	27.8	44.6	205	16.5	18.2	26.4	29.4	7
165.	Agadi	V	8.1	32.9	132	76.2	12.0	6.5	4.4	1
166.	Guttal	V	27.2	29.9	132	75.6	8.2	6.8	6.5	1
167.	Shirahatti	5	17.1	37.3	176	46.0	12.1	9.9	21.7	1
168.	Lakshmeswar	4	19.9	34.5	149	49.9	20.4	12.2	12.8	1
169.	Shiggali	V	24.3	34.3	111	53.6	32.4	6.3	5.3	1
170.	Kundagol	5	19.1	41.4	131	62.3	8.3	9.3	18.1	3
171.	Saunshi	V	23.3	----	122	77.3	7.1	7.3	7.0	1
172.	Gudgeri	V	27.5	45.6	190	77.9	1.1	6.5	9.3	1
173.	Unkal	V	21.7	31.2	185	61.9	16.0	10.5	9.8	4
174.	Byahatti	V	24.6	26.2	123	82.7	6.9	2.7	5.9	1
175.	Navalgund	4	23.9	33.7	140	55.6	14.3	10.5	14.0	3
176.	Annigeri	4	50.8	32.8	127	70.0	11.3	8.4	8.6	3
177.	Morab	V	29.7	34.1	138	86.3	6.2	2.4	4.6	1
178.	Nargund	4	37.4	30.9	112	44.8	21.1	15.8	15.3	3
179.	Ron	4	21.3	33.7	95	67.6	8.1	9.9	13.2	1
180.	Gajendragad	4	23.2	31.4	96	31.2	41.6	13.9	9.3	1
181.	Naregal	4	19.1	31.0	85	79.0	6.7	4.6	6.2	1
182.	Abhigeri	V	21.8	28.6	74	88.0	5.2	2.1	3.7	1
183.	Gadag-Betgeri	2	17.0	48.0	173	12.2	30.4	28.8	25.0	5
184.	Mulgund	V	18.6	30.2	149	78.6	9.2	5.3	6.4	1
185.	Kurtakoti	V	18.7	26.6	135	86.6	5.9	2.2	0.9	1
186.	Hombal	V	32.6	31.7	82	85.5	4.5	3.4	4.8	1
187.	Lakkundi	V	14.6	30.9	104	68.7	18.9	4.4	5.0	1
188.	Mundargi	V	28.2	35.9	132	46.3	17.0	12.5	17.6	1
189.	Dambal	V	28.2	22.8	99	79.6	9.8	3.7	5.9	1
190.	Koppal	4	12.8	31.5	182	29.7	15.8	20.9	22.5	7
191.	Munirabad	5	-65.9	39.9	147	3.4	13.2	15.1	52.9	7
192.	Kinhal	V	5.5	26.9	110	37.8	39.7	6.4	15.8	1
193.	Yelburga	V	33.1	23.5	156	63.2	10.6	4.0	22.1	1
194.	Kuknooru	V	7.9	30.7	122	56.8	18.5	7.7	15.0	1
195.	Kushtagi	5	18.5	30.6	158	54.7	8.3	11.7	20.5	7
196.	Hanumsagar	V	1.9	19.2	106	55.9	28.6	3.8	11.2	1
197.	Tawargeri	V	5.0	21.1	164	53.8	21.0	11.3	13.1	3
198.	Lingsugur	5	22.1	27.0	125	49.2	10.1	13.1	19.0	2
199.	Mudgal	5	26.4	18.8	124	63.0	12.2	10.0	12.3	3
200.	Maski	V	27.7	23.5	149	33.1	19.2	13.7	30.5	3

Appendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
201.	Deodurg	5	10.2	28.9	170	38.2	16.6	15.9	23.6	1
202.	Raichur	2	17.2	35.0	199	7.6	15.5	31.6	38.8	7
203.	Manvi	5	10.3	21.5	142	37.9	15.1	13.3	28.7	3
204.	Kowtal	V	35.8	17.9	123	75.0	7.4	4.7	8.4	3
205.	Kalluru	V	58.2	12.1	93	89.5	2.2	2.1	5.7	2
206.	Kurdi	V	23.6	17.3	120	82.5	5.8	2.6	8.7	1
207.	Sindhanur	5	25.8	23.1	135	48.6	5.0	11.2	26.3	2
208.	Gangavathi	4	17.0	22.4	131	38.8	11.8	19.2	23.2	3
209.	Kanakagiri	V	10.2	16.6	128	66.6	13.3	7.4	10.8	1
210.	Siruguppa	V	37.6	22.2	145	48.7	11.1	11.0	26.2	2
211.	Tekkalkota	V	21.8	13.8	143	65.1	8.3	3.9	21.9	3
212.	Bellary	2	21.8	42.7	230	3.9	23.4	28.6	39.2	5
213.	Kudathini	V	10.0	17.7	83	76.9	7.0	4.7	6.1	3
214.	Yemmiganur	V	17.6	13.3	67	86.3	4.2	1.8	6.9	1
215.	Hospet	2	37.8	28.7	152	28.9	19.9	17.5	27.3	5
216.	Amaravathi	5	1187.2	30.3	169	4.7	27.8	4.6	28.6	4
217.	Kamalapur	4	69.7	21.5	108	47.4	8.9	7.1	20.3	1
218.	Kampli	4	69.0	24.1	105	51.2	21.5	9.8	12.8	1
219.	Mariyammenahalli	V	NA	18.5	142	66.1	9.3	9.4	12.2	4
220.	Sandur	V	11.4	29.6	198	89.6	10.1	10.6	23.2	1
221.	Hadagalli	V	26.7	26.8	173	59.9	7.8	9.9	18.8	1
222.	Harapanahalli	4	25.5	28.2	195	40.7	11.1	13.2	29.7	3
223.	Kothur	4	17.2	40.7	180	35.7	16.9	20.9	24.4	3
224.	Kudligi	V	24.4	23.0	162	86.0	10.9	7.0	24.8	3
225.	Molakalmuru	6	17.4	43.6	170	15.5	35.4	16.0	25.9	1
226.	Tagalur	5	24.8	48.0	176	41.0	9.5	12.7	24.3	5
227.	Challakere	4	54.3	40.1	173	18.5	20.4	19.7	29.1	3
228.	Nayakanhatti	6	29.8	35.7	127	59.8	12.6	9.3	12.8	1
229.	Chitradurga	3	32.9	53.1	222	6.6	17.1	28.2	36.8	9
230.	Turuvanur	6	25.5	37.4	93	61.9	10.6	2.9	11.1	1
231.	Doddasiddavanahalli	V	12.6	30.9	82	79.3	6.9	2.0	8.0	1
232.	Hiriyur	4	134.6	38.7	143	41.4	16.0	13.8	22.4	7
233.	Hosadurga	5	36.0	45.9	204	18.9	19.9	25.9	28.2	1
234.	Holalkere	5	22.2	43.5	185	38.4	10.0	13.4	31.6	3
235.	Davanagere	2	39.5	44.5	197	3.4	37.7	26.2	26.5	7
236.	Mayakonda	6	13.3	32.0	127	66.6	11.5	5.0	12.7	3
237.	Harihar	3	43.4	45.0	230	8.9	49.9	16.6	18.4	8
238.	Channagiri	5	30.6	38.0	145	36.0	15.9	12.7	29.4	3
239.	Bhadravati	2	55.0	41.6	143	6.5	55.8	9.6	20.5	5
240.	B.R.Project		NA	36.1	230	1.4	0.8	2.4	5.6	1
241.	Shimoga	2	37.1	49.0	83	8.7	20.2	28.6	36.6	5
242.	Kumsi	6	28.0	36.6	67	56.7	7.5	7.2	15.9	5
243.	Honnali	5	11.6	35.2	152	32.6	12.6	18.0	29.0	3
244.	Nyamathi	5	5.2	42.6	169	32.2	14.9	22.9	18.6	1
245.	Shikaripur	4	62.1	33.7	108	39.4	12.3	16.6	23.5	1

Appendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
246.	Shiralkoppa	5	49.1	41.9	105	21.7	23.7	24.3	24.7	1
247.	Sorab	6	33.4	50.3	141	15.2	22.3	17.3	4.1	1
248.	Sagar	3	62.8	50.4	198	3.4	25.5	30.1	33.8	5
249.	Karga Project Area	3	NA	21.7	173	0.7	8.6	3.4	7.4	1
250.	Hosdnagar	6	75.0	45.3	195	14.3	20.1	17.5	40.2	1
251.	Thirthahalli	5	36.2	52.1	180	7.6	17.3	21.8	43.5	3
252.	Coondapur	4	8.6	37.1	162	14.9	22.1	20.7	28.9	2
253.	Gangolli	5	-24.4	40.3	221	7.3	12.7	28.5	19.9	2
254.	Uppunda	V	9.9	27.1	136	37.5	11.4	5.7	10.6	2
255.	Shiroor	V	10.0	19.3	145	44.1	11.6	20.2	11.8	2
256.	Udipi	3	20.3	61.6	240	5.2	26.4	30.1	35.4	2
257.	Malpe	4	11.0	44.9	145	16.3	30.2	10.3	24.4	2
258.	Tonse West	5	23.4	36.7	155	15.3	20.5	14.5	18.8	1
259.	Shivalli	V	25.3	39.7	124	55.0	15.7	5.3	17.8	2
260.	Udyavar	V	10.1	33.5	146	31.6	18.2	8.8	15.4	2
261.	Perdoor	V	15.1	23.3	88	78.3	6.1	5.9	8.5	2
262.	Tonse East	V	NA	50.0	211	30.9	15.5	16.8	27.2	2
263.	Shirva	V	13.3	41.0	160	58.8	13.0	9.7	15.0	1
264.	Hejmadi	V	7.9	43.0	169	34.4	6.5	9.1	15.0	2
265.	Nadsal	V	NA	45.4	172	38.6	17.3	15.9	17.2	2
266.	Uppoor	V	-3.6	39.6	121	78.8	3.9	5.8	6.7	1
267.	Karkal	4	12.4	36.1	224	13.0	26.6	21.9	34.5	2
268.	Nitta	V	-19.4	33.0	105	71.7	8.6	4.0	11.4	1
269.	Kukkundoor	V	22.4	33.5	105	70.6	9.9	4.9	11.5	2
270.	Mangalore	1	21.9	57.0	178	1.2	5.2	30.7	31.6	7
271.	Ullal	4	NA	33.1	127	7.4	44.1	20.2	15.1	2
272.	Padavu	5	26.1	38.2	160	11.4	39.3	13.4	19.9	2
273.	Kankanadi	5	33.8	47.8	131	4.9	50.7	12.6	27.3	2
274.	Someswar	5	NA	32.1	178	13.5	42.7	12.8	21.4	1
275.	Mulki	4	4.5	53.9	171	25.6	19.6	17.6	28.3	2
276.	Suratkal	V	-33.7	39.3	133	42.0	23.7	9.3	14.9	2
277.	Panambur	V	-26.9	35.2	111	32.5	28.7	9.5	13.0	2
278.	Talipady	V	NA	40.7	162	49.0	25.4	9.2	14.4	1
279.	Buntwal	V	NA	43.6	134	19.1	38.7	17.3	19.8	2
280.	Buntwalmuda	V	NA	32.00	105	29.2	44.2	9.9	13.4	2
281.	Vittal	V	24.3	31.0	137	35.8	17.1	9.5	27.3	1
282.	Kolnad	V	-3.8	27.6	97	74.2	11.7	2.7	5.1	1
283.	Puttur	4	11.6	75.1	205	9.3	17.3	28.7	40.1	2
284.	Mudigere	6	41.8	57.9	172	7.0	12.9	27.8	41.8	1
285.	Mavinkere	V	41.4	17.6	79	41.2	4.6	6.2	22.9	1
286.	Sringeri	6	19.7	60.1	209	13.2	16.8	21.7	43.2	1
287.	Koppa	6	70.2	54.2	164	6.6	15.9	30.2	37.8	1
288.	Narasimharajapura	5	67.3	51.9	214	20.2	14.1	18.1	40.0	1
289.	Tarikere	4	26.6	39.9	189	23.8	12.5	19.2	27.0	5
290.	Ajjampur	5	17.8	40.7	167	34.4	13.5	16.5	30.0	3

Appendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
291.	Kadur	4	40.3	36.1	153	27.4	16.0	20.6	28.5	5
292.	Birur	4	21.3	35.6	183	32.0	11.4	16.8	27.9	5
293.	Chikmagalur	3	39.1	52.3	212	10.0	20.2	24.1	36.6	3
294.	Belur	5	38.5	47.9	212	11.4	26.0	25.4	30.9.	3
295.	Manjrabad	5	42.3	53.2	188	6.8	14.9	25.6	42.7	3
296.	Alur	6	24.7	37.3	154	47.0	9.8	12.6	26.5	3
297.	Arkalgud	5	12.5	35.6	133	41.8	15.1	14.8	23.4	1
298.	Konanur	6	33.7	35.7	195	43.9	15.5	15.7	20.9	1
299.	Holenarasipur	4	8.6	43.8	188	25.5	19.6	17.4	30.4	5
300.	Hassan	3	29.4	56.6	245.	7.4	20.4	27.7	39.4	5
301.	Arasikere	4	10.9	20.5	209	6.0	16.4	35.7	33.9	5
302.	Lakshmipuram	6	24.7	69.0	285	--	11.2	37.2	43.8	3
303.	Banavara	6	NA	44.1	254	41.0	11.9	19.6	25.1	3
304.	Channarayapatna	5	19.5	49.0	198	18.1	19.8	25.9	32.0	3
305.	Sravanabelabola	6	11.0	37.7	129	38.7	28.9	12.5	17.2	1
306.	Kunigal	4	18.6	46.9	209	29.2	16.4	17.7	28.9	4
307.	Turuvekere	6	33.5	47.5	97	21.3	20.6	13.7	30.5	2
308.	Tiptur	4	31.8	47.0	208	6.1	20.1	35.5	29.3	4
309.	Gubbi	5	19.6	42.9	202	29.8	18.2	19.4	22.1	4
310.	Chikkanaya-kanahalli	4	23.7	43.6	140	20.0	25.7	12.1	23.2	2
311.	Sira	4	26.5	46.3	178	19.2	35.0	19.1	18.6	4
312.	Pavagada	5	32.0	42.4	166	27.1	14.8	15.6	27.2	2
313.	Y.N.Hoskote	6	19.3	34.0	181	24.7	34.5	16.3	22.7	1
314.	Madhugiri	4	108.2	49.8	218	17.9	18.8	22.2	32.5	1
315.	Koratagere	6	16.4	46.8	216	37.9	12.9	17.1	23.6	1
316.	Tumkur	3	31.3	54.8	255	9.2	21.7	27.8	36.7	7
317.	Gauribidanur	5	26.4	41.7	205	32.7	12.5	19.5	31.3	4
318.	Manchenahalli	6	22.6	33.2	144	52.2	12.7	14.5	14.7	1
319.	Gudibanda	6	22.9	37.4	148	59.8	10.0	7.1	19.9	1
320.	Bagepally	6	20.8	43.3	183	46.6	8.6	10.0	30.6	3
321.	Chikballapur	3	13.9	43.3	197	22.8	19.1	23.5	24.9	6
322.	Chintamani	4	36.3	46.6	191	13.4	22.7	29.6	28.3	4
323.	Srinivaspur	5	14.0	42.0	233	22.2	11.8	27.6	31.9	4
324.	Siddlaghatta	4	36.5	34.8	201	24.5	38.8	15.6	33.1	6
325.	Kolar	3	19.9	50.6	224	11.5	22.9	26.1	33.1	6
326.	Mulbagal	4	32.7	37.6	168	43.0	13.5	17.6	20.9	5
327.	Kolar Gold Fields	1	-7.7	35.9	245	21.7	4.9	9.7	13.6	5
328.	Bangarpet	4	11.1	52.2	236	6.8	15.6	42.2	31.1	6
329.	Malur	5	9.4	38.5	170	41.1	13.3	16.7	23.9	5
330.	Hoskote	5	9.1	40.2	179	40.9	15.2	15.8	22.2	5
331.	Devanahalli	5	-0.1	37.9	168	44.7	14.0	13.0	24.3	6
332.	Vijayapura	5	27.4	16.1	187	40.4	17.3	18.9	20.2	1
333.	Doddaballapur	3	50.8	42.7	199	8.2	62.2	10.8	15.1	3
334.	Nelamangala	5	8.9	50.6	202	20.0	19.3	21.6	32.4	7
335.	Thyamagondlu	5	0.3	34.7	197	37.5	16.0	18.9	24.0	3

Appendix I - (contd.)

1	2	3	4	5	6	7	8	9	10	11
336.	Magadi	4	31.0	42.4	194	24.6	31.7	19.6	20.1	1
337.	Bangalore	1	40.4	50.1	211	5.4	34.7	20.2	33.4	14
338.	Devarajevana-halli	4	64.7	38.4	225	0.3	37.1	23.3	34.9	4
339.	Jalahalli	4	9.7	61.4	94	0.7	31.8	1.2	65.4	1
340.	Jodikempapura	5	38.6	30.0	197	18.5	41.8	9.0	23.5	1
341.	Kethamarana-halli	3	99.1	47.5	204	12.1	55.9	9.7	32.0	1
342.	Kadugandana-halli	6	11.4	29.4	152	5.4	49.4	7.5	19.1	1
343.	Yelahanka	5	-4.6	39.5	159	18.2	41.4	14.3	22.1	4
344.	Yesavantapur	4	79.8	43.3	207	1.7	41.7	19.4	24.9	6
345.	H.A.L.	3	97.5	41.8	207	13.1	55.1	3.7	18.4	5
346.	Anekal	4	13.1	44.6	156	23.8	33.4	15.9	21.6	5
347.	Sarjapura	6	13.5	32.3	200	41.6	13.4	14.8	29.5	5
348.	Ramanagar	4	9.2	40.6	215	18.2	33.3	18.5	25.6	1
349.	Channapatna	3	10.1	44.2	215	11.2	31.7	26.9	26.0	1
350.	Kanakapura	4	17.6	40.1	208	20.1	26.9	17.9	30.3	1
351.	Harohalli	V	14.3	27.3	140	60.8	11.4	7.0	18.5	1
352.	Malavalli	4	12.4	30.3	221	45.6	13.6	15.6	20.3	1
353.	Belakavadi	6	5.9	22.7	170	66.7	13.0	4.1	13.3	1
354.	Maddur	5	52.3	35.3	177	32.5	14.6	19.2	28.3	5
355.	Mandya	3	57.6	48.3	218	5.7	31.6	18.9	34.6	5
356.	Mandya(R)	V	72.1	19.7	115	62.4	19.5	3.9	7.3	2
357.	Suggr Town	5	NA	47.7	309	0.7	84.5	2.3	9.9	2
358.	Keragodu	V	57.8	14.2	163	80.3	6.3	0.6	11.1	1
359.	Guttalu	V	52.7	26.0	184	35.0	34.8	10.1	14.7	2
360.	Nelamangala	5	18.8	48.4	185	29.8	15.3	20.4	31.6	3
361.	Bellur	6	15.1	41.9	183	50.2	13.8	14.3	20.8	2
362.	Krishnaraja-pet	5	19.5	34.7	162	38.2	17.0	10.7	27.2	1
363.	Pandavapur	5	30.6	39.6	168	30.9	14.1	16.8	27.9	5
364.	Melkote	6	-2.3	48.2	122	23.7	43.3	8.1	23.2	1
365.	Srirangapatna	4	9.5	40.0	207	32.9	15.1	11.8	35.0	5
366.	Arakere	V	17.3	21.3	120	82.0	6.0	3.2	7.5	1
367.	Mysore	1	3.9	52.9	255	4.3	26.1	27.9	34.4	5
368.	Periyapatna	5	27.2	34.0	171	43.4	10.2	11.8	26.9	3
369.	Kollegal	3	19.4	37.7	141	21.0	29.6	20.4	24.0	1
370.	Kongrolli	V	32.4	14.7	68	80.2	8.9	1.2	3.6	1
371.	Maduvanahalli	V	6.3	21.4	108	83.5	8.2	2.6	4.1	1
372.	Gowdalli	V	34.3	17.5	106	78.1	2.7	6.9	10.0	1
373.	Matalli	V	53.4	11.8	103	58.1	7.1	2.4	30.8	1
374.	Bandalli	V	45.3	16.1	109	77.6	5.9	4.0	2.5	1
375.	Yelandur	6	12.9	28.1	188	25.7	17.0	13.4	38.2	1

Appendix I - (concld.)

1	2	3	4	5	6	7	8	9	10	11
376.	Agra-Mamballi	5	11.9	21.6	141	29.7	32.0	8.9	20.4	1
377.	Chamarajanagar	3	9.2	31.4	163	29.4	18.6	19.5	26.9	5
378.	Gundlupet	4	32.5	32.3	197	25.3	31.5	14.3	23.6	3
379.	Terakanambi	V	12.2	20.4	108	49.2	13.1	12.3	17.3	21
380.	Nanjangud	4	5.2	42.5	240	14.7	21.8	20.8	35.6	5
381.	Tagadur	V	7.0	18.9	125	78.0	8.9	3.1	8.1	1
382.	Heggadadevana kote	6	53.6	29.6	134	43.8	4.9	9.2	31.4	3
383.	Sargur	6	26.6	29.0	139	27.1	20.6	17.9	23.6	1
384.	Hunsur	4	14.1	41.6	171.	34.3	20.2	13.8	24.3	3
385.	Krishnarajanagar	5	22.3	48.6	210	20.3	16.0	18.2	33.9	3
386.	Mirle	6	40.1	29.4	219	70.6	11.9	5.4	12.9	1
387.	Saligrama	5	8.0	25.2	201	51.5	12.4	10.6	18.2	1
388.	Tirumakudalu-Narasipur	5	9.2	41.0	215	14.6	24.3	22.1	34.3	1
389.	Bannur	5	15.2	20.5	192	49.2	10.0	15.5	22.6	1
390.	Mugur	5	0.7	16.4	134	60.6	26.3	5.5	4.8	1
391.	Talkad	5	-0.6	35.9	190	73.6	8.4	4.5	11.8	1
392.	Hebbale	6	NA	25.3	95	83.2	5.6	2.9	5.6	1
393.	Kodlipet	6	NA	51.0	207	29.7	12.9	26.1	27.0	1
394.	Kushalnagar	6	NA	50.9	173	7.6	13.8	22.4	42.6	2
395.	Somwarpet	5	NA	46.9	141	16.9	15.6	15.2	37.6	3
396.	Suntikoppal	6	NA	51.0	106	0.4	5.9	29.8	37.1	1
397.	Savinarsanthe	6	NA	43.5	189	12.5	16.8	23.7	32.1	1
398.	Mercara	4	42.9	63.2	180	2.0	14.8	23.7	50.4	3
399.	Virajpet	5	32.6	55.0	172	2.8	15.8	33.5	41.6	3
400.	Gonikoppal	6	NA	46.1	111	1.9	24.1	32.2	35.2	2
401.	Ponnampet	6	NA	50.2	150	8.4	20.8	20.2	42.2	1

Note: (1) NA = Data Not Available;

(2) V = Large-sized Village;(5000+ Population);

(3) Arabic numerals in Col.3 denote Class-Size of the Town.

APPENDIX II

LIST OF NON-AGRICULTURAL SETTLEMENTS

Sl. No.	Name of Settlement	Class size	Non-Agricultural Workers engaged in			No. of Tri-angle	Cir-cle
			Manu-fac-turing	Trans-port, Trade & Com-merce	Ser-vices		
1	2	3	4	5	6	7	8
1.	Bhalki	5	32.89	28.93	38.19	II	A3
2.	Bidar	3	20.13	34.46	45.42	I	A1
3.	Chitguppa	4	49.82	17.08	43.10	III	A
4.	Humnabad	4	19.59	24.59	55.03	I	A
5.	Basava Kalyan	4	55.66	26.47	17.87	IV	A
6.	Gubbalgundi	V	43.36	14.19	42.44	III	A
7.	Hallikhed	V	41.07	20.36	38.56	II	A1
8.	Aland	4	66.57	14.97	18.46	III	A
9.	Gulbarga	2	39.56	26.15	34.29	III	A2
10.	Chincholi	5	30.94	17.27	52.78	II	A
11.	Chitapur	4	37.50	18.30	44.20	II	A1
12.	Rawoor	V	35.32	20.84	43.84	II	A1
13.	Bhankur	V	78.67	4.76	16.57	III	A
14.	Nalwar	V	31.20	14.10	54.70	II	A
15.	Halkatti	V	16.23	19.97	63.79	II	A
16.	Shahabad	3	49.17	21.42	29.42	III	A
17.	Sedam	5	20.94	29.81	49.25	I	A1
18.	Shahapur	4	50.53	22.61	26.87	III	A
19.	Shorapur	4	49.00	18.23	32.77	III	A
20.	Gurmatkal	5	70.20	8.42	21.39	III	A
21.	Yadgir	3	41.09	18.83	40.08	III	A1
22.	Afzalpur	V	19.42	4.74	75.84	II	A
23.	Chadchana	V	49.12	18.29	32.59	III	A
24.	Bijapur	2	31.04	29.63	39.33	II	A3
25.	Talikot	4	37.56	31.91	30.52	IV	A3
26.	Muddebihal	V	28.49	33.41	38.10	I	A3
27.	Ilkal	3	82.79	9.70	7.52	IV	A
28.	Sulibhavi	4	83.27	7.90	8.83	III	A
29.	Gudur	V	80.99	10.93	8.08	IV	A
30.	Kamatgi	V	91.05	3.00	5.75	III	A
31.	Guledgud	3	77.91	10.84	11.25	III	A
32.	Kerur	V	80.47	11.90	7.63	IV	A
33.	Bagalkot	3	37.85	33.77	28.38	IV	A3.
34.	Mudhol	4	51.91	19.32	28.77	III	A
35.	Mahalingapur	4	77.37	10.61	12.02	III	A

Appendix II - (contd.)

1	2	3	4	5	6	7	8
36.	Jamkhandi	3	48.12	23.95	27.92	III	A1
37.	Rabkavi-Banhatti	3	81.51	8.40	10.09	III	A
38.	Hunnur	V	85.33	4.73	9.94	III	A
39.	Athani	4	31.79	25.97	43.23	II	A2
40.	Chikodi	4	38.98	26.50	34.51	III	A2
41.	Nippani	3	47.37	20.25	32.38	III	A1
42.	Gokak	3	37.17	27.69	35.13	III	A3
43.	Konnur	3	87.20	6.14	6.66	III	A
44.	Shindi-Kurbade	V	90.20	5.36	4.44	IV	A
45.	Sankeshwar	4	38.97	29.83	31.21	III	A3
46.	Ramadurg	4	67.92	14.29	17.79	III	A
47.	Bail Hongal	4	33.33	34.07	32.61	V	A3
48.	Kittur	V	60.47	16.90	22.62	III	A
49.	Belgaum	1	31.58	26.80	41.62	II	A2
50	Belgaum(R)	V	33.49	11.96	54.52	II	A
51.	Madhavpur	V	81.83	6.30	11.87	III	A
52.	Anagol	V	49.23	17.16	33.61	III	A
53.	Khanapur	5	39.39	20.93	39.67	III	A2
54.	Nandagad-mogue	V	37.39	31.27	32.34	III	A3
55.	Karwar	3	30.44	20.35	49.21	II	A
56.	Ankola	V	30.72	21.65	47.62	II	A1
57.	Kumta	4	37.03	24.80	38.16	II	A2
58.	Gokarn	5	32.89	18.37	48.74	II	A
59.	Kondli	V	40.34	32.22	27.44	IV	A2
60.	Honnavar	4	35.11	21.93	42.96	II	A1
61.	Bhatkal	4	25.24	26.73	48.03	I	A1
62.	Kondli(Siddapur)	V	43.97	26.78	29.25	III	A2
63.	Sirsi	3	36.46	26.26	37.28	III	A2
65.	Haliyal	4	30.06	21.89	48.05	II	A1
66.	Dandeli	5	80.47	6.12	13.42	III	A
67.	Kumbarkop	5	66.06	15.76	18.19	III	A
68.	Hubli-Dharwar	1	38.57	28.98	32.46	III	A3
69.	Alnavar	V	24.80	36.80	38.40	I	A2
70.	Kalghatgi	V	40.52	29.71	29.78	IV	A2
71.	Shabazar	V	36.03	26.20	37.77	II	A3
72.	Hangal	4	27.78	20.99	51.23	II	A
73.	Hirekerur	V	27.80	41.03	31.16	VI	A2
74.	Ranibennur	3	53.16	21.89	24.96	III	A
75.	Tumminkatti	V	81.18	11.36	7.46	IV	A
76.	Byadgi	4	27.40	33.23	39.36	I	A2
77.	Haveri	3	35.39	28.74	35.86	II	A3
78.	Shirahatti	5	45.49	16.58	37.92	II	A
79.	Gajendragad	4	72.32	16.86	10.82	IV	A
80.	Gadag-Betgeri	2	44.50	28.13	27.37	IV	A2

Appendix II - (contd.)

1	2	3	4	5	6	7	8
81.	Koppal	4	39.31	26.60	34.09	III	A2
82.	Munirabad	5	28.48	14.14	57.38	II	A
83.	Kinhal	V	70.96	6.91	22.12	III	A
84.	Maski	V	35.90	8.34	44.76	II	A
85.	Deodurg	5	40.02	21.46	38.52	III	A1
86.	Raichur	2	23.51	28.31	48.18	I	A1
87.	Manvi	5	36.06	15.78	48.16	II	A
88.	Gangavathi	4	30.75	29.31	39.96	II	A2
89.	Bellary	2	28.25	27.18	44.57	II	A1
90.	Hospet	2	36.81	22.74	41.45	II	A2
91.	Amaravathi	5	63.46	4.45	32.09	III	A
92.	Harpanahalli	4	27.98	19.82	52.20	II	A
93.	Kottur	4	30.70	27.50	41.81	II	A2
94.	Molakalmuru	6	57.67	16.81	25.51	III	A
95.	Jagalur	5	41.51	20.48	38.01	III	A1
96.	Challakere	4	40.06	21.72	38.21	III	A1
97.	Chitradurga	3	33.45	27.12	39.43	II	A2
98.	Hiriyur	4	42.69	20.93	36.37	III	A1
99.	Hosdurga	5	43.17	26.02	30.81	III	A2
100.	Holalkere	5	26.74	20.24	53.03	II	A
101.	Davanagere	2	47.88	24.03	28.09	III	A1
102.	Harihar	3	61.83	17.19	20.99	III	A
103.	Channagiri	5	34.73	18.17	47.10	II	A
104.	Bhadravati	2	64.76	10.45	24.79	III	A
105.	B.R.Project	V	92.99	1.93	5.08	III	A
106.	Shimoga	2	29.89	28.72	41.21	II	A2
107.	Honnali	5	31.50	23.37	45.13	II	A1
108.	Nyamati	5	41.91	29.77	28.41	IV	A2
109.	Shikaripur	4	35.47	25.53	39.00	II	A2
110.	Shiralkoppa	5	37.20	29.61	33.19	III	A1
111.	Sorab	6	32.02	18.59	49.39	II	A1
112.	Sagar	3	34.32	28.65	36.93	II	A3
113.	Kargal Project Area	3	90.67	2.58	6.75	III	A
114.	Hosanagar	6	34.30	18.17	47.53	II	A
115.	Thirthahalli	5	30.04	20.27	49.69	II	A
116.	Coondapur	4	38.57	23.44	38.00	III	A2
117.	Gangolli	5	42.77	31.43	25.81	IV	A2
118.	Uppunda	V	47.23	34.83	17.94	IV	A1
119.	Udipi	3	31.01	26.76	42.23	II	A2
120.	Malpe	4	57.27	13.14	29.59	III	A
121.	Tonse West	5	67.00	15.19	17.81	III	A
122.	Udyavar	V	57.18	22.41	20.42	IV	A
123.	Tonse East	V	31.31	19.96	48.73	II	A
124.	Hegmadi	V	40.94	39.77	19.29	IV	A
125.	Karkal	4	33.28	21.18	45.54	II	A1

Appendix II - (contd.)

1	2	3	4	5	6	7	8
126.	Mangalore	1	43.57	23.91	32.52	III	A1
127.	Ullal	4	71.56	16.29	12.25	IV	A
128.	Padavu	5	71.75	10.37	17.88	III	A
129.	Kankadadi	5	68.19	8.50	23.32	III	A
130.	Someswar	5	62.58	15.57	21.85	III	A
131.	Mulki	4	39.53	22.30	38.17	III	A1
132.	Panambur	V	59.98	26.11	13.91	IV	A
133.	Bantwal	V	62.21	15.32	22.46	III	A
134.	Bantwal-muda	V	76.84	9.21	13.95	III	A
135.	Vittal	V	45.03	11.68	43.28	II	A
136.	Puttur	4	26.51	26.17	47.32	II	A1
137.	Mudigere	6	26.28	26.69	47.03	I	A1
138.	Mavinkere	V	56.25	7.67	36.08	III	A
139.	Sringeri	6	25.74	22.33	51.93	II	A
140.	Koppa	6	27.77	29.71	42.53	I	A 2
141.	Narasimharajapur	5	26.11	21.26	52.63	II	A1
142.	Tarikere	4	40.37	22.02	37.60	III	A1
143.	Ajjampura	5	32.43	23.11	44.46	II	A1
144.	Kadur	4	33.97	25.07	40.96	II	A2
145.	Birur	4	34.39	21.20	44.41	II	A1
146.	Chikmagalur	3	33.08	23.45	43.46	II	A1
147.	Belur	5	38.45	25.66	35.89	III	A2
148.	Manjarabad	5	26.07	25.76	48.16	I	A1
149.	Alur	6	30.50	21.09	48.40	II	A1
150.	Arkalgud	5	44.38	20.32	35.31	III	A1
151.	Konanur	6	41.17	24.47	34.36	III	A2
152.	Holenarasipur	4	40.96	19.91	39.13	III	A1
153.	Hassan	3	28.25	27.28	44. 47	II	A1
155.	Arasikere	4	27.39	34.94	37.66	I	A2
156.	Lakshmipuram	6	18.01	35.29	46.69	I	A
157.	Banabar	6	25.69	32.28	42.03	I	A2
158.	Channarayapatna	5	31.94	30.13	38.93	II	A3
159.	Sravanabelagola	6	60.00	16.93	24.07	III	A
160.	Kunigal	4	36.31	23.25	40.44	II	A2
161.	Turuvekere	6	43.93	16.55	39.52	III	A
162.	Tiptur	4	33.98	34.70	31.33	IV	A3
163.	Gubbi	5	43.40	26.08	30.52	III	A2
164.	Chiknayakanahalli	4	60.79	12.00	27.20	III	A
165.	Sira	4	58.21	19.79	22.00	III	A
166.	Pavagada	5	43.47	18.89	37.64	III	A1
167.	Y.N.Hosakote	6	52.50	16.83	30.67	III	A
168.	Madhugiri	4	36.07	25.12	38.81	II	A2
169.	Koratagere	6	35.03	26.18	38.79	II	A2
170.	Tumkur	3	30.00	28.80	41.20	II	A2

Appendix II - (contd.)

1	2	3	4	5	6	7	8
171.	Gauribidanur	5	23.00	27.50	49.50	I	A1
172.	Chickballapur	3	41.12	27.63	31.25	III	A2
173.	Chintamani	4	37.78	29.14	34.08	I	A
174.	Srinivaspura	5	28.60	31.31	41.09	I	A2
175.	Sidlaghatta	4	66.89	18.38	24.73	IV	A
176.	Kolar	3	35.90	26.19	37.91	II	A2
177.	Mulbagal	4	37.41	26.68	35.91	III	A2
178.	Kolar Gold Fields	1	65.93	13.11	20.96	III	A
179.	Bangarpet	4	22.54	42.24	35.22	VI	A2
180.	Malur	5	32.99	26.74	40.27	II	A2
181.	Hoskote	5	34.48	25.95	39.57	II	A2
182.	Devanahalli	5	28.56	18.78	52.66	II	A
183.	Vijayapura	5	35.45	29.22	35.33	III	A3
184.	Doddaballapur	3	70.91	11.87	17.22	III	A
185.	Nelamangala	5	36.74	23.66	39.60	II	A2
186.	Thyamagondlu	5	29.73	25.07	45.20	II	A1
187.	Magadi	4	49.55	23.62	26.83	III	A1
188.	Bangalore	1	43.12	19.81	37.07	III	A1
189.	Devarayevanahalli	4	40.44	20.76	38.80	III	A1
190.	Jalahalli	4	34.58	1.29	64.13	II	A
191.	Jodi Kempapur	5	57.40	12.07	30.53	III	A
192.	Kadugondanahalli	6	66.69	7.00	26.31	III	A
193.	Kethamaranahalli	3	57.83	9.37	32.80	III	A
194.	Yelahanka	5	55.79	15.63	28.58	III	A
195.	Yeshawanthapur	4	44.97	19.02	26.01	III	A1
196.	H.A.L.	3	70.77	4.55	24.68	III	A
197.	Anekal	4	57.86	17.47	24.67	III	A
198.	Sarjapura	6	25.38	22.72	51.90	II	A
199.	Ramanagar	4	46.25	21.10	32.65	III	A1
200.	Channapatna	4	43.81	27.65	28.54	III	A1
201.	Kanakapura	4	46.99	19.03	33.98	III	A1
202.	Malavalli	4	34.19	29.09	36.72	II	A3
203.	Maddur	5	30.94	26.86	42.20	II	A2
204.	Mandya	3	34.79	21.39	43.82	II	A1
205.	Sugar Town	5	85.59	2.24	12.16	III	A
206.	Guttalu	V	60.74	15.38	23.88	III	A
207.	Nagamangala	5	30.93	25.00	44.07	III	A2
208.	Krishnarajpet	5	45.32	14.50	40.18	III	A
209.	Pandavapura	5	33.55	23.45	43.00	II	A1
210.	Melkote	6	71.40	7.53	21.07	III	A
211.	Srirangapatna	4	29.78	18.51	51.71	II	A
212.	Mysore	1	35.16	27.48	37.36	II	A3
213.	Periyapatna	5	32.26	19.59	48.15	II	A1
214.	Kollegal	3	50.52	20.33	29.15	III	A
215.	Yelandur	6	33.12	15.73	51.15	II	A

Appendix II -(concld.)

1	2	3	4	5	6	7	8
214.	Agaramamballi	5	67.42	9.62	22.96	III	A
215.	Chamarajnagar	3	35.95	24.65	39.40	III	A2
216.	Gundlupet	4	47.78	18.24	33.98	III	A
217.	Nanjangud	4	36.15	22.89	40.96	II	A2
218.	Sargur	6	50.26	21.67	28.07	III	A
219.	Hunsur	4	48.77	16.90	34.33	III	A
220.	Krishnarajanagar	5	35.11	22.15	42.74	II	A1
221.	Saligrama	5	38.54	17.94	33.52	II	A1
222.	T.Narasipur	5	35.78	24.12	40.10	II	A2
223.	Mugur	5	79.33	8.71	11.96	III	A
224.	Kodlipet	6	22.99	33.62	43.39	I	A1
225.	Kushalnagar	6	30.03	21.60	48.37	II	A1
226.	Somawarpet	5	47.85	16.05	36.10	III	A
227.	Suntikoppa	6	38.29	25.79	35.92	III	A2
228.	Sanivarsanthe	6	42.86	23.18	33.96	III	A
229.	Mercara	4	23.22	20.40	56.38	II	A
230.	Virajpet	5	18.56	26.14	55.29	I	A
231.	Gonikoppal	6	31.91	29.78	38.31	II	A3
232.	Ponnampet	6	32.03	20.12	47.84	II	A1

APPENDIX III

LIST OF DECLASSIFIED TOWNS

Sl. No.	Name of Declassified Town	POPULATION	
		1951	1961
1	2	3	4
	BELGAUM		
1.	Shedbal	7,035	8,629
2.	Ainapur	6,738	7,647
3.	Angol	5,824	8,139
4.	Yellur	5,477	6,903
5.	Madhavapur	4,966	6,352
6.	Khadaklat	7,743	9,140
7.	Examba	7,178	8,385
8.	Borgaon	6,441	7,663
9.	Galatga	6,413	7,519
10.	Kognolli	6,004	6,699
11.	Karadga	5,948	6,740
12.	Bhoj	5,762	6,647
13.	Khangaon	6,014	7,427
14.	Yemkanmardi	5,767	6,547
15.	Nandgad	5,356	6,224
16.	Munvalli	6,072	7,283
17.	Murgod	5,374	6,379
18.	Raibag	5,926	8,981
19.	Katkol	5,716	6,476
20.	Kittur	6,746	8,149
	BELLARY		
21.	Hadagalli	7,126	9,031
22.	Sandur	5,967	6,649
23.	Tekkalkota	7,624	9,284
24.	Siruguppa	7,055	9,710
	BIDAR		
25.	Hallikhed	6,273	6,944
26.	Rajeshwar	5,517	6,016
27.	Dubalgundi	5,014	5,200
	BIJAPUR		
28.	Kerur	7,314	8,835
29.	Shirur	6,567	6,999
30.	Kaladgi	5,564	6,439
31.	Managoli	6,227	7,637
32.	Bableshwar	6,418	7,163
33.	Tikota	5,656	6,679
34.	Kakandaki	5,113	5,972
35.	Kamatgi	7,477	8,494
36.	Muddebihal	6,273	8,171

Appendix III - (concld.)

1	2	3	4
	BIJAPUR-(concld.)		
37.	Nalatwad	6,071	6,789
	DHARWAR		
38.	Alnawar	6,107	7,879
39.	Mulgund	7,924	9,398
40.	Hirekerur	5,480	6,847
41.	Kalghatgi	5,210	6,356
42.	Saunshi	4,630	5,709
43.	Gudgeri	4,603	5,709
44.	Kamdolli	3,472	3,789
45.	Mundargi	6,564	8,413
46.	Tumminkatti	5,688	5,919
47.	Bankapur	8,214	9,763
48.	Shiggaon	7,360	9,424
49.	Shigali	4,823	5,996
	GULBARGA		
50.	Gogipet	6,436	3,837
51.	Halkatta	6,328	7,682
52.	Nalwar	5,789	6,151
53.	Afzalpur	4,027	5,210
	NORTH KANARA		
54.	Mavalli	5,941	6,247
55.	Shirali	5,727	6,367
56.	Manki	7,073	7,908
57.	Haldipur	5,670	6,069
58.	Chitkula	6,319	6,504
59.	Majali	5,861	6,308
	RAICHUR		
60.	Kanakagiri	6,155	6,780
61.	Maski	5,866	7,491
62.	Hanumasagar	5,730	5,838
63.	Kuknoor	5,682	6,133
64.	Tawaragere	5,613	5,895
65.	Gurgunta	4,297	4,401
66.	Yelburga	3,760	5,004
67.	Kinhal	5,175	5,460
	SOUTH KANARA		
68.	Buntwal	11,678	8,013

APPENDIX IV

DEFINITION OF TOWN AS PER CENSUS OF INDIA (1872 - 1961)

(Reproduced from Census Of India 1971, Series - 14 MYSORE, PART I - A - Volume I, GENERAL REPORT)

1872

Every place with 5,000 inhabitants and above was treated as town;

1881

Town was defined as every coherent group of houses inhabited permanently by not less than 5,000 people and every 'area' within which Act XX of 1856(Chaukidari Act) or Act XV of 1873(Municipal Act) was in force.

If the houses of several villages formed together a coherent group, with a population as specified above, such group was treated as a town. But if the houses of a village were segregated into distinct groups, which contained more than 5,000 residents, then, though the total population of these groups amounted to 5,000 they were not regarded as towns. Where seperate groups of houses had been united for the purpose of the above Act, it must be considered in each case whether the circumstances required the statistics to be seperated or combined. In the first case the groups were considered separate towns in the later case one town.

1891

Towns included every municipal Corporation, Municipal area or any place brought under similar regulation for police or sanitary purposes, every place where the proportion of the trading and industrial population to the total was equal to or greater than that of the agricultural population, and every other continuous group of houses inhabited by not less than 5,000 people.

1901

Towns included Municipal Corportaion, every Municipality, all Civil lines not included within Municipal limits; every Cantonment and every other continuous collection of houses, permanently inhabited by not less than 5,000 persons, which the Provincial Superintendents decided. Many of the places treated as towns were in reality nothing more than overgrown villages, but it would have been impossible to frame any definition, with the object of excluding such places, without destroying all prospects of uniformity in its application in different parts of India, and even in different parts of the same Province. Most, if not all, Indian Municipal enactments contained a provision that a certain population of the inhabitation of any area which it was proposed to bring under their operation must earn a livelihood by non-agricultural occupations, and it was clearly stated

that this condition has been found to exist as the main test of what constituted as town, rather than, to attempt to introduce a new standard that could not be applied correctly without far more elaborate enquirbes than it would have been possible to carry out.

1911

The definition of town was the same as in 1901. For the purposes of the Census the term included every Municipal Corporation, Municipal Area, all Civil Lines not included within the Municipal limits, every cantonment, and lastly every other continuous collection of houses inhabited by not less than 5,000 persons, which the Provincial Superintendents decided. A few places chiefly in Native States, which did not satisfy the above requirements were also treated as towns for special reasons. Overgrown villages having no urban characteristics were not treated as towns. In framing the definition the object in view was, as far as possible, to treat as towns only places which were of a more or less urban character. In most Provinces there was a provision of the law which prohibited the creation of Municipalities in places which contained a large proportion of persons dependent on agriculture for their subsistence. It may thus be assumed that all places which were under Municipal Government possessed some urban characteritics.

1921

Every Municipality, all Civil lines not included within Municipal limits, every Cantonment and every other continuous collection of houses inhabited by not less than 5,000 persons which the Provincial Superintendents decided was treated as a town for Census purposes. In Indian States, where there were no Municipalities, this definition was extensively applied,. In dealing with such problems the Provincial Superintendents took into consideration the character of population, the relative density of the dwellings, the importance of the places as a centre of trade and historic associations, He also bore in mind that it was undesirable to treat as towns overgrown villages which had no urban characteristics.

1931

Every Municipal Corporation, Municipal Area, Civil lines not included in Municipal limits, Cantonments were treated as towns irrespective of their population size. In respect of other places the town was defined as the continuous collection of houses inhabited by not less than 5,000 persons which the Provincial Superintendent decided. In making this decision consideration was given to (a)the character of the population,(b)relative density of the dwellings(c)importance in trade, historic associations and to avoid treating as towns overgrown villages without urban characteristics.

1941

All places having Municipal Corporation, Municipal Area, All Civil Lines not included in Municipal limits and Cantonments were treated as Urban irrespective of their population size. In other cases a town was defined as the 'continuous' collection of houses inhabited by not less than 5,000 persons possessing definite Urban Characteristics, which the Provincial Superintendent decided.

1951

All places having Municipalities, Cantonments, Civil Lines, Town area committee were treated as Urban Areas irrespective of their population size. In respect of other places a 'town' was regarded as a continuous group of houses inhabited by usually not less than 5,000 persons, which having regard to the character of the population, the relative density of dwellings, the importance of the place as a centre of trade and historic associations, the Superintendent of Census Operations, decided. The chief criterion, however, was the character of the population indicating whether the majority of residents were non-agricultural or non-pastoral by occupation. There must also be the existence of distinct urban characteristics, such as facilities for higher education, Public utility services, local body administration, urban diversions, and recreations.

1961

To qualify an urban area the place should first be either a Municipal Corporation or a Municipal Area or a Town Committee or a Notified Area Committee or Cantonment Board in respect of other towns the following empirical tests were applied:-

(a) A density of not less than 1,000 per square mile;

(b) A population of 5,000;

(c) Three-fourths of the occupations of the working population should be outside of agriculture;

and(d) The place should have, according to the Superintendent of the State, a few pronounced urban characteristics and amenities, the definition of which, although leaving room for vagueness and discretion, yet meant to cover newly-founded industrial areas, large housing settlements, or places of tourist importance which had been recently served with all civic amenities.

NOTE:- In all censuses cities were defined as those towns which had a population of more than 1,00,000. But in a few cases the towns with local importance having population less than 1,00,000 were also treated as cities.

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