SOCIO-ECONOMIC AND DEMOGRAPHIC IMPLICATIONS OF CLASSIFICATION OF SETTLEMENTS INTO RURAL, SEMI-URBAN & URBAN IN INDIA :

A CASE STUDY OF MAHARASHTRA STATE

Dissertation submitted to the School of Social Sciences
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I certify that the dissertation entitled " Socio - Economic and Demographic Implications of the Classification of Settlements into Rural, Semi-urban and Urban in India : A case Study of Maharashtra State," Submitted by (Mrs) Veena Dixit in fulfilment of six credits out of the total of thirty credits for the Degree of Master of Population Studies (M.P.S) of the University, is, to the best of my knowledge, her original work and may be placed before the examiner for evaluation.

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Preface

The Faculty of the Centre for the Study of Regional Development connected with the population programme has remained concerned for some time past with the problems of rural-urban classification of India's population and has been of the view that a three-way-classification of the settlements into rural, semi-urban and urban would be more meaningful and revealing of the Indian reality than the present two-way-classification. The faculty felt that it would be useful to undertake an exercise to reclassify the settlements of any one State in India into the three categories by utilizing several alternative criteria.

With this end in view an exercise was planned to reclassify the settlements of Maharashtra into rural, semi-urban and urban by using the following four different criteria.

a) To consider all urban places with population less than 20,000 and all villages with population more than 5,000 as semi-urban.

b) Without regard to the local government status, to apply the three criteria of the urban definition to those places which have been declared as towns and regard those settlements as semi-urban which do not meet these criteria. Simultaneously, test the rural places on the basis of the same criteria and regard those village as semi-urban which satisfy these requirements.

c) By taking certain demographic characteristics like density, sex ratio, literacy rate, work participation rate of the total and female population, arrive at the category of semi-urban places.

d) By considering the availability of a certain minimum of social amenities in the urban areas to arrive at the category of semi-urban places.

The present study is a part of this major study. An effort has been made here to look at the problem by considering all rural settlements with population 5,000 and above and all urban settlements with population below 20,000 as semi-urban.

The study is divided into six Chapters. Chapter I explains the problem and its objectives. A brief discussion of the related research and scope of the study in relation to area coverage, unit of the study and time perspective has also been given here. Methodology for three-way-classffication has been explained in Chapter II. An introduction of settlement pattern within the different geographical regions of Maharashtra State has been given in Chapter III. Chapter IV presents the findings of the three-way-classification of settlements and their population. An analysis of the socio-economic and demographic implications of classification of settlements in rural, semi-urban and urban is presented in Chapter V. The final chapter summarises the findings and suggestions for policy makers and for future research in this area.

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I express my deep gratitude to Shri R.S.Chari, the Ex.Registrar General,India, Shri Badrinath, the Ex.Deputy Registrar General,India, Shri R.K.Aggarwal, the then Assistant Director of Census Operations, Delhi and Shri Jagdish Singh, Dy.Director Census Operations, Delhi who very kindly agreed to my pursuing higher studies and gave me study leave and extended certain other facilities which could make it possible to complete the M.Phil Course including the present dissertation.

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Veena Dixit

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INTRODUCTION

1.1 Problem for the study:

Rural-urban classification has been a traditional and important classification of human settlements throughout the world. 'The urban and rural dichotomy is often used as yard-stick for international socio-economic comparison and as a rough measure of socio-economic revolution of each country.....[1]

In India, too, the dichotomous i.e. rural and urban classification of settlements has always been considered significant and necessary from the view point of assessing the differential in the social, cultural, economic and demographic characteristics of the population. But 'what is rural? What is Urban ? These are the questions which still echoed in the halls of International seminars and conferences ...'.[2]

A study of the history of the origin of human settlements and their classification as rural and urban reveals

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1. Charls T. Stewart; 'The Rural-Urban Dichotomy' in American Journal of Sociology; 62(2) ; September 1958, p. 152.
2. Ashish Bose; Urbanisation in India; An Inventory of source Material; Bombay Academic Press; 1970, p.70.

that rural and urban classification of settlements is a function of a few socio-economic and demographic factors as well as closely related to administrative, political, cultural and historical considerations,[3&4] The concept of an urban area usually presupposes an environment different from that of rural areas in terms of physical environment, the mode of life and social and political conditions[5] and in defining urban areas, nations have adopted various combinations of demographic, cultural and political criteria to recognise the urban environment. United Nations has identifiedfive major concepts among those used in defining urban areas; administrative areas, population size, local government areas, urban characteristics and predominant economics activities.[6]

In India the dichotomous classification of settlements has been caried out, by the census of India, on the basis

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3. Philip M.Hauser; 'Urbanization; an Over_view, in Philip M.Hauser and Leo F.Schnore (eds); The Study of Urbanisation, New York, John Wiley & Sons, Inc., 1967 pp. 1 - 30.

4. Ralf Turner; The Great Cultural Traditions; Foundation of Civilisation, New York, McGraw Hill, 1941, Vol.I, p.270.

5. Donald J. Bogue; Principles of Demography; New York, John Willey and Sons, Inc., 1969, p. 465.

6. C. Chandrasekaran and K.C.Zachariah; 'Concepts used in defining urban population and data available on its characteristics in countries of Southern Asia'.In UNESCO; Urban-Rural Differences in Southern Asia; Report of Regional Seminar, Delhi, 1962, Delhi, UNESCO Research Centre on Social and Economic Development in South Asia, 1964, pp. 51 - 70.

distinct differentiations of one place from another in relation to some of the socio-economic, demographic and administrative characteristics.[7] For example, at the time of the 1961 and 1971 census, urban areas were defined as :

(a) all places with a Municipality, Corporation, Cantonment or notified town area,

(b) all other places which satisfy the following criteria :-

(i) a minimum population of 5,000

(ii) atleast 75 per cent of the male working population being non-agricultural,

(iii) a density of population of atleast 400 persons per km^2 (i.e. 1,000 per sq. miles)

(c) The Directors were given some discretion in respect of some marginal cases in consultation with the State Govt. to include some places* that had other distinct urban characteristics and to exclude the undeserving cases.

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7. Census of India; The General Population Tables, Series 1, part II-A(i), Delhi Manager of Publications, 1974, p.44 & 47.

* Although leaving room for vagueness and discretion, the last (c) criterian was intended to cover newly founded industrial areas, large housing settlements or places of tourist importance which have been recently served with all civic amenities.

Rural : The population not covered by settlements defined as urban is treated as rural in the Indian census and the habitations are called 'villages'. The concept of a village used in the Indian census is that of a revenue village which some times can consist of a number of habitations known by separate names and can at other times be even uninhatited. To quote the Indian Census;

'It should be borne in mind that the concept of a village is not demographic but administrative. As a general rule it represents a parcel of land, the boundries of which are defined and settled by a Revenue Survey or by a cadestral survey. It may be, but need not always necessarily be a single house cluster with a local name, marking its distinctiveness as a residential locality.** Thus, on the basis of the above definitions, human settlements all over India, have been classified into two types of settlements-rural and urban, which have further been categorised between various size-groups of population as given below :-

RURAL : Three broad categories[8] viz;

I - Villages with less than 2,000 persons

(i) less than 200 persons

(ii) 200 - 499 persons

(iii) 500 - 999 persons

(iv) 1,00 - 1,999 persons

** Census of India; 1961; Part II-A, Demographic Tables, p.2

8 Ibid, p. 151.

II - Villages with 2,000 - 9,999 persons

(i) 2,000 - 4,999 persons

(ii) 5,000 - 9,999 persons

III - Villages with 10,000 and above persons.

URBAN : All towns and urban agglomerations have been grouped into following six classes;[9]

Class	I @	Population of 1,00,000 & above
Class	II	- Population of 50,000-99,999
Class	III	- Population of 20,000-49,999
Class	IV	- Population of 10,000-19,999
Class	V	- Population of 5,000- 9,999
Class	VI	- Population of less than 5,000

Out of a total number of 5,79,062 settlements in India, 3,126 settlements have been defined as 'urban' consisting of around 20 per cent of the total Indian population. While all the remaining 5,75,936 settlements have been treated as rural inhanited by about 80 per cent of the total population of India.[10]

Now the question arises whether the presently existing rural and urban classification of settlements is appropriate in today's India ? or one may raise the question: Does the

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9. Ibid, p. 181

10. Ibid, p. 54

@ Recording to the convention of Indian census any urban place with a population exceeding 1,00,000 is called 'city' while rest of the urban places are called towns.

arbitrary dividing line (drawn by census of India) between rural and urban represent the real and clear distinction between various settlements of today's India as appropriately as it could in the late mediaeval or early modern India*? Such problem arises because today the Country is undergoing a process of transformation form agrarian to industrial society. In the context of mass production and comparatively quick transportation in the wake of industrialisation, the urbanisation seems to be a border crossing phenomenon today, while a few decades ago when the change was less rapid, there appeared to be reasonable balanced between the macrostructures of two social realities, the rural and urban. But now the increasing imbalance between the old urban and rural macrocosms is giving rise to a third social reality[11] (identified here as semi-urban).

Some studies have shown that mere delimitation of the Municipal boundries does not limit the urban process at its edge.[12] The adjoining rural communities in their course of development tend to acquire increasingly similar characteristics as those of the urban areas.[13] On the

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* When most of the cities had grown round the princely Courts, seats of govts, pilgrim centres and temples etc. but not in the wake of modern industrialisation.

11. H.R.Trivedi; Urbanism, A New outlook; Atma Ram & Sons, Delhi, 1976, pp. 10-11.
12. Report of Rural-Urban Relationship Committee; (Govt. of India, Ministry of Health & Family Planning, June,1966), vol 1, Report; p. 37.
13. Ibid.

other hand ruralism as a way of life is prevalent in many towns of India. People live in urban places, many of them are very much rural in their way of life. Because, although urban ways of life are not new to India,* even than one finds that most of the cities/towns of today's India have grown by additions and agglomerations of small and large villages and by inclusion of rural migrants pushed out of the villages by economic pressure.[14]

The villages which are, generally, situated at commutable distance from cities or large towns or near the highways or railway stations etc. have mix (Rural and urban) socio-economic characteristics in terms of electricity, water supply, civic amenities, housing system and use of machinery to supplement work and so on.[15] On the other hand 'Rural-urban Relationship Committee' found that even if the modest tests with reference to :

(a) Potable water supply;

(b) Street lightening, preferably electric;

(c) drainage, atleast pucca surface drains;

(d) Surfaced roads and streets and

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* As historical evidences show that in early ages, India developed well planned cities such as Ayodhya, Indera-prasta, Pailiputra and many others.

14. Ibid, p. 10

15. B.K.Roybarman ; An approach to urban studies in India; Census Publication; New Delhi; 1974.

(e) : : sanitation, conservacy and arrangements for the disposal of refuse and prevention of epidemics

were applied, a large number of towns (mostly with population less than 50,000) did not satisfy the same.[16] The rural elements[++] commonly appear in Indian urban settings and reflect certain aspects of socio-economic conditions of the urban dwellers.[17]

A statistical discussion over the two-way-classification of settlements with reference to census criteria also discloses the problem of drawing the dividing line between the rural and urban areas. Rural-Urban Relationship Committee's report mentions that 1961 Census of India classified as many as 4,197 places with population varying from 5,000 to 20,000 as rural, although a number of them had urban local bodies while 829 places classified as urban, mostly with population of 5,000 and above, had

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16. Rural-Urban Relationship Committee's Report; op. cit p. 26.

++ For example Wandering cattles, the presence of bullock carts, or vendors selling Cowdung-cakes or the conditions of main streets, scarcity of drinking water supply and so on.

17. B.F.Hoselitz; 'The role of urbanisation in economic development; in Roy Turner (ed); India's Urban Future; Berkeley and Los Angles, Calfornia, 1962; p. 171-72.

panchayats.[18] It has been observed "..... the census of both the time points has failed to provide an unambiguous list of the urban local bodies the occurence of which at a places would automatically give the place the status of town. This ambiguous description regarding the existence of urban local self-government bodies has led to adoption of different criterion in different States.... It may also be mentioned that criteria for granting a local self-government body to a particular place differ from State to State."[19] On the basis of three empirical tests of 1961 census to declare an area urban, 803 town of 1951 census were declassified on the eve of 1961 census while 443 rural places were brought in under urban category. 268 towns with population less than 5,000 were also classified as urban for special characteristics.[20]

Some of the places with population of even 20,000 or more were not classified as urban mainly because they did not satisfy the occupational test of 75 per cent of the working population being engaged in non-agricultural persuits though having some urban characteristics such as shopping centres, commercial activities and medical and

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18. Report of the Rural-Urban Relationship Committee, op. cit., p. 25.
19. M.K.Premi, D.B.Gupta and A.Kundu; 'A note on the concept of Urban Area in 1961 and 1971 census' A Bose et.al (eds) Population Statistics in India; Delhi; Vikas Publications, p.353.
20. Report of the Rural-urban Relationship Committee, op. cit., p.26.

educational institutions.[21]

In this connection we may also see that in a study Ashish Bose[22] had applied three eligibility tests (based on three empirical tests of 1961 census) to each of the urban settlement of the 1961 census and found that out of 2,700 towns in India, 1610 towns (60 per cent) satisfied all the three eligibility tests. But on the basis of eligibility test based on all the four census criteria (except part C) it had been found that only 43 per cent of the total town could satisfy the same. The study also reveals that 77 per cent of the large size towns/ cities (town having population more than 20,000) satisfy all the four eligibility tests while this holds true only in case of 30 per cent of the small size towns i.e. towns with population less than 20,000 persons. This study further points out that on the basis of three eligibility tests 86 per cent of the large size towns qualify for being treated as urban while in case of small size town only 49 per cent of them qualify for the same.

In short, it may be concluded that in same settlements of India, urbanism in its pure form could be as diffdcult to find as the pure form of ruralism in comparism to the population agglomerations that are most

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21. Ibid. p. 26.

22. Ashish Bose, Studies in India's Urbanisation 1901-1971; Tata McGraw-Hill Publishing Co. Ltd; New Delhi, 1973, pp. 42-8.

rural and those that are most urban.[23] Between the two extremes are found various mixtures of urbanism and ruralism : the one diminishing in the urban-ward direction and the other diminishing in rural-ward direction[24] and, basically, the problem arises in relation to the classification of these very settlements, the present classification of which as rural or urban with reference to their presently prevailing socio-economic demographic and administrative characteristics, appears, comparatively, to be dubious,

1.2 Related Research :

Until recently there had not been many studies on the areas other than most rural or most urban. Although, there have been some publications in the field of India's urbanisation which enrich our knowledge with studies concerning with variety of problems of larger cities of national importance and pattern of small towns. There are other studies on development of rural areas of India, but a very few concerning with the areas which are neither fully urban nor fully rural but lie between the two extremes. To quote Iravati Karve and J.S.Ranadive.[25]

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23. Nels Anderson; The urban Community, New York, Henry Holt. p.
24. Ibid, p.
25. Iravati Karve & J.S.Ranadive; The Social Dynamics of a growing Town and its surrounding Area; Deccan College, Post graduate and Research Institute, Poona, 1965,p.114.

"Anthropologists have been working on the basis of two societies, an urban and a rural, or two cultural traits; the great and the small, as if there was nothing in between the two."

It is only recently that the topics like rural-urban 'dichotomy' or 'continuum'[26] in relation to classification of settlements have attracted the attention of researchers.

Richard D. Limbert[27] condems the rural-urban dichotomy by saying "it is as untidy a sociological concept in India as it is elsewhere in the world" while Yadav[28] has expressed the rural-urban dichotomy as an unreal affair when he says;

" People may become urbanised in their thinking and behaviour although they may not move to a town or city. They may not move from agricultural work to industrial work and still they may be urbanised. The contention here is that though urbanism (urban way of life) is distinct from peasant way of life, they need not be exclusive of each other ....Rural-urban dichotomy is a useful conceptual frame of

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26. J.P.Gibbs (ed) Urban Research Methods; Van Nostrand Publications, New York; p. 474.

27. Richard D.Lambert; 'The Impact of Urban Society upon Village life' in India's urban Future, Roy Turner (ed) Berkely & Los Angles, University of California Press, 1961, p. 117.

28. J.S.Yadava; Urbanisation and Peasant Culture; a case Study; Asian studies 8, December 1970, pp. 301-06.

reference only and is not a reality."

Some sociologists have coined new terminologies such as 'Rurban Villages'[29&30] or 'semi-urban pockets'[31] and have explained these terms as distinctive categories of settlements with unique characteristics from 'rural' and 'urban'. Ashish Bose[32] has classified the entire urban population in two classes (1) Effective urban population belonging to class I, II & III towns and (2) Quasi-urban population belonging to class IV,V & V towns (i.e. towns with population below 20,000). In other words small size towns have been termed as quasi-urban' areas. Davis[33] has observed that there should be a continuum among different sized urban places while Mukherjee[34] analysed the controvercy from a sociological perspective and concludes that concepts of 'cuntinuum in the context of urbanisation and consequent social development may be of limited value in India since

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29. O.Bhargava; Rurban dimensional Planning for India; Khadigramodyog; February 1967; pp. 373-87.
30. K.R.Unni;'Rurban villages'in Journals of Institute of Town planners; Nos. 42 & 43; 1965; pp. 163-66.
31. H.R.Trivedi; op. cit., pp. 10-21.
32. Ashish Bose; op. cit. pp. 63-4.
33. K. Davis, The population of India and Pakistan; Princeton; Princeton Uni Press, 1951, pp. 134-44.
34. S.P.Jain; A status study of population Research in India; vol. II Demograpgy, New Delhi, Tata McGraw Hill Publishing Co. 1975, p.77.

a significant rural-urban difference is not evident.... Chatterjee[35] says that many India cities portray "an incompletely urban" outlook or "appear hybrides rather than full-fledged urbanised units."

Some other social scientists have also made the efforts to draw the attention of policy makers of the national developmental plans towards the development of small sized towns and rural areas which lie between the two extremes (of most urban and most rural) and can play a significant role in achieving, more successfully, the goals of socio-economic developmental plans. Misra[36] in his paper 'Growth Centres and Rural-urban continuum' mentions about 'semi-urban areas' with reference to the rural focal points which can provide the needed links between a few large urban centres and too many small rural settlements. He also talks of the importance of large number of small sized towns which are 'essentially rural' with urban infra-structure and social facilities in context of Indian economy. In one of his papers Premi[37] has concluded that some of the settlements are not fully rural or urban but are the mixture of the two in terms of way of life, literacy, occupation and behaviour etc. and it is not justified to classify them in either of the two

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35. M.Chatterjee; 'The Town/Village dichotomy in India' in Man in India, (July-September), 1968,pp.193-200.
36. R.P.Misra; Growth centres and Rural-urban continuum in A.D.Moddie's (ed) Approaches to Rural Development; p.54
37. M.K.Premi;

classes i.e. rural or urban. In this connection studies of P.B.Desai, I.P.Desai,[38] Trivedi[39] and others in India and like Davis,[40] Ruth Glass[41] and other outside India are also note worthy.

Although in India, the studies relating to the areas-possessing semi-urban characteristics have been scarce and halting but in affluent societies, considerable thought has been given and is being given to such studies.[42] Many developed Countries are of the view that at different times and in different places three-fold or multiple distinction may have been more meaningful than the Rural-urban dichotomy.[43] In most recent census of Italy and Fedral Republic of Germany, data are tabulated according to the population size of 'Communes' but the explicit distinction between urban and rural population has been omitted.[44] Conference of Europeon Statisticians has suggested that

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38. I.P.Desai; 'Small Townes, Facts and Problems'; Economic Weekly; April 1964, p. 725.
39. H.R.Trivedi; op., cit., pp. 145-72.
40. K.Davis; op., cit.
41. Ruth Glass; Introduction & Conclusion; Urban-Rural differences in Southern Asia; Report on Regional Seminar; UNESCO Research Centre on Social and economic Development in South Asia; 1964, p.1-29.
42. Report of Rural-urban relationship Committee; op. cit. p.36.
43. United Nations; Demographic year Book 1972; United Nation Publication, New York; p.5
44. Ibid; p.6.

in Europe the localities of 10,000 or more inhabitants may be designated as urban, those of 2,000-9,999 inhabitants as semi-urban while smaller localities may be classified as rural.[45]

In the context of future regional, physical and social planning for development, a suggestion for four fold classification of settlements has also been forwarded in order to distinguish urbanised and non-urbanised areas (mainly on the basis of high and low densities of areas), both, within metropolitan regions and out side metropolitan regions, resulting in four categories viz. metropolitan urbanised metropolitan rural, non-metropolitan urbanised and non-metropolitan rural populations.[46]

In United State of America, rural population has further been divided into rural farm a-nd rural non-farm populations. This is done by identifying the rural farm population and defining the rural non-farm population as the residue after the urban and rural farm populations have been separated and small towns that provide services to those who pursue rural industries, are also a part of rural area, as are non-agricultural aggregations of population that are too small or too dispersed to be classed as urban.[47]

In Yugoslavia and Japan smaller towns and surrounding

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45. Ibid; p.7
46. Ibid; p.12
47. Donald J. Bogue; op. cit; 0.465

villages have been covered under a single unit of planning and administration.[48]

Although in Gujarat State of our Country we find the system of 'Nagar Panchayat' for some smaller (10,000 - 20,000 population)towns and 'village panchaysts' for other small towns having population less than 10,000.[49] But there is no indication of three-way-classification of settlements as such so that one may identify a set of settlements (semi-urban) which may serve as rural-urban linkages. In short;

> "between the two streams of research-urban and rural lies a doab relatively unwatered by the rising flood of social research in India ....."[50]

1.3 Need and importance of a Three Tier System of classification of settlements :

1.3.1 Need : On the basis of the preceding discussion one may agree that mere 'rural and 'urban' classification of settlements may not be appropriate in India. In the changing socio-economic and administrative conditions, mainly in response to the prevailing process and pattern of urbanisation and industrialisation in the present

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48. Report of Rural-urban relationship Committee; op. cit., p. 42.
49. Ibid, p.25.
50. Richard D. Lampert; op. cit; p.

transitional stage of Indian economy (from agrarion to industrial Society) we find that some of the census urban settlements have become, comparatively, more urban while others have remained less urbanised, still possessing certain rural characteristics. Similarly some rural places are found to be more rural in comparison of those possessing many urban characteristics in terms of social, structural and behavioural aspects. As has been mentioned earlier, studies of rural and urban societies cast considerable doubt as to whether there is a rural urban dichotomy in India.[51] Gibbs has observed that the distribution is not really a two-fold one, in which one part of the population is wholly rural and other is wholly urban, but a graduated distribution along a continuum from the least urban to the most urban or from the most rural to least rural and consequently, the line that is drawn between urban and rural for census purposes is necessarily arbitrary.[52] In other words, a qualitative as well as a quantitative analysis with reference to the socio-economic, cultural, administrative and demographic characteristics of rural and urban settlements in India leads us to the conclusion that the concept of 'rural' and 'urban' is applicable only in relation

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51. S.P.Jain; A Status Study of Population Research in India; Vol.II, Demography, New Delhi, Tata McGraw Hill Publishing Co., 1975, p.77.

52. J.P.Gibbs; (ed) Urban Research Methods; Van NeStrand Publications, New York; p.474.

to the most rural and 'most urban' type of settlements, But between these two extremes, there lies a set of settlements which retain the mixture of the rural and urban characteristics or say which are semi-urban in character and needs a more realistic term for their identification (other than rural or urban) and representation with reference to their characteristics. Hence to abridge the gap of ambiguous character of some settlements between 'most urban' and 'most rural', a three-tier-system of classifying the settlements into Rural, Semi-urban and urban is highly needed in today's India.

1.3.2 Importance: The importance of three-way-classification of settlements may be accounted in many ways.

Historically, it would re-introduce the most traditional classification of settlement structure in India viz Shahr, 'Kasba' and 'Gaon'. As the history of urbanization in India reveals, 'Kasbas' were the connecting links, between 'Shahr's, the urban areas and 'Gaons' the rural villages, possessing certain mixed characteristics of both. These were the service centres, rendering some social factlities to the rural areas and thus, were providing the necessary middle links between the urban and rural areas. Besides, Kasbas- the semi.urban settlements of that time-were the centres of Indian handicrafts. Due to the biased economic policy of British rule in India, the importance of Indian

handicrafts started declining and consequently due to weak economic base, Kasbas started declining and the middle links between rural and urban also started missing.

A major importance of three-way-classification lies in identifying the semi-urban set of settlements which can provide the necessary links between the most urban and most rural areas. A need of such a link is highly felt today under the present economic setup of the nation.[53 & 54]

Secondly, after the introduction of rural and urban i.e. two-way-classification of settlements under the British system of census in India the entity of 'Kasbas' as a part of settlement hierarchy was lost and was mingled with the 'urban' and 'rural'. Two-way-classification of settlements poses certain administrative problems, particularly in relation to the resource allocation for the development of areas of different sizes@ under 'urban' and 'rural' sub-heads. For example, a few big/large sized urban centres enjoy too great a share of resource allocation for 'urban areas' while smaller urban units remain undeveloped or under-developed due to the lack of resources, Similarly sometimes, large sized villages (some of them are declassified

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53. R.P.Misra; op. cit.

54. Rural-urban Relationship Committee Report; op., cit., p.

@ as has been mentioned earlier in the study the urban and rural settlements have been recategorised into different size groups of population.

towns) need some different kind of resources in comparison to that for smaller rural areas.[55] But due to certain administrative difficulties both type of settlements (small sized urban centres and large sized villages) don't get a suitable allocation of resources and face a stage of under-development in comparison to their capacity for further flourishment.

Under three-way-classification these areas would be able to maintain their independent (from rural and urban) entity and would attract more specifically, the attention of policy makers of developmental programmes and therefore, may have a more suitable administrative management providing facilities for the proper development of these areas in favour of balanced regional growth of the nation.

Further it has been found that big/large urban centres absorb a great share of national resources but with little capacity to recirculate them. In addition a wide range of problems relating to the physical congestion and social tention@ starts appearing and urbanisation seems to be at the breaking point in big urban centres.[56] Therefore, sociologists and Town Planners in India and outside India

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55. Ibid; p.

@ in terms of inadequate shelter, Communal services absence of safe water, Sanitation, development of slums and so on.

56. M.B.Deshmukh; A Study of floating Population, Delhi, The Social Implication of industrialization and urbanisation; Calcutta; UNESCO Research Centre, 1956.

are generally, in agreement that to avoid many of the Pathological developments concomitants with the Community life in big cities, attempts should be made to disperse and channalise the population in small towns.[57] Because it has been observed by now that small urban centres can flourish very well, having many of them favourable location and site for decentralized industries. Thus small urban units can provide the employment opportunities to the people by accomodating the decentralised industries as well as by providing the needed services for improving agricultural practices and agro-industries alongwith a whole range of small scale industries. Thus, the semi-urban areas, identified under three-way-classification, would play an important role as 'counter-magnets' to the existing migration to big cities and would help us to attain a more orderly urbanisation in our Country.

In short, historically, three-way-classification (rural, semi-urban and urban) system would be re-introducing the most traditional classification ('Gaon','Kasba' and 'Shahar') of settlement structure in India. This may be the most appropriate and practical classification in the context of Indian Culture and economic setup as it shall enable us to identify that set of settlements (semi-urban) which are at the transitional stage towards urbanisation

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57. B.K.Roy Berman; op., cit.

and from the economic point of view, would play and important role as the nurseries of industrialisation and urbanisation and can provide the necessary links between the concerning agricultural regions on one hand and bigger/ larger urban centres on the other hand. Therefore, an insight knowledge of the socio-economic and demographic characteristics of semi-urban areas along with rural and urban areas may be of a great help to the planners to chalk out more purposeful and fruitful programmes for the balanced regional growth. If a proper attention is paid by the government the semi-urban areas can be developed as the nodal points and growth centres to abridge the rural-urban dichotomy in the socio-economic and spatial terms.[58]

1.4 Objective of the Study:

Hence the main objective of the present paper is to develop a concept of three-way-classification of settlements identifying the settlements as Rural, Semi-urban. and urban. More precisely one may say that present paper seaks (i) to develop the concept of 'semi-urban' also alongwith the basic and very important concept of 'rural' and 'urban' classification of settlements and (ii) to study the socio-economic and demographic implications of the same to ascertain whether the three-way-classification would be

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58. R.P.Misra; op. cit.

able to represent the three types of settlements quite distinctively and in a better manner over two-way-classification existing at present in the Country.

1.5 Scope and coverage :

1.5.1. Area coverage : Maharashtra State.

Preceding discussion reveals that the present study is concerned with developing the concept of three-way-classification of settlements and with the study of socio-economic and demographic implications of the same in India. Since the work load, involved in selecting the semi-urban settlements in the Country, cannot be completed by a lone investigator within a given time (for completing this dissertation as a part of M. Phil Course) it was not feable to take up this empirical task at all India level.

Therefore, it has been decided that initially, the study may be confined to one of the States of Indian Union, representing the whole Country with reference to our study. After certain considerations Maharashtra State has been selected to serve the purpose of the study.

Selection of the State :

It may be mentioned here that the selection of Maharashtra State as a suitable area for the present study is not absolutely arbitrary, rather, it is based on certain reasons. In support of the same we may go through the following points;

ii) Maharashtra State represents India to a greater extent with reference to some important socio-economic and demographic characteristics viz. Density of population , sex ratio, percentage decadal variation of population, percentage of population living in villages with population 5,000 and above, literacy rate and so on. (Table No. 1.1)

Table No. 1.1

A statement showing the data for some socio-economic and demographic characteristics for India & Maharashtra, 1971 census.

Variables	Type of settlements/Economics activity	India	Maharashtra
1	2	3	4
1. Density	Total	177	164
	Rural	148	115
	Urban	2505	2554
2. Sex ratio	Total	930	930
	Rural	949	985
	Urban	858	820
3. Literacy	Rural	23.74	30.63
	Urban		
	i. Both city & non-city population	52.44	58.07
	ii. Cities with population 1,00,000 and above	56.47	61.16
	iii. Non-city population	48.57	52.41

1	2	3	4
4. Occupational structure	% of primary workers to total workers	72.56	66.73
	% of secondary workers to total workers	10.69	14.52
	% of tertiary workers to total workers	16.76	18.75
5. % Decadal variation of popn. during	1951-1961	+21.51	+23.60
	1961-1971	+24.80	+27.45
6. % of population living in villages with 5,000 and above population	1971	12.54	12.25
7. % of urban to total population	1971	19.90	21.92 (excluding greater Bombay)

(ii) As will be discussed in the following section, the sub-natural division has been taken as a meaningful unit of study for the present work. Therefore, it was highly desirable that area of the study must consist of a number of sub-natural divisions with distinct regional characteristics to enable us to find out whether the three type of settlements (Rural, semi-urban and urban) show any variations in relation to socio-economic and demographic characteristics at Intra and Inter regional level.

Maharashtra State consists of five sub-natural divisions with distinct topography, availability of minerals,

climate and drainage etc. resulting in distinct cropping pattern, level of industrialisation and settlement pattern etc. among the five sub-natural divisions.(see the chapter III of the Study).

(iii) It is expected that set of semi-urban settlements may best be identified within the states which are more industrialised+ and urbanised++ in comparison to some of the backward states of India. From this view point also Maharashtra State appears to be the most suitable area for the study as it is considered as one of the most industrialised and urbanised states of the Country, in addition, it has backward areas as well@.

(iv) No major changes relating to demarcation of the State boundaries or district boundaries within Maharashtra State had taken place between 1961 to 1971 census. Thus, the area covered by the State, more or less, remains the same for 1961 and 1971 census. Secondly, the district census Handbooks, from which the basic data for the present study have been collected, are also available for all the districts of the State and for both the time points i.e. 1961 and 1971 census which has made it possible to introduce temporal comparability in this study

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+ With reference to percentage of non-agricultural workers to total workers.

++ with reference to percentage of population living in urban places to total population of the State.

@ It is important to note here that industrial development is concentrated, mainly in and around Greater Bombay Metropolis. If this metropolis is excluded, rest of the State is as backward as some other states of the country.

1.5.2 Unit of the study-sub-natural division :

Sub-natural-division has been considered as a meaningful unit for the present study due to following reasons;

It is a well known fact now that apart from human resources and technological development, the level of the socio-economic development and type of economy of a region is also a function of its geographical conditions. Physical landscape features of the territory play a significant role in the establishment, type and pattern of distribution of human settlements among different regions. Systematic regional studies and urban studies in regional context reveal that their is a distinct regional settlement pattern throughout the Country. Spatial distribution and growth of different type and size of settlements indicates that each region has different characteristics and problems relating to the distribution pattern of settlements of different types and sizes.

The natural resources are not distributed uniformaly in all over the Country. Some regions are rich in natural resources and are more developed in comparisón to those regions which are poorly endowed by the nature. Besides, some other regions, although richly endowed with natural resources, are less developed due to poor infra-structure or inadequate planning for the exploitation of the existing natural resources. In turn some natural regions are thickly populated and

have a number of large sized urban and rural settlements while others are sparsely populated having small sized and scattered settlements, some regions are more industrialised and urbanised with a favourable proportion of urban population while in other regions the case is just the reverse.

Therefore, sub-natural-division of the State has been considered a meaningful unit of the study of socio-economic and demographic implication of classification of settlements into rural, semi-urban and urban in Maharashtra.

1.5.3 Period covered under the study :

In order to understand the changes and to confirm our hypothesis in time perspective, it has also been proposed to extend the study for different time points. Therefore, the present study is based on 1961 and 1971 census. For both these periods the required data is available in a uniform pattern and for all the districts of Maharashtra State enabling us to maintain the reliability and comparability of data in time perspective.

C H A P T E R - II

METHODOLOGY

2.1 Selection of criterion/criteria :

As has been discussed in the previous chapter, the main objective of the present study is to develop a concept of 'semi-urban' category of settlements and thereby to built up a three-tier-system for classification of settlements into rural, semi-urban and urban against their two-way-classification as rural and urban by the Census orgainisation of India.

This empirical task is not possible unless some specific criterion/criteria is developed on the basis of which a systematic and scientific selection of semi-urban settlements may be possible. Problem does not lie only in selecting the criteria but also that criteria should appriciably be suitable to our study of developing to concept of semi-urban classification of settlements. Besides this, the following points have also been considered to be important while selecting the criterion/criteria.

1. It should be more practical and convenient from the view point of its adoption because ultimately, it is to be applied to a large number of settlements

to declare them as 'semi-urban' in context of a vast country like India.

2. Comparability of data between the previous and future censuses must be maintained through the selected criterion/criteria.

3. It should bring forward the three-way-classification of settlements against the years old two-way-classification in such a manner that the prevailing socio-economic, cultural and demographic characteristics pertaining to each class (Rural, Urban and Semi-Urban) must be represented quite distinctly. More specifically we may say that semi-urban settlements between the extreme rural and extreme urban settlements should be so identified that the same may prove to be a real help to the policy makers of the national developmental plans in context of the balanced regional development and planning for more orderly and healthy urbanisation.

In regards to the above mentioned considerations it has been decided to apply merely the demographic approach for the selection of the criterion i.e. mainly, 'the size of population' criterion has been adopted to reclassify the census settlements into three categores viz. rural, semi-urban and urban.

In this respect census categorisation of urban and

rural settlements on the basis of 'size of population' has facilitated in solving the problem to a great extent. As has been mentioned earlier, census has classified the urban and rural settlements in the following classes :

Type of settlements	Class	Size of population
Urban	Class I cities	1,00,000 and above
	Class II towns	50,000 - 99,999
	Class III towns	20,000 - 49,999
	Class IV Towns	10,000 - 19,999
	Class V towns	5,000 - 9,999
	Class VI towns	less than 5,000
Rural	Broad classification	
	I	Villages with less than 2,000 persons
	(i)	less than 200 persons
	(ii)	200 - 499 persons
	(iii)	500 - 999 persons
	(iv)	1000 - 1999 persons
	II	vilages with 2,000-9,999 persons
	(i)	2,000 - 4,999 persons
	(ii)	5,000 - 9,999 persons
	III	villages with 10,000 and above persons

According to our criterion the reclassification of census settlements into rural, semi-urban and urban has

been carried out in the following manner :

Type of settlements	Size of population
Rural	All the census rural settlements with population less than 5,000 i.e. small sized villages.
Urban	All census urban settlements pertaining to class I, II and III i.e. Big/large and medium sized urban centres with population more than 20,000
Semi-urban	All the census urban settlements of class IV, V and VI i.e. small sized towns with population below 20,000 + all the large sized rural settlements i.e. villages with population 5,000 or more

Hence it has been proposed in the present study that small + sized villages and big+/large+ urban centres may be treated as the two extreme ends of rural-urban dichotony while the large sized villages combined with small sized towns may be considered for their reclassification as 'semi-urban'.

2.2 Selection of small sized towns and large sized villages as 'semi-urban' category of settlements :

Here one may again question : why the cutting point is not fixed at population size of 30,000 or 40,000 and so on in relation to reclassification of census urban settlements as semi.urban. Similarly why the rural settlements

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+ Although 'big' 'large' 'medium' and 'small' are relative terms and it is difficult to fix the size limit for these classes in relation to the size of settlements in terms of no. of persons living therein. These limits vary from place to place and from one time point to another. But in context of India, at present the towns with population below 20,000 are, generally, considered as 'small sized' urban centres and the towns with population 20,000-49,999 as 'medium sized' urban centres. The urban settlements with population 50,000-99,999 and with 1,00,000 and above are called 'large' sized towns and 'big cities' respectively. But in this study, all the urban settlements with population 20,000 and above have been called 'large sized' urban centres or towns.

In case of rural settlements, with 'small sized' we mean all the rural settlements with population below 5,000 and all the rural villages with population and 5,000 andmore have been termed as 'large-sized' rural settlements.

with 5,000 and above population have only been considered to be reclassified under three-tier-system of classification. Of course, it is true that some of the large and medium sized urban settlements or villages below 5,000 may also show the characteristics similar to that of semi-urban settlements but quite reasonably it has been decided that this empirical study initially may be started with the reclassification of small towns and large villages into semi-urban category. Because various studies have shown that most of the small size towns have, altogather, different socio-economic and demographic characteristics in comparison to most of the large and medium@ sized urban centres, in addition most of the large sized villages in this respect are similar to small sized towns while quite distinct from small sized rural settlements. The following discussion may support the same.

2.1.1 Small towns as semi-urban settlements :

In this connection a study of Ashish Bose[1] may also justify our selection of small urban areas as semi-urban settlements since he finds that if eligibility

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@ Leaving aside some marginal cases, such as Desai's study on Mahuva town (the town with population 25,000) shows that a small town of class III also retain the value system more similar to rural areas.

1. Ashish Bose; Studies in India's urbanisation 1901-1971; Tata McGraw Hill Publ; Co. Ltd, New Delhi, 1973 pp.42-8.

test, based on all the four census criteria of classifying urban from rural (1961 census), is applied, most of the large towns (77 per cent) satisfy the same while this holds true in case of only 30 per cent of small size towns. He also terms the small sized towns as quasi-urban.

Apart from the differences of urbanisation between large and small towns with reference to census criteria, studies have also shown that presently small sized towns show a wholesome contrast to big and medium sized towns in relation to population concentration, social and civic amenities, rate of population growth per capita income, pattern of employment and age and sex composition of population etc. To quote Ruth Glass's[2] report.

> "Inter-urban (of various size classes) differences were as pronounced as if not more than, the differences between aggregates of 'urban' and 'rural' settlements."

Furthermore, small sized towns show the socio-economic and demographic characteristics resembling more to large sized villages, especially, in way of life,[3]

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2. Ruth Glass; Introduction & Conclusions; Urban-Rural differences in Southern Asia; Report on Regional Seminar; Delhi 1962; UNESCO Research Centre on Social & Economic Development in South Asia; 1964, p. 24.

3. M.K.Premi.

Value system relating to castism, kinship and religion etc. prevails in small towns more or less in the same ways as in the large size villages.[4] The places with population 5,000 and above which Indian census classifies as urban retain the rural value system and differ from cities and large size towns.[5] Kulkarni has also mentioned that small size towns resemble more to the overgrown villages than to the large or medium size towns.[6] Desai in his study of Mahuva town (with 25,000 population) observes that in terms of social structure and culture a small town is more a-kin to a rural area than to an urban area and the rate of change is very low.[7]

In short small size towns are urban, mainly in form and differ little from villages except in the provision of some urban physical amenities of a low standard.

2.1.2 Large size villages and urban characteristics :

On the other hand among the presently rural set of settlements, some villages do not remain as rural as the

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4. Ruth Glass; op. cit; pp. 1-29
5. Majumdar D.N.; Caste & communication in an India-village; Bombay; Asia Publishing House; 1958; p.329.
6. o/o Registrar General India; Proceedings of Indian Census Centenary Seminar; New Delhi, 1972; Vol. 1; pp. 73-88
7. I.P.Desai; Small Towns, Facts and Problems; Economic weekly; XVI (16); 18th April; 1964.

others rather possess, comparitively more of the urban characteristics than the rural ones. This is so because urbanisation being a two-way process involves (1) the movement towards urban places and (2) the outward movement of urban influences.[8] The absence of employment opportunities and lure of urban life attracts a large number of villagers to towns and this process results in two-way consequences : (i) because of the movement of people towards big urban places, the villages within communiting distance from cities are occupied by urban oriented people (doing urban type of work) due to environmental and housing problems in big urban places and so called urban traits get disseminated and diffused among wider sections of the society. (ii) Migrated rural folk takes long time to be absorbed in the life of the town as regular town dweller.[10] They often visit their families, left in the villages and thus they take with them the ideas of urban life in the rural areas.

Large sized villages have been proposed to be considered here as semi-urban areas because these villages are distinctive from the small sized villages which are comparatively more remotely situated from the view point of

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8. Nels Anderson; The Urban Community; New York, Henry Holt.
9. Ibid.
10. Report of Rural-Urban Relationship Committee; Government of India, M/O Health & Family Planning, June 1966; Vol. 1 Report; p. 37.

TABLE No. II.1

Statement showing the socio-economic and demographic characteristics of large size villages Vs small size villages, small size towns Vs large towns and similarity between small towns and large villages for Maharashtra, 1971

Type of settlements	Density	Sex ratio	Literacy	Work participation rate	% distrinution of workers between three sectors of economic activity		
					Primary	Secondary	Tertiary
Small villages (with population less than 5,000)	108	991	29.39	39.24	89.4	5.6	5.0
Large villages (with population mote than 5,000)	215	944	39.58	33.96	73.65	11.04	15.31
Small towns (with populatiog below 20,000)	614	916	49.15	30.25	39.38	20.87	39.75
Large towns/cities (with population more than 20,000)	4202	807	59.53	32.02	6.40	40.00	53.60
Maharashtra Rural	115	985	43.22	38.59	87.49	5.94	6.57
Maharashtra Urban	2554	820	66.88	31.80	11.06	37.58	51.36

transport and Communication network and are more rural (than the large villages) being not influenced by urbanism. On the other hand large size villages are expected to change their characteristics, more rapidly, with the change in socio-economic, techno-economic and socio-political forces.[11]

In short, the small sized town and large sized villages are expected to have common socio-economic and demographic characteristics in comparison to each other while distinct in comparison to the large and medium sized urban centres at one end and the smaller rural places at the other end as the table No.II.1 shows for Maharashtra state. Therefore, it has been considered reasonable here to classify the same as semi-urban set of settlements considering the small size villages and large size urban centres as the two extreme ends of rural urban dichotomy in India.

2.3 Plan of the study :

Present paper is a part of a bigger project and a team of four students, each working independently, has been engaged to introduce four alternative methods of classifying the settlements into rural, semi-urban and urban classes. As has been mentioned earlier, the selection of semi-urban set of settlements is, mainly, based on the size of population of the presently existing rural and urban settlements

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11. I.P.Desai ;

but in order to confirm the validity of the same, four alternatives have been proposed. A brief description of the entire plan of the study under the main project is given below.

According to the size of population criteria, firstly the reclassification of census settemants into rural, semi-urban and urban classes has been carried out as has been explained in the previous sections.

At the second stage some variables, disclosing the socio-economic and demographic characteristics, have been selected and certain test are applied to their values in three categories of settlements in order to find out the variations between the so called rural, semi-urban and urban settlements.

At this stage the study of the main problem (to identify the semi-urban settlements) has been divided in four parts and four students have worked independently to evolve a methodology for arriving at the semi-urban category of settlements. A broad out line of the methodology followed by other three collegues and a detailed description of the present one is given below :

(i) Economic activity of male population has been considered and the cutting points in terms of percentage of total male workers (to total male

population) engaged in non-agricultural traits have been fixed on the basis of which each assumed semi-urban settlement has been tested and classified accordingly as rural, semi-urban or urban.

(ii) By considering the five variables, viz. population size and density, sex ratio, literacy rate and proportion of workers outside agriculture, each on a decile scale, scores have been alloted to each settlement and cutting points have been obtained to classify the small sized towns and large size village as rural and semi-urban and urban.

(iii) Availability of some of the social amenities viz. hospitals, post office, schools, drinking water and connectivity with transportation system has been taken for each rural settlement with population 5,000 or more and town with population below 20,000 and scores assigned to them. On the basis of composite score of each settlement, the same has been classified into rural, semi-urban or urban.

(iv) Lastly for the present study it was decided to consider all the presently small sized towns

combined with all the large sized villages to be classified as 'semi-urban' settlements, all the class I, II & III urban centres, as 'urban' settlements and all the small sized villages as 'rural' set of settlements. In other words the entire number of census settlements-classified as rural and urban have been reclassified into three classes say, rural, semi-urban and urban purely on the basis of the size of population of the census rural and urban settlements. Then all the three types of settlements have further been classified according to five sub - natural - divisions of the state. In the next stage of the study some of the important socio-economic and demographic variables have been selected to study the socio-economic and demographic implications of three-way-classification of settlements. In this study, an attempt has been made to find out (1) whether the two types of classification of settlements viz. (i) Rural and Urban and (ii) Rural, Semi-Urban and Urban show any significant variations between them in respect of socio-economic and demographic characteristics at sub-natural-division level and (2) Whether the semi-urban set of settlements under three-way classification shows any

distinctiveness from its rural and urban counterparts with reference to socio-economic and demographic characteristics and in context of their spatial and regional (at sub-natural division level) distribution.

In short, the present paper, as a part of the main study, is confined to study the socio-economic and demographic implications of three-way classification of settlements in context of regional variations. It differs from the other three parts of the study on the same topic mainly, in two ways :

(i) In other papers each of the settlements, pertaining to town with population below 20,000 and large size villages with population 5,000 or more, has been tested (as mentioned above) before classifying them as semi-urban while in the present paper all the small towns and large sized villages have been classified as semi-urban.

(ii) In other studies after identifying the three types of settlements the variations between rural, semi-urban and urban set of settlements with reference to socio-economic and demographic characteristics have been studied directly at state level while

in the present paper the three types of settlements have been identified and studied at sub-natural-division level of the state. Thus in other three papers, the unit of the study is 'the state' while in the present paper the ultimate unit of the study is 'the sub-natural-division' of the state. As has been mentioned earlier the entire study is conducted for two time points i.e. 1961 and 1971.

2.4 Data requirements and its collection;

Currently the behavioural, structural and demographic approaches are applied to the study of urbanisation and its related characteristics.[1] Obviously, a number of variables can be listed to study the degree of urbanisation in the different settlements and thereby to classify them as rural semi-urban or urban. Data requirement for the same way may force us to collect them from many different sources.

But in India, census is the primary agency to determine rural and urban nature of the settlements. Therefore, it is essential here to develop such a methodology of three-way-classification of settlements in India,

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1. Eric E, Lampard, 'Historical Aspects of Urbanisation' in the study of urbanisation; Philip M. Hauser & Leo F.Schonore (Eds); New York, John Wiley & Sons Inc, May 1967, pp. 519-20.

which must be adoptable by the census organisation in the country. To meet this purpose some of the important and commonly used variables, indicating the socio-economic and demographic differentials between the three types of settlements, have been selected. Basic data have been collected to work out the following variables :

1. Growth of population
2. Density of population
3. Sex ratio
4. Literacy
5. Occupational structure of population in terms of work participation rate, per 1,000 distribution of primary, secondary and Tertiary workers, percentage proportion of Non-agricultural workers to the agricultural workers and percentage of male workers engaged in non-agricultural pursuits.

2.5 Source of Data Collection :

For the collection of required data, the reliance has been placed on the secondary data provided by the census of India, Maharashtra census publications. Data has mainly been collected from :

(1) Part II-A, Series II, General population tables for 1961 & 1971 Census.

(2) Part IV, Town Directory, 1961 & 1971.

(3) Part X, District Census Hand-books, 1961 & 1971.

Frame :- The frame, to locate the units for compilation, has been prepared from General population Tables, 1961 & 1971. The Union Table A-III of this volume presents the 'villages classified by population' while Table A-IV "Towns and Urban Agglomerations classified by population" (of the same) enable us to enlist the small sized town.

After preparing the list of large size villages and small size towns, the data have been collected for the following items for each of large size villages and small size towns :

1. Area of the settlements
2. Total population by sex
3. Number of literates by sex
4 Number of total workers by sex
5. Distribution of workers (by sex) among the nine industrial categories of census.

2.6 Compilation and Tabulation of data:

First step :

(a) The data on the above mentioned items have, initially, been collected for each town with population below 20,000 and for each village with a population 5,000 and above.

(b) After the compilation of data at settlement level (large size villages and small size towns) the data have been merged at district level.

(c) Ultimately the complied data have been merged from districts to sub-natural-division (5 in number) level separately for large size villages and small size towns.

Second step :

(a) Data for the same items have been compiled, separately for entire rural and entire urban set of settlements (as per census of India) for each of the district of Maharashtra.

(b) The data compiled at district level have been converted at sub-natural division level, simply by adding the data pertaining to the number of districts falling in each of the five sub-natural divisions of the State. The excercise has been carried our separately for Rural & Urban set of settlements as per Indian census. Thus, the data for Rural and Urban settlements under two-way-classification became available at sub-natural division level.

Third step :

Now we had to separate out the semi-urban settlements (as per our criterion) out of rural and urban set of

settlements (as per census of India) at sub-natural division level. For this purpose ;

(a) The compiled raw data for each item for large sized villages have been sub-tracted from the compiled raw data for the entire rural settlements for each of the five S.N.Ds+ Thus, the villages other than large size villages have been termed as 'rural' as per our criterion.

(b) Same exercise has been worked out in relation to find out urban settlements i.e. raw data for small size towns have been sub-tracted from the raw data for entire urban settlements for each sub-natural division. Thus the remaining urban settlements, which are other than small size towns, are the urban areas according to the theory of the present study.

(c) Lastly to find out the characteristics of semi-urban settlements the raw data for large sized villages and small sized towns have been combined togather at sub-natural division level of the state.

Thus the basic data for working out the variables required to study the socio-economic and demographic characteristics of the settlements of Maharashtra under two types of classification viz, two-way-classification (as

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+ Sub-natural-divisions.

discussed in 'step second' above and three-way-classification (as per 'step third' above) of settlements become available at sub-natural division level of Maharashtra.

Our next step was to work out the rates and ratios to study the differentials in relation to socio-economic and demographic characteristics of settlements under two systems of classification. The different variables have two been worked out through the following methods:

1. Density of persons per sq. km.

$$= \frac{\text{Total number of persons}}{\text{Total area in sq. km.}}$$

2. Sex ratio: Number of females per 1000 males

$$= \frac{\text{Total number of females}}{\text{Total number of males}} \times 1000$$

3. Growth rate: The percentage decadal growth of population, 1961 - 1971.

$$= \frac{\text{1971 population} - \text{1961 population}}{\text{1961 population}} \times 100$$

4. Literacy rate by sex :

a) Total literacy rate = $\frac{\text{Total number of literates}}{\text{Total population}} \times 100$

b) Male literacy rate = $\frac{\text{Total male literates}}{\text{Total male population}} \times 100$

c) Female literacy rate = $\frac{\text{Total female literates}}{\text{Total female population}} \times 100$

5. (i) Labour force participation rate :

(a) Total $= \frac{\text{Total workers}}{\text{Total Popu.}} \times 100$

(b) Male $= \frac{\text{Total male workers}}{\text{Total male population}} \times 100$

(c) Female $= \frac{\text{Total female workers}}{\text{Total female popu.}} \times 100$

(ii) Per 1000 distribution of workers (by sex) among primary, secondary & tertiary sectors of economic activity.

(iii) Percentage of male workers engaged in non-agricultural traits:

$$= \frac{\text{Total male workers engaged in non-agricultural traits (i.e. engaged in other than first two categories of economic activity)}}{\text{Total male workers}} \times 100$$

(iv) Per 100 proportion of non-agricultural workers to Agricultural workers =

$$\frac{\text{Total workers engaged in category III to IX}}{\text{Total workers engaged in category I + II}} \times 100$$

On the basis of above calculations a number of tables showing the variations between the Rural, Semi-urban and

Urban settlements with reference to socio-economic and demographic characteristics under two-sets (two-way & three-way)classification of settlements for 1961 and 1971 at sub-natural division level for Maharashtra State, have been prepared to study the socio-economic and demographic publication of three way classification of settlements in Maharashtra.

The above mentioned compilation, tabulation and calculation of rates and ratios has been carried out separately, for the two time points: 1961 & 1971 census of India for Maharashtra State.

2.7. Hypothesis[©]

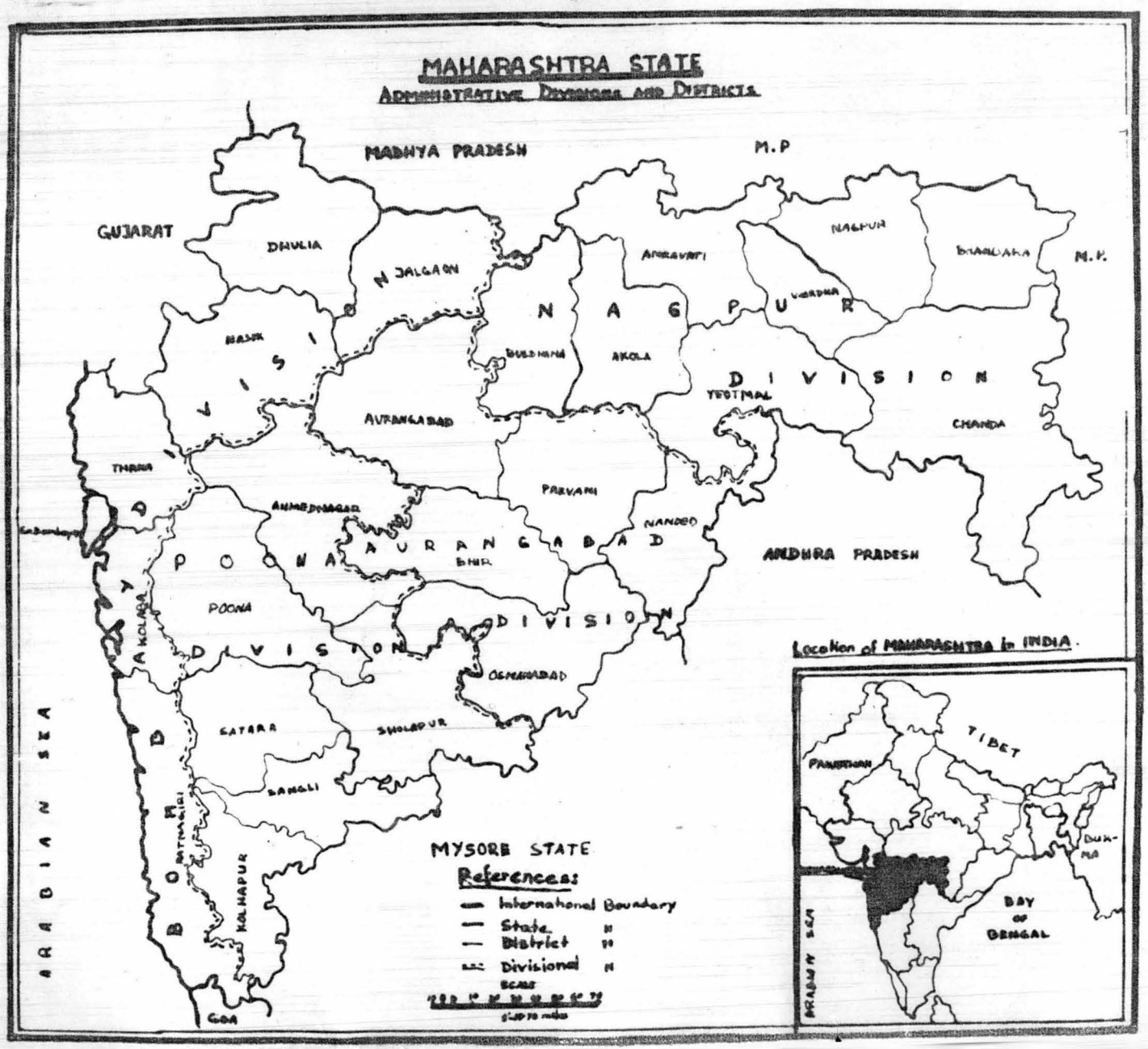
(i) It is expected that the rural of three-way-classification will show more pronounced characteristics than the rural of two-way-classification and urban in the three-way-classification similarly will show more pronounced urban characteristics.

(ii) In the three-way-classification the socio-economic and demographic characteristics for 'semi-urban' will be somewhat in between of the 'rural' and the 'urban' and differentials between the three sets of settlements should be significant.

The above mentioned expectations should be true for Maharashtra State as well as for each of its sub-natural divisions and for both the time points i.e. 1961 and 1971 Census.

©Hypothesis relating to each variable is discussed in the concerned sections in Chapter V.

MAP 1


MAHARASHTRA STATE
ADMINISTRATIVE DIVISIONS AND DISTRICTS
MADHYA PRADESH
M.P
GUJARAT
DHULIA
JALGAON
NASIK
BULDHANA
AKOLA
AMRAVATI
NAGPUR
BHANDARA
WARDHA
M.P.
N A G P U R
D I V I S I O N
YEOTMAL
CHANDA
AURANGABAD
THANA
PARBHANI
AHMEDNAGAR
NANDED
P O O N A
A U R A N G A B A D
D I V I S I O N
BIDAR
ANDHRA PRADESH
POONA
KOLABA
OSMANABAD
SATARA
SHOLAPUR
SANGLI
RATNAGIRI
KOLHAPUR
GOA
ARABIAN SEA
MYSORE STATE
References:
International Boundary
State "
District "
Divisional "
Scale
Location of MAHARASHTRA in INDIA.
TIBET
PAKISTAN
BHUTAN
BAY OF BENGAL
ARABIAN SEA

C H A P T E R - III

SUB-NATURAL DIVISIONS AND SETTLEMENT PATTERN IN MAHARASHTRA ; AN INTRODUCTION

Today's* Maharashtra, one of the twenty two states of Indian Union, consists of twenty-six administrative districts which have further been categorised into four administrative divisions as has been shown in table No. 1 in the appendix and Map No. 1. But in terms of relief and drainage, these 26 districts have been categorise in five sub-natural divisions by Census of India, 1971. As the analysis of settlement classification in this study is carried out on the basis of sub-natural divisions, it will not be out of place to have some discussion on the physical and cultural features and settlement pattern of these sub-natural divisions. Such a discussion becomes necessary in view of the fact that physical features, climate, type of availability of natural resources, cropping pattern and transport pattern etc. play an important role in the pattern of distribution of human settlements within and between the different parts of a territory. For example, under the existing physical and cultural landscape features in

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* The present Maharashtra state was formed on 1st May, 1960 at the time of territorial re-organisation of the states in India. Maharashtra was emerged as a result of amalgamation of Bombay and Poona divisions of the composite Bombay state, the Vidharbha region of the old Madhya Pradesh and Marathwada region of the former Hyderabad state. Today the territorial boundry of the state is defined by the Arabian Sea to the West, Gujarat state to the North-West Madhya Pradesh state to the North and Karnataka to the South and Andhra Pradesh to the South-East.

TABLE No. III.1

Percentage distribution of Maharahstra's total area, T.R.& U. settlements and population among its sub-natural division, 1971.

Name of the State/Sub-natural Division	Total area (km^2) of the state and its distribution among SNDs.	Number of settlements			Population		
		Total	Rural	Urban	Total	Rural	Urban
1	2	3	4	5	6	7	8
MAHARASHTRA	307762.0 (100.00)	36067	35778 (100.0)	289 (100.0)	50412235 (100.00)	34701024 (100.00)	15711211 (100.00)
Sub-natural division							
3.7.1 Tapti-Purna valley	57436.0 (18.66)	7213	7160 (20.01)	53 (18.34)	8090967 (16.05)	6301245 (18.16)	1789722 (11.39)
3.7.2 Penganga-Wainganga plateau	65015.0 (21.12)	8613	8574 (23.96)	39 (13.49)	7371644 (14.62)	5583823 (16.09)	1788021 (11.38)
3.8.1 Eastern plateau	96168 (31.25)	9761	9680 (27.06)	81 (28.03)	13900056 (25.57)	11370688 (32.77)	2529368 (16.10)
3.8.2 Western plateau	587490 (19.09)	5625	5563 (15.55)	62 (21.45)	9543743 (18.93)	7056740 (20.34)	2487003 (15.83)
4.2.1 Maharashtra littoral	30394.0 (9.88)	4855	4801 (13.42)	54 (18.69)	11505825 (22.82)	4388728 (12.65)	7117097 (45.30)

(SND = Sub- natural division)
T = Total
R = Rural
U = Urban

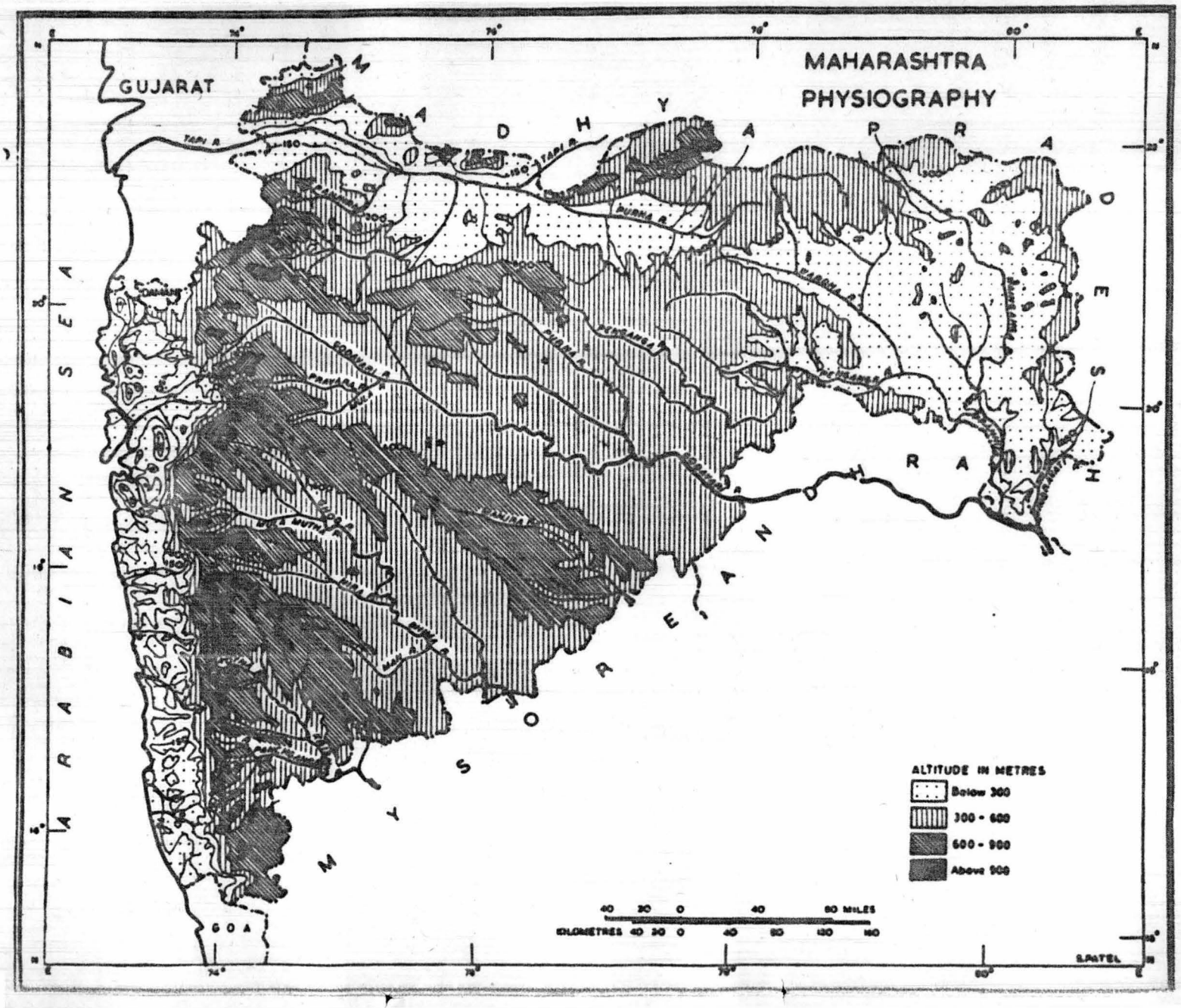
in Maharashtra, all the 36,067 settlements, covering an area of 307,762.0 sq. kms. and inhabited by 50,412,235 persons are not of the same kind in terms of area and population coverage as well as from the view point of the level of socio-economic, techno-economic and cultural development. Most of the settlements (35,778) covering 98.00 per cent of the State's area and a bulk (68.93 per cent) of the State's population are rural settlements while only 289 settlements are urban settlements having only 31.17 per cent population and only 2.0 per cent of the State's area (Table III.1 and III.2 & Fig 1&2). Further, all the rural settlements are not having the same size of population. Some are very small with population less than 200 while others are as big as having population more than 10,000 persons (as has been shown in table No. 2 in the appendix Fig.3). Similarly all the 289 urban settlements of the State are distributed quite unevenly among the six urban size classes in respect of the number of settlements as well as the number of persons (Table 3 in the appendix). Not only that but the concentration of rural and urban settlements and population among different size classes also varies from one sub-region to the other and from one district to the other within each sub-natural division of the State (Table No. 2 and 3 in the appendix) in response to the physical and cultural landscape features of the area (Fig 3 & 4).

TABLE No. III.2

Rural/Urban-wise distribution of total area and population within Maharashtra State and within each of its sub-natural division, 1971.

State/Sub-natural Division	Area in km²			Population		
	Total	Rural	Urban	Total	Rural	Urban
1	2	3	4	5	6	7
MAHARASHTRA	100.00	98.00	2.00	100.00	68.83	31.17
Sub-natural division						
3.7.1 Tapti-Purna valley	100.00	98.72	1.28	100.00	77.88	22.12
3.7.2 Penganga-Wainganga-plateau	100.00	99.03	0.97	100.00	75.74	24.26
3.8.1 Eastern Plateau	100.00	97.69	2.31	100.00	81.80	18.20
3.8.2 Western Plateau	100.00	97.51	2.49	100.00	73.94	26.06
4.2.1 Maharashtra Littoral	100.00	96.37	3.67	100.00	38.14	61.86

MAP 2


MAHARASHTRA
PHYSIOGRAPHY
GUJARAT
GOA
ARABIAN SEA
MYSORE PLATEAU
DECCAN PLATEAU
SATPURA RANGE
TAPI R.
PURNA R.
GIRNA R.
GODAVARI R.
PRAVARA R.
MULA R.
MUTHA R.
BHIMA R.
KRISHNA R.
WARDHA R.
PENGANGA R.
WAINGANGA R.
PAINGANGA R.
TAMBRAPARNI R.
ALTITUDE IN METRES
Below 300
300 - 600
600 - 900
Above 900
40 30 0 40 80 MILES
KILOMETRES 40 20 0 40 80 120 160
SATEL

Relief and Drainage in Maharashtra[1,2 & 3]

Physical setting : The Maharashtra region, which entirely rests on a basaltic base at places is technically disturbed, eroded and burried beneath a mantel of alluvium, consists of two major relief divisions; (i) The Plateau- a part of Deccan table - land and (ii) Konkan coastal strip abuting on the Arabian sea (Map 2).

(i) The Plateau - Nearly nine-tenth of the State's area consists of the plateau Local variations in relief are caused by Sahyadrian range of mountains-forming the Western rim of plateau. In contrast to the Sahyadrian chain of mountains the Satpuras and the Melghats are in the North of the State.

There are several other minor hill ranges, just as in the South of Tapti-Purna basin are the Satmalas & Balaghat etc. These hill ranges of the lava plateau transverse the plateau mostly with West-North-West and East-South-East trend. Forming the water divide between the major rivers of the plateau, these ranges develop the prominent relief features on the lava surface.

On the other hand the outcrops of granite, limestone

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1. C.D.Deshpandey - Geography of Maharashtra; National Book Trust; New Delhi, 1971.
2. J.P.Ambannavar - A Demographic Study of Maharashtra State; National Institute of Family Planning, New Delhi, 1975.
3. R.L.Singh - INDIA; A Regional Geography; R.L. Singh(ed); Silver Jubilee Publication; Varanasi; pp 698-734.

and associated rock types have produced irregular and craggy hills in the Vidharba hill complex of the plateau. These types of hills and sluggish stream hare much in evidence in Bhandara and Chanderpur districts of the State.

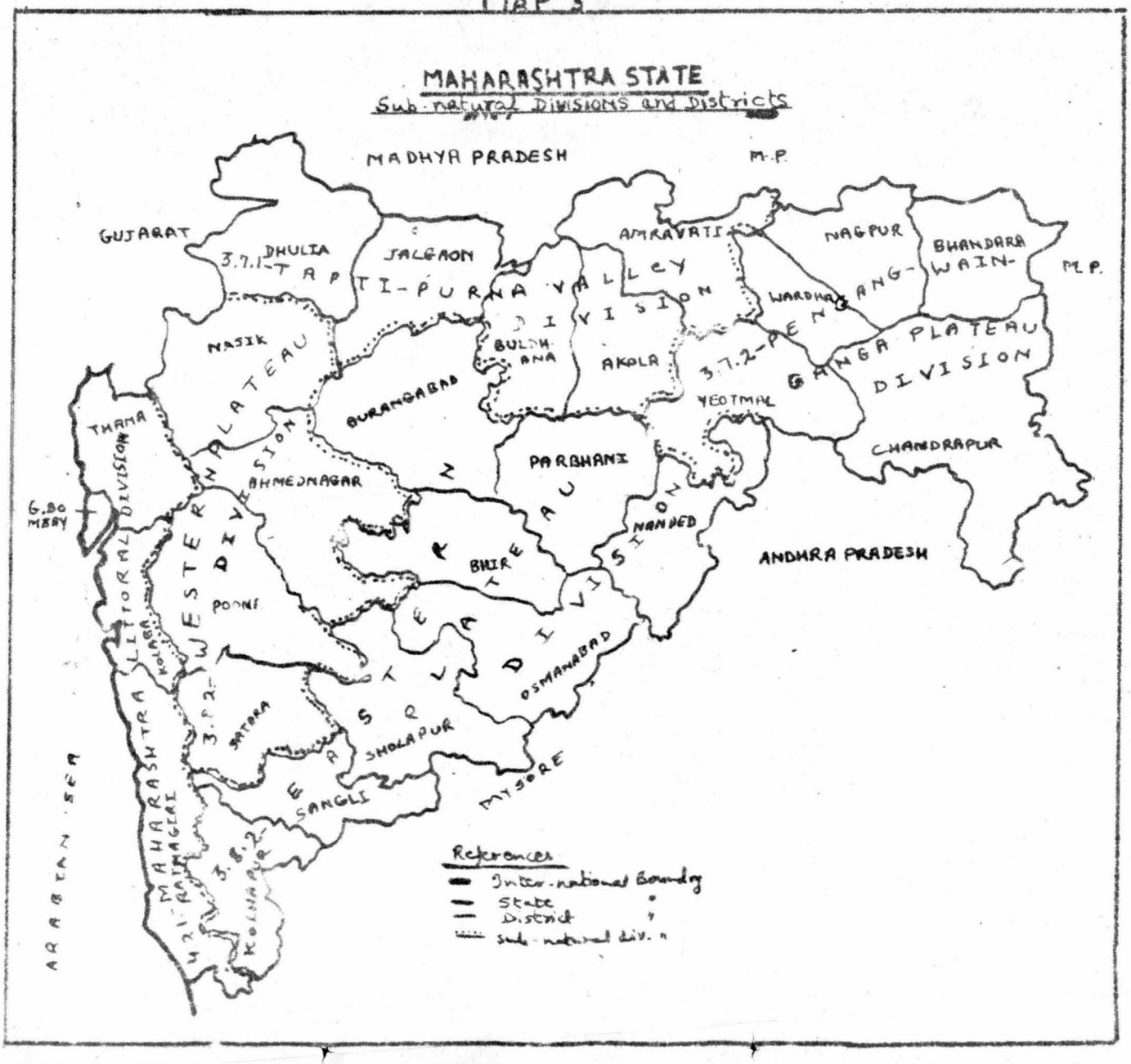
(ii) The Konkan coastal lands :- This area stretches from Damanganga river in the North to the Terekhol river in the South and in the Arabian sea litteral of Maharashtra state. This littoral region lies between the sea and Sahyadrian hills having the varying width of 45 kms. to 75 kms.

Rivers and drainage in Maharashtra :

As has been shown in map No. 2, the principal rivers that drain in Maharashtra region are Tapti, Godavari and Krishna, although, Bhima, Wardha and Wainganga are also the major rivers of the area. Tapti basin is drained to the Arabian sea, while the rest of the region is drained to the Bay of Bengal. Tapti is a major river of Maharashtra plateau. Its major tributary is Purna which drains a part of Vidharba. Tapti and Purna form broad basin which is quite unlike the basins of other rivers of the Region. Southern part of the basins are fertile while northern areas are sandy and more dissected. Tapti covers almost one-fifth of the area of the Region.

Godavari is the other principal river in Maharashtra.

MAP 3


MAHARASHTRA STATE
Sub-natural Divisions and Districts
MADHYA PRADESH
M.P.
GUJARAT
3.7.1-TAPTI-PURNA VALLEY DIVISION
DHULIA
JALGAON
AMRAVATI
NAGPUR
BHANDARA
WAIN-GANGA
WARDHA
3.7.2-PENGANGA PLATEAU DIVISION
NASIK
BULDHANA
AKOLA
YEOTMAL
CHANDRAPUR
AURANGABAD
PARBHANI
NANDED
THANA
AHMEDNAGAR
BHIR
3.8.1-WESTERN PLATEAU DIVISION
3.8.2-EASTERN PLATEAU DIVISION
6.80 MARY
KONKAN LITTORAL DIVISION
POONA
KOLABA
SATARA
SHOLAPUR
OSMANABAD
ANDHRA PRADESH
MYSORE
SANGLI
RATNAGIRI
KOLHAPUR
ARABIAN SEA
References
International Boundry
State "
District "
Sub-natural div. "

More than half of the area is covered by Godavari Basin. It drains the State in the north . Penganga is its principal tributary in the West and drains the area of Buldhana - Yeotmal plateau.

Krishna and its tributaries drain Maharashtra in the South. It covers a large area of the State. (Map 2)

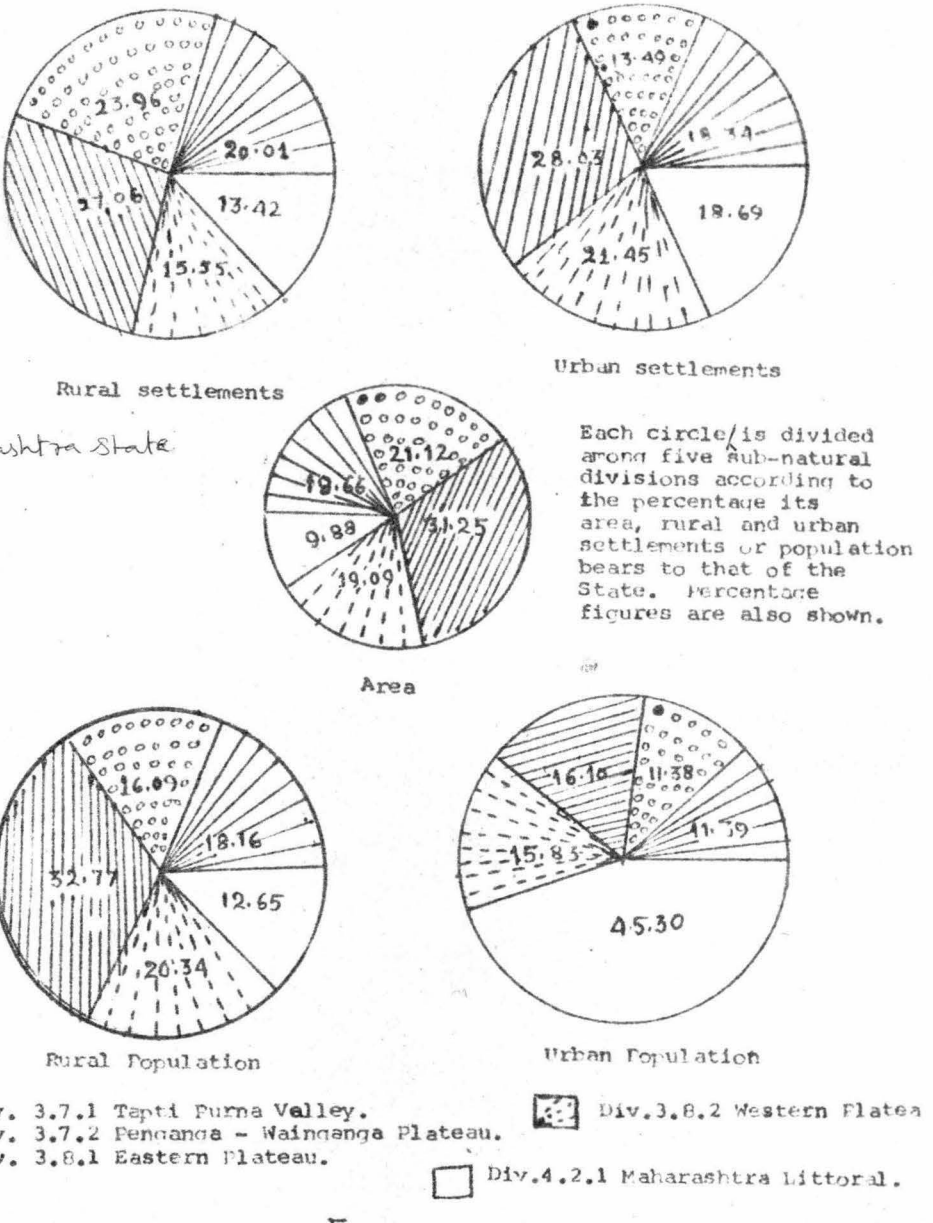
A careful analysis of the relief and drainage of the state thus leads us to distinguish very clearly the three natural regions, classified further into five sub-natural divisions within Maharashtra State, as has been shown in Map No. 3. The following statement showing this classification, presents the list of districts falling under each of the five sub natural divisions of the State:-

Statement showing the sub-regions and sub-natural divisions with census code and number of districts in each division:

Region	Sub.region with census code No.	Sub-division with census code No.	Districts
1	2	3	4
Maharashtra	3.7 North Maharashtra	3.7.1 Tapti-Purna Valley	Dhulia, Jalgaon, Buldana, Amravathi, Akola.
		3.7.2 Wardha-Penganga-Wainganga Plateau	Nagpur, Bhandara, Chanderpur, Yeotmal, Wardha.
	3.8 Maharashtra Plateau	3.8.1 Eastern Plateau	Aurangabad, Parbhani, Nanded, Bhir, Osmanabad, Sholapur, Sangli, Kolhapur

~~54(a)~~

Area, rural and urban settlements and population by sub-natural divisions, Maharashtra, 1971



(representing Maharashtra State

Each circle is divided among five sub-natural divisions according to the percentage its area, rural and urban settlements or population bears to that of the State. Percentage figures are also shown.

Fig. 1

1	2	3	4
		3.8.2 Western plateau with protruded hills	Nasik, Ahmednagar, Poona, Satara.
	4.2 Western Coastal Region	4.2.1 Maharashtra Littoral	Thana, Greater Bombay, Ratnagiri, Kolaba.

Sub-natural-divisions*: Physical and Cultural Features and settlement pattern**

Sub-natural-division 3.7.1 Tapti-Purna valley

The Western part of the valley is confined between Satpuras on the North and Ajanta Hills on the South East ward prolongation of the valley is limited on the East by Amravati Plateau which marks the divide between the two river systems: the Tapti-Purna on west and Wardha-Wainganga on the East. This division consists of five districts namely Dhulia, Jalgaon, Buldhana, Amravati and Akola covering 18.66 % (57,436.0 sq. km.) of the State's total area (Table III and Fig. 1).

A most fertile part of Maharashtra lies in this division. Amravati plateau in the east bestowed with rich alluvium soil and heavy rainfall makes the paddy cultivation possible. Although, underground water in Amravati plateau

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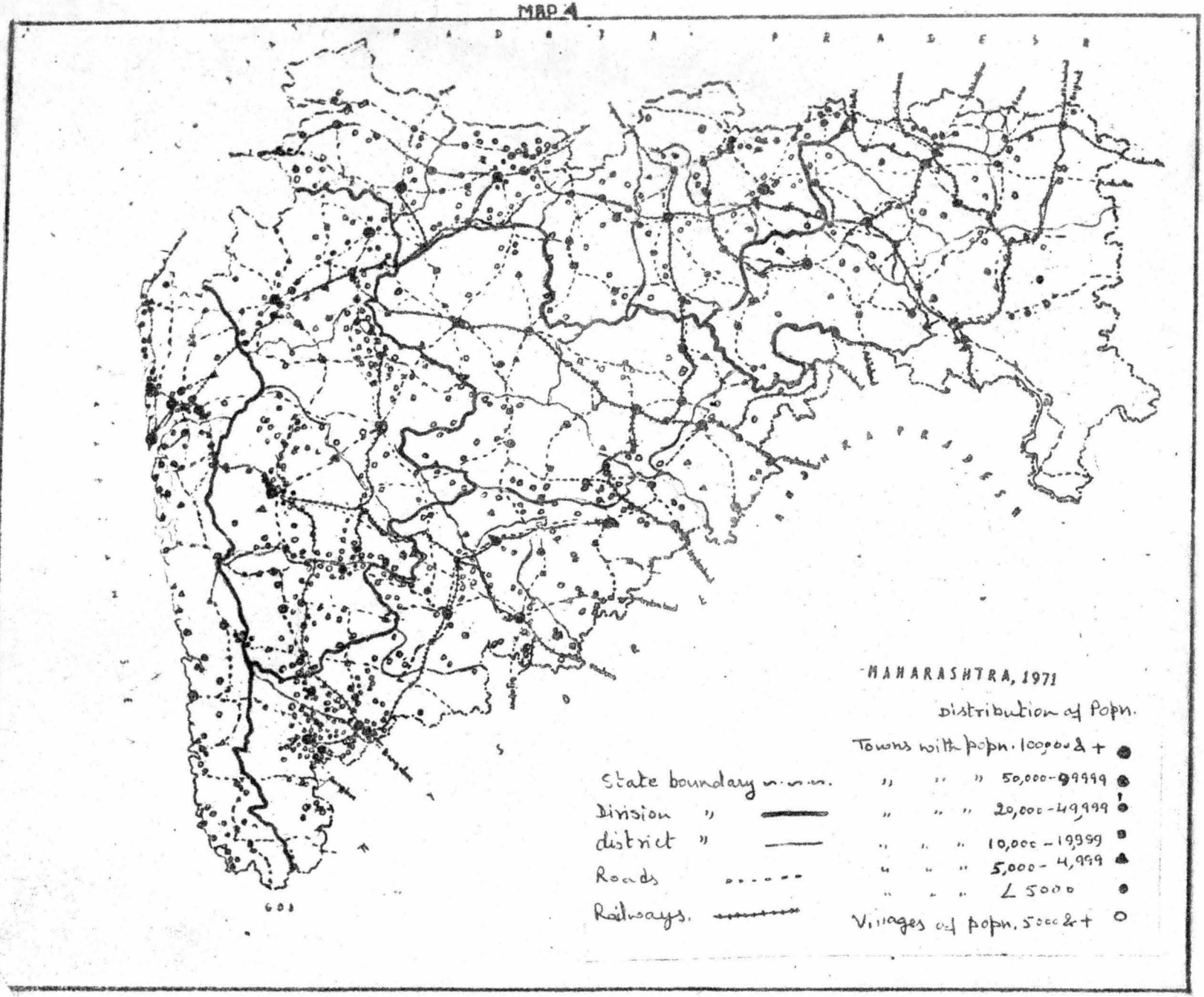
* Census Atlas of Maharashtra, 1961 and 1971 Census.

** A s per 1971 Census of India, Maharashtra.

MAP 4


MADHYA PRADESH
ANDHRA PRADESH
MAHARASHTRA, 1971
distribution of Popn.
Towns with popn. 100,000 & +
" " " 50,000-99999
" " " 20,000-49999
" " " 10,000-19,999
" " " 5,000-4,999
" " " < 5000
Villages of popn. 5000 & +
State boundary
Division "
district "
Roads
Railways.
601

and small dams across the streams in the western Khandesh makes the irrigation convenient, but most of the land in Jalgaon districts remains unirrigated.

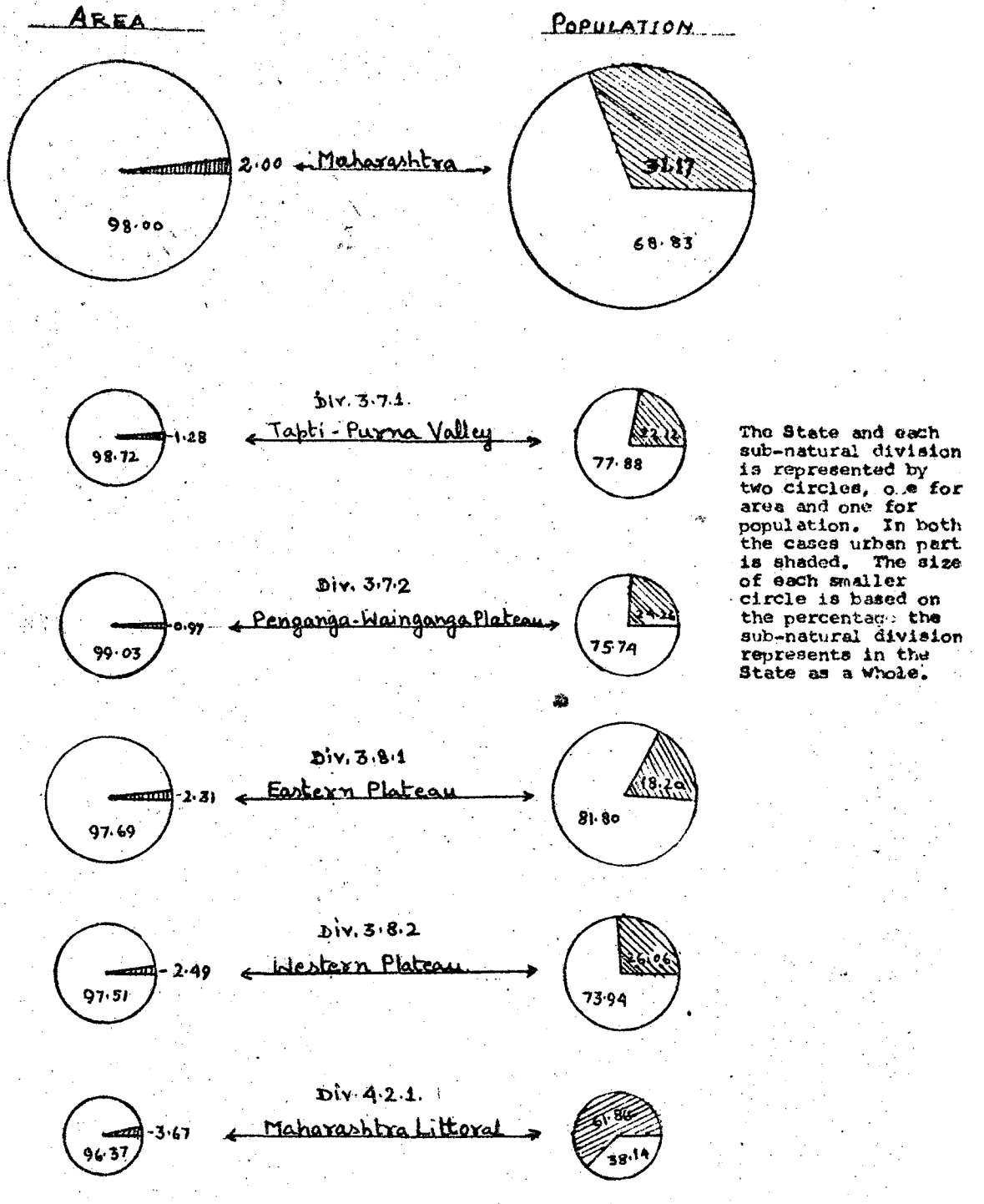
Area is known for the production and export of cotton. Khandesh is called the cottonyard of Maharashtra. East of the division enjoys a well developed transport network. Major transport rauts are parallel to the Purna river. Jalgaon and Bushawal both are the important trading centres on central railways. Dhulia commands highways between Bombay and Delhi. The Town is away from central railway and there is comparatively a slow pace of development here. Northern limit of the Division is a traditional zone being largely inhabited by Adivasis (Bhils). Forests are the main economic resource here. Wood cutting and collection of honey and gum besides, the primitive type of agriculture is the main economic activity of the tribals.

Settlement Pattern :

Fertile land of the division support cultivation and major settlements like Dhulia and Jalgaon 10-20 kms. away from river. The fertile crescent has many large villages and several towns connected by roads or located on the Tapti valley railway system as has been shown in Map No. 4.

The division has a total No. of 7,213 settlements inhabited by 80,90,967 persons in all covering 16.05% of

AREA AND POPULATION BY SUB-NATURAL DIVISIONS, MAHARASHTRA, 1971



The State and each sub-natural division is represented by two circles, one for area and one for population. In both the cases urban part is shaded. The size of each smaller circle is based on the percentage the sub-natural division represents in the State as a whole.

Fig. 2

the State's total population and 18.66 per cent of the total area of the State. Of the total settlements of this division 7,160 are rural (covering 20.01 per cent of the State's rural settlements and 18.16 per cent of the rural population). 11.39 per cent of the State's urban population live in the 53 urban settlements of this division (table No. III.I) and Fig .1...)

98.72 per cent area of the Division, inhabited by 77.88 per cent of the Division's total population, is rural (table III.2 Fig 2) Most of the rural settlements i.e. more than nine tenth of the rural settlements having three forth of the total rural population of the Division are small size villages with population below 2,000. 12.50 per cent rural population of the Division is concentrated among a very few large villages accounting for 1.47 per cent of the total rural places of the Division (Fig 3). Moreover large villages are also concentrated in the maximum in Jalgaon district followed by Dhulia and Amaravathi districts. Akola has the least number of large sized villages (table No. 2 in the appendix) Fig 3)

Due to the development of cotton textile industries some large sized and medium sized centres are coming up in this division. 82.41 per cent of the total urban population of the Division is concentrated among four class I, four class II and twenty two class III towns of the Division while only 17.59 per cent of the remaining population live in 23 small sized towns, as the table No. 3 in the appendix & Fig 4).

Percentage Distribution of Total RURAL settlements and persons by Size Groups of Population for Maharashtra state & sub-natural divs., 1971

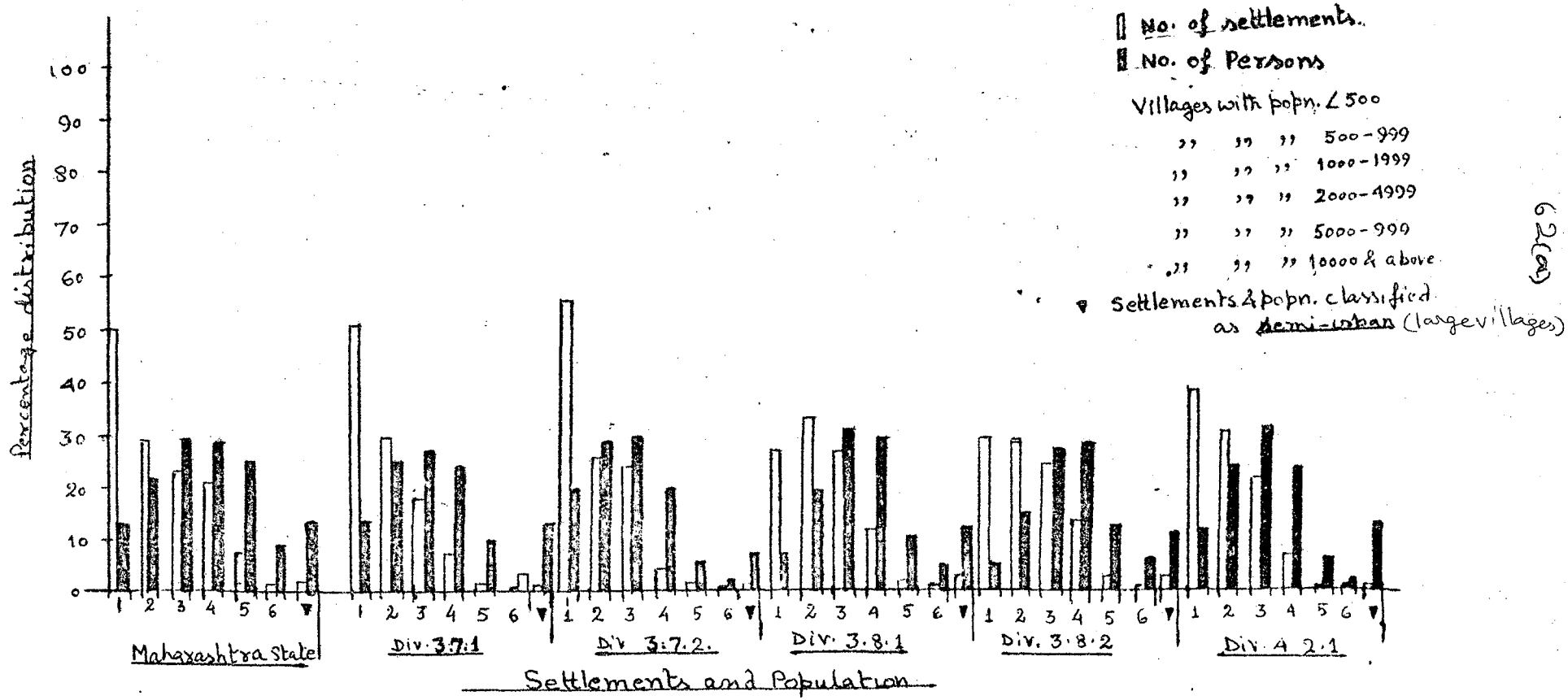
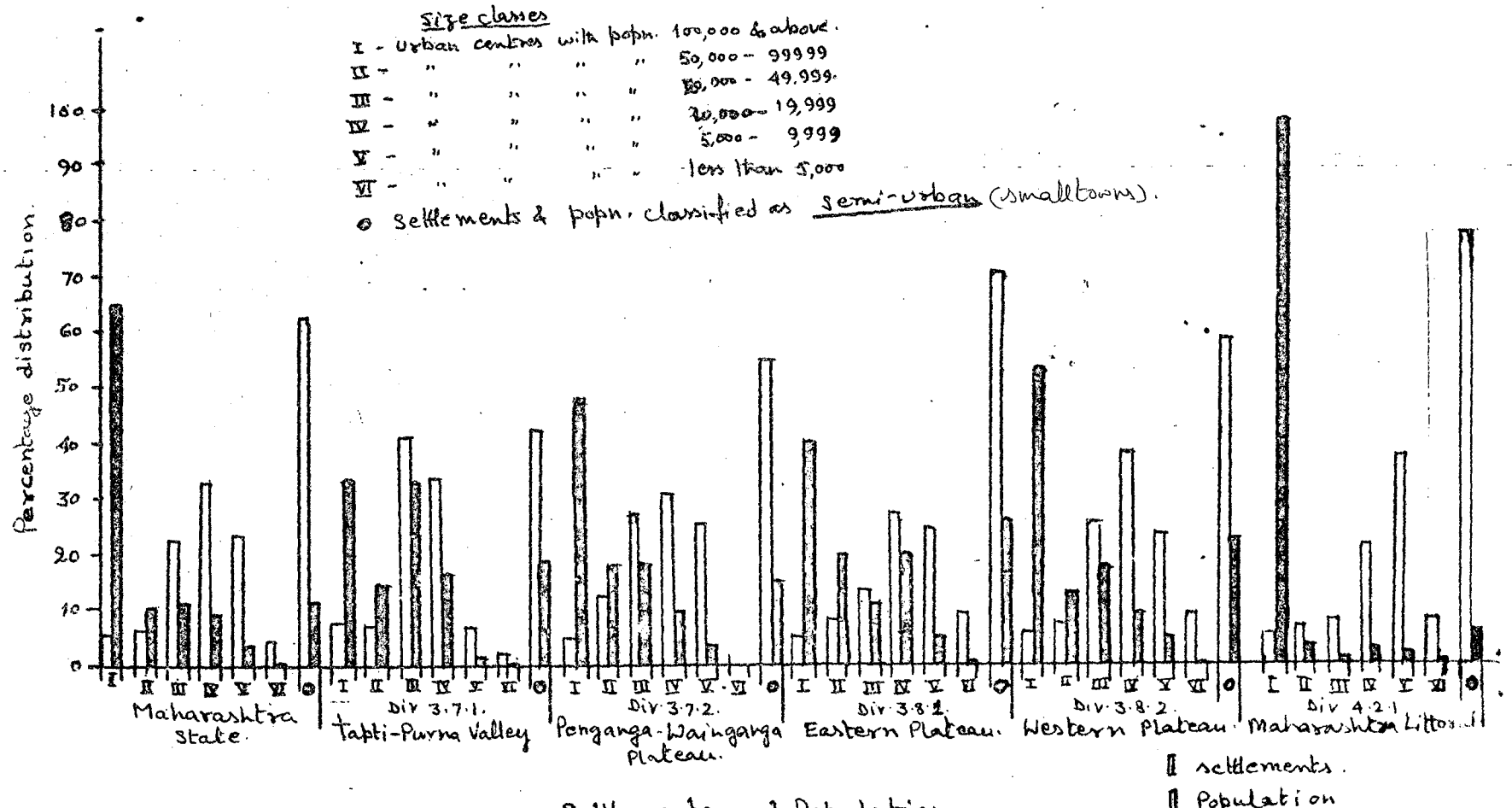


Fig. 3

Percentage distribution of URBAN settlements and popn. by size-class of urban popn., Maharashtra & Sub-natural divs.

1971



Settlements and Population.

Fig. 4

represents. A look into the districtwise distribution of urban settlements in the division reveals that Buldhana has no class I town while Akola and Amaravati has one each but there is no class II town in these districts. Dhulia has only four town with population above 20,000, one each in class I & II and two towns in class III. Maximum number of urban settlements of the Division are covered by Jalgaon district followed by Amaravati district as the table 3 in the appendix shows.

Sub-natural-division 3.7.2, Wardha-Penganga-Wainganga plateau :

This division covers Nagpur-Wardha plain on the west and the forest covered Wainganga valley on the South-east of the State. It comprises of five districts viz. Nagpur, Bhandara, Yeotmal, Wardha and Chanderpur. Wainganga flows through Bhandara and Chanderpur districts. Wardha's drainage lies in the western part of Nagpur district while central and eastern parts of Nagpur belong to Wainganga drainage. Wardha joins Wainganga in Chanderpur district while Penganga joins Wardha in Yeotmal district as the Map No. 3 shows.

Heavy rainfall is the main climatic characteristic of the Division. This division is covered by many kinds of forests but Chanderpur district contains a remarkable proportion (80.2 per cent) of its area under forests.

Rice is grown mostly along the terraced flanks of

the river basins in the division, except in Chanderpur and Bhandara districts. These two districts have an intensive cultivation of non-edible oilseeds viz. linseed. Cotton is grown extensively in Nagpur, Wardha and Yeotmal districts of the division. Textile industry has provided base to Nagpur city, around which the secondary and tertiary industries have grown.

This division has major deposits of important minerals also. Coal deposits of the State are confined to Nagpur, Chanderpur and Yeotmal districts. Manganese is found in Nagpur and Bhandara districts. Important iron ores are located in Chanderpur and Bhandara while lime stone occures in Yeotmal and Chanderpur districts.

Division has a good network of railways except in Chanderpur district. Same is the position with regard to roadways (Map No. 4).

Settlement pattern : This region covers 21.12 per cent of the State's total area; 99.03 per cent of which is rural and only 0.97 per cent of the Division's area is urban. Out of 8,613 settlements inhabited by 7,371,644 persons (14.62 per cent of the State's total population), 8,574 settlements (covering 23.96 per cent of the State's rural settlements and 16,09 per cent of the rural population of the State) are rural and only 39 settlements (covering

11.38 per cent of the State's urban population) are the urban centres the Division. Due to the rugged topography of the Division, most of the rural settlements are small scattered hamlets. Chanderpur district of the division has the largest number of rural settlements of the State. 66.62 per cent of the District's rural settlements are small size villages with population less than 500. Large size rural settlements are very few in this division, most of which are concentrated again, in Chanderpur district of the State (Table 2 in the appendix).

Although lot of mineral deposits are found in this region but there is very little industrial development, most probably due to lack of exploitation of these natural resources. Consequently there are a few (39) urban settlements out of which 13 are concentrated in Nagpur district itself which, comparatively, is the most developed district of the Division. In all the districts of the division, urban population is, generally, concentrated among the towns having population more than 20,000 i.e. class I, II or III towns (table 3 in the appendix).

Sub-natural-division 3.8.1. Eastern Plateau.

Eastern Plateau i.e. Eastern part of the Central Plateau region of the state covers eight districts of Maharashtra, namely, Aurangabad, Parbhani, Sangli, Nanded

Osmanabad, Bhir, Sholapur and Kolhapur. At the southern foot of Ajanta hills there are strategic towns like Jalna, Aurangabad, Daulatabad and Khuldabad. Low rainfall limits the agricultural productivity in the Division except for the intensive cultivation of paddy in Kolhapur district due to same what heavy rainfall here. Gangapur is the only irrigation project in the Division. Aurangabad, Parbhani, Bhir and Osmanabad are the wheat growing areas lying in Godavari valley. Cotton is grown moderately almost in all the districts though, mainly confined to Parbhani, Nanded and Aurangabad districts. Latur is the important cotton centre and focus of transport and trade. Kolhapur and Sangli are the important tobacco producing districts. This division is also an important cane growing area in the upper Godavari valley. Sugarcane factories have developed by the side of cane-fields. Oilseeds are grown almost in all districts of the division but ground-nut growing is concentrated in Osmanabad. The area falling in Mahadeo hill region is rocky and is short of water.

Mineral deposits are not found in this division except Bauxite in Kolhapur and some limestone in Sangli district.

Jalgaon-Aurangabad-Ahmednagar is a traditional route between Tapti and Godavari valleys. Transport is not well developed in all districts except Kolhapur with regard to

railways and Kolhapur, Sangli and Sholapur with respect to roadways as the Map No. 4 shows.

Settlements pattern: Settlements in this division have, generally, followed the water courses and are located on the terraces at a safe distance from flood water, covering 31.25 per cent (96,168.0 km^2), of the State's total area. Like the area coverage, the Division consists the maximum of the State's total and rural settlements and population as well. The table No. III.1/ & Fig 1 discloses the same. 81.80 per cent inhabitants of Division are distributed among 9,680 rural settlements pertaining to different size groups of the population (Fig 3) A good number of large size rural settlements comes under this division. But this is true only for Kolhapur, Sholapur and Sangli districts (Table 2 in the appendix) where the agro-industries are developing. Rest of the five districts of Eastern plateau appear to be poorly resourced districts having a concentration of small sized rural settlements.

This division has only 18.20 per cent (minimum proportion of urban population among all thefive sub-natural division) of the population living in 81 towns (covering 28.03 per cent of the State's urban settlements) of the division. In comparison to other divisions, Eastern plateau has much lower percentage of its urban population concentrated in large size urban centres. On the contrary, among all the divisions, the maximum percentage of the Division's urban population, concentrated in small sized

towns of class IV, V & VI is found in Eastern plateau & division. A large number of urban settlements (9 out of 12 towns), inhabited by more than 50 per cent of the urban population of the district, falls in the category of small sized towns in Parbhani district followed by Osmanabad, Nanded, Bhir and Aurangabad districts of the Division (Table 3 in the appendix). Most probably, a poor industrial development, may be due to the poor natural resources of the division, have restricted the development of large sized urban centres in most of the districts of the division. Some of the small and medium sized urban centres are the strategic cities of historical significance. Some of these are also the centres for the important agro-based industries.

Sub-natural-division 3.8.2 Western plateau.

This division comprised of four districts Nasik, Ahmednagar, Poona and Satara lying at the foot of Sahyadrian range which slopes gently eastward along the Maharashtra plateau and forms an almost continuous range in its North-South course except for a few gaps. The Satmala-Ajanta chain runs across Nasik and marks off the Tapti-Purna valley from the Godavari basin. The Bhim Shanker & Balghat range forms the watershed between the Godavari and the Bhima. The Krishna basin stretches to the south-west of the Mahadev hills. Thus this division lies between the major river basins of the State as the Map No. 2 shows.

Low rainfall limits the agricultural productivity here, but due to the availability of large scale irrigational facilities, the cultivation of sugarcane is mostly concentrated in this division. Ahmednagar is the most important cane-producing area. Sugar Factories have grown by the side of the cane-fields, integarating the agro-industrial economy and evolving in the process of an agro-industrial landscape. Some large sized villages, such as Igatpuri and Goti, function as the centres of paddy trade with a few rice mills.

The Thal Ghat and Bore Ghat are the major passes through which communication lie between the plateau and the Konkan coast land. The Nasik-Bombay route uses the Thal Ghat while traffic from south proceeds through Poona to Bombay through Bor Ghat. Other Ghats are also there.

Overall transport network is not well developed in the Division. Although from the view point of surfaced roads, the areas are not much inaccessible but as far as railways are concerned, many areas are the highly inaccessible in all the four districts. Poona-Banglore and Bombay-Bangalore metre gauge passes through the region linking the towns and the large sized villages (Map No. 4).

Settlement pattern: A number of 5,625 settlements covering 18.93 per cent and 19.09 per cent of the State's population and area respectively, fall in western plateau division of the

state. Out of the Division's total settlements, 5,663 are the rural settlements sharing 15.55 per cent of the state's rural settlements and covering 20.34 per cent of the state's rural population. Urban settlements are 62 in number covering 15.83 per cent of state's urban popula-tion, (Table No. III.1 & III.2 and Fig 1&2).

The table No. III.2 reveals that 97.51 per cent of the total area inhabited by 73.94 per cent of the Division's population is rural. In comparison to other division's large size rural settlements are found more commonly in this division specially in Poona and Ahmednagar districts (Table No. 2 in the appendix). The rural landscape in these pockets is radically transformed due to agro-industrial activities-a tempo that continues from fields to factories. 18.50 per cent (highest among all the division) of the total rural population of the division live in large size villages (Table 2 in the appendix).

62 urban settlements of the western plateau division cover 2.49 per cent of the total area and 26.06 per cent (highest, after Maharashtra littoral division 4.2.1, among all the divisions) of the total population of the division. 85.82 per cent of the total urban population live in (25) large sized towns while the rest of the 37 small towns are inhabited by only 14.18 per cent of the urban population of the Division (Table 3 in the appendix & Fig. 4).

Some old and medieval towns in this division have readily responded to the modern changes and are fast developing into 20th century towns with all their modern thoroughfares and industrial landscape. The settlement cluster in Poona owe their significance to the high industrialisation of the area.

Sub-natural-division: 5.2.1 Maharashtra Littoral.

This division comprises of four districts i.e. Greater Bombay, Thana, Ratnagiri and Kolaba existing in the land between the Arabian Sea on the west and Sahyadri range on the east and stretches from north to south. The region is called Maharashtra littoral.

Heavy rainfall during summer and extreme humidity marks its climate. Its rivers (Damanganga, Vaitarna, Ulhas, the Tansa, the Savitri and Vasishti etc) flow transversely. Important creeks like Dharamtar, Rajpuri, Dabhol, Jaigad, Vijayadurg and Terekhol are formed where the rivers join the sea and country boats plying on coastal trade use them frequently.

Mineral deposits like Manganese, Iron ore, Bauxite and Ilmenite are located in Ratnagiri district, alongwith Bauxite in Kolaba and Thana districts. Salt is produced from brine by evaporation along the sea coast. Concentration of salt pans is found in the North Konkan region. The area is naturally handicapped in agriculture. There is no cultivation of rich crops except interim millet crops.

Of course rice is the important crop all along coastline from Ratnagiri to Thana district because of heavy rainfall in this area. Fishing and mining is the major economic activity of the coastal towns and villages.

From the view point of surfaced roads, generally, the areas are accessible but railways net work presents an interesting picture. Areas are highly inaccessible through railways in Kolaba and Ratnagiri districts (including district headquarters) while in Greater Bombay district the position is just the riverse. In Thana district the position is tolerably good (Map No, 4)

Settlement pattern : Rest of the area, smallest in comparison to other four division i.e. the remaining 9.88 per cent of the total area of the State, having 4,855 settlements, is covered by Maharashtra littoral division. Out of the total settlements, 4,801 are the rural settlements being 13,42 per cent of the State's rural settlements covering 12.65 per cent of the rural population of the State. Urban settlements are 54 in number. These are 18.69 per cent of the state's urban settlements having maximum (45.30 per cent) of the state's urban population (Fig 1).

This is the most urbanised part of the state. In contrast to other divisions, most of the population of this division is urban i.e. 61.86 per cent of the total population is urban while a smaller proportion (38.14 per cent) (Fig 2)

of population is rural. But district-wise analysis of settlements pattern of the Division shows that the distribution of urban population between the four districts of of the Division is quite uneven. Greater Bombay district of the Division is fully urbanised while rest of districts, except Thana, are highly rural. Small sized scattered villages and small sized urban settlements with high concentration in the coastal line is the main settlement characteristic of this division (Map 3) small sized urban settlements are 42 in number having only 5.38 per cent of division's urban population while 94.62 per cent of the urban population live in only among 12 big and medium sized towns of the Division (Table 3 in the appendix & Fig 4). About 84 per cent of the Division urban population is covered by a single urban unit i.e. Greater Bombay-the city district of the State. Impact of rapid industrialisation and urban diffusion in this District is reflected in its periphery. Ulhas basin is influenced by the metropoliton city and is growing rapidly due to its favourable geographical location. Urban and sub-urban settlements in the Division are gemerally, located along the railway line as the Map No. 4 shows.

Summary :

In short we can say that in term of relief and drainage Maharashtra state can be divided into five sub-natural divisions. Each of these divisions shows the

distinctive socio-economic and geographical characteristics in respect of transport network, irrigation resources, climatic conditions, type of soil and availability of mineral resources etc. Accordingly the cropping pattern and level of industrial development also varies from division to division. Heterogeneity in relation to physical setting, and economic development potentialities togather-with historical factors of economic growth resulted in a highly imbalanced distribution of settlements between the five sub-natural divisions of the state (Table No. III.1 and III.2). For example, a higher proportion of division's urban settlements belong to small sized urban centres in Maharashtra littoral division (4.2.1) most probably due to the concentration of industries and urban diffusion in a few big and large sized urban centres in the division. On the other hand a higher no. of small sized towns is found in Eastern plateau most probably because urban centres are not growing at a faster rate due to poor industrialisation in the division. In contrast to the growth pattern of urban settlements, the large sized rural settlements are emerging at a faster rate in Eastern plateau and western plateau regions of the state because of the development of agro-industries in these areas. Large sized villages in Tapti-Purna valley are supported by the fertile crescent of the division. Small sized scattered villages in the common feature of settlement pattern in the Maharashtra littoral and Vidharabha region (division

(p. 182)

3.7.2), may be due to the poor cultivation, rugged topography and poor transport network specially in Ratnagiri and Kolaba districts of Maharashtra littoral and in almost all the districts, except Nagpur district of Vidharva region. (Fig. 3&4).

District-wise distribution of rural and urban settlements within each division also varies mainly, in response to the cropping pattern, state of industrialisation and transport network of the district. For example, in comparison to other districts, Greater Bombay and Thana districts of Maharashtra littoral, Poona district of Western Plateau, Sholapur district in Eastern plateau, Nagpur district in Penganga-Wainganga plateau i.e. Vidharba division and Amravati in Tapti-Purana valley are more industrialized and urbanised districts showing a settlement pattern different from other districts of the divisions. Map No.4 supporting the above mentioned discussion shows the sub-natural division-wise and district-wise location ~~location~~ of all the urban settlements and large sized villages by transport pattern in Maharashtra. (It was not possible to show also the location of 35211 small sized rural settlements in this map).

C H A P T E R - IV

THREE-WAY-CLASSIFICATION VERSUS TWO-WAY-CLASSIFICATION OF SETTLEMENTS IN MAHARASHTRA

In the present chapter, an attempt has been made to reclassify the entire number of census settlements (classified into two categories viz; rural and urban) into three categories namely rural, semi-urban and urban categories of settlements in Maharashtra state. As has been mentioned earlier, under the plan of this study the excercise of three-way-classification is based mainly, on the size of population criterian. According to this criterian all the small sized towns with population below 20,000 and larged villages with population 5,000 and above are to be categorised as semi-urban while large sized urban centres with population 20,000 and above will be treated as urban at one extreme and small sized villages with population less than 5,000 will be treated as 'rural' at the other extreme. It has also been mentioned earlier that the excercise of three-way-classification is to be carried out at sub-natural division level and for two time points : 1961 and 1971 Census of India in Maharashtra. Therefore, with respect to the question : How many and which of the settlements can be classified as semi-urban out of the census rural and urban types of settlements,

on the eve of 1961 and 1971 census in Maharashra and in its sub-natural divisions, one may look into the distribution of census rural and urban settlements in their respective size groups of population. For this purpose, two main tables, one showing the distribution of total number of rural settlements and population according to the respective size groups of rural population and the other showing the distribution of all the census urban settlements and population among the six size classes of urban population, have been prepared for Maharashtra state at sub-narural-division level and for 1961 as well as for 1971 census (Appendix 2 & 3 respectively) with the help of these tables the reclassification of census settlements into rural, semi-urban and urban has been carried out in the following manner:

Under three tier system of classification:

(i) Rural settlements = Total Rural settlements-large sized villages.

(ii) Urban settlements = Total urban settlements-small sized towns.

(iii) Semi-urban settlements = Large sized villages + small sized towns.

let us now see that how many of the census rural and census urban settlements have shifted to the third category (semi-urban) of settlements in Maharashtra state and in its five

sub-natural divisions in 1961 and in 1971 census.

Semi-urban settlements out of the census Rural settlements: Maharashtra state : 1961;

There were 35,851 inhabited rural settlements in the state at the time of 1961 census. It appears from the table 2 in the appendix that only 0.93 per cent (334 villages) of the total villages with 8.32 per cent of the total rural population of the state can be classified as semi-urban while rest of the villa es with 91.68 per cent of the rural population of the state are the small sized villages and come under the rural category of settlements according to our criterian of three tier system of classifica-tion. (Fig 3).

Maharashtra 1971: Appendix 2 also provides the data relating to total rural population and total no. of rural settlements and their distribution among the respective size groups of rural population for 1971 census. At first instance one observes that in 1971 census, the no. of total villages has declined * by 23 in comparison to

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* The decrease in the number of villages over the decade may be due to (1) depopulation of some villages, specially the forest villages,

(ii) Some of the villages were amalgamated with the adjacent villages.

(iii) Some villages were fully converted into urban and (iv) some villages have been submerged completely in the new irrigation project etc.

that in 1961. Another important aspect of this table is the increase of large sized villages in 1971 against the same in 1961. In 1971 the no. of large sized villages becomes as high as 567 as against 334 villages in 1961. But still like 1961, most of the villages, having about 87 per cent of the total rural population fall under the category of small sized rural settlements (with population below 5,000). Therefore, only 1.59 per cent of the total villages having 12.25 per cent of the rural population could be classified here as semi-urban while rest of the 98.41 per cent census villages have been treated here as 'rural' (Fig. 3).

Semi-urban villages at sub-natural division level, 1961 & 1971.

The table 2 further (in the appendix) presents the distribution of all the rural areas and population of the state among its five sub-natural divisions and 26 districts. The percentage distribution of rural settlements and population among the different size groups of rural population within each sub-natural division is also shown in the same table. It is observed that following the state's pattern a very small number of villages and persons can be classified as semi-urban and the bulk of the villages remain as 'rural' within each sub-natural division at both the time points : 1961 & 1971 census. (For 1971, Fig. 3)

Semi-urban settlements out of the census URBAN settlements:

Maharashtra, 1961; The table no. 3 in the appendix shows that in the 1961 census of India, Maharashtra state had a total of 266 urban settlements distributed among the six size groups of urban population. If we separate out the class IV, V & VI towns for classifying them as 'semi-urban' as per our criterion, we find that 192 settlements with 17.34 per cent of the total urban population of the state belong to the 'semi-urban' category while rest of the 74 settlements (distributed in class I, II & III) with 82.66 per cent of the total urban population remain as 'urban' settlements.

Maharashtra state, 1971; There is an increase of 23 towns during the sixties raising the number of urban centres from 266 in 1961 to 289 on the eve of 1971 census in Maharashtra state. Of these 182 settlements have population below 20,000 (covering 12.47 per cent of the states urban population) which can be classified here as semi-urban. The remaining 107 are the large sized urban centres (covering 87.53 per cent of the state's urban population) and can be classified as 'urban' as per our criterion, (Map 6 , Fig. 4). One may note here that in 1971, the number of urban settlements, belonging to class I, II & III, shows an increase of 33 towns in comparison to their number in 1961. Against this pattern, the small

TABLE No. IV.1

Distribution of settlements and population among Rural and urban classes under two-way-classification and among Rural, Semi-urban (Small size town + large size villages) and urban classes under three-way-classification for Maharashtra State at sub-natural division level for 1961 and 1971,

State/Sub-natural division	Year	Total number of		Distribution of settlements and population under two-way-classification				Distribution of settlements and population under three-way-classification									
				RURAL		URBAN		RURAL		SEMI URBAN						URBAN	
		Settlements	Persons	Settlements	Population	Settlements	Population	Settlements	Population	Total		Semi-urban villages		Semi-urban towns		Settlements	Population
										Settlements	Population	Settlements	Population	Settlements	Population		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
MAHARASHTRA	1961	36117	39553718 (100.00)	35851	28391157 (71.78)	266	11162561 (28.22)	35517	26023505 (65.80)	526	4348936 (11.00)	334	2362652	192	1986284	74	9176277 (23.20)
	1971	36067	50412235 (100.00)	35778	34701024 (68.83)	289	15711211 (31.17)	35211	30469136 (60.44)	749	6189464 (12.28)	567	4231888	182	1957576	107	13753635 (27.28)
Sub-natural-division 3.7.1 Tapti-Purna valley	1961	7189	6598115 (100.00)	7137	5224573 (79.18)	52	1373542 (20.82)	7073	4760431 (72.15)	96	876941 (13.29)	64	464142	32	412799	20	960743 (14.56)
	1971	7213	8090967 (100.00)	7160	6301245 (77.88)	53	1789722 (22.12)	7055	5513489 (68.14)	128	1102632 (13.63)	105	787756	23	314876	30	1474846 (18.23)
3.7.2 Penganga-Wainganga plateau	1961	8531	5751910 (100.00)	8495	4443719 (77.25)	36	1308191 (22.74)	8472	4269451 (74.57)	46	393353 (6.84)	23	154268	23	239085	13	1069106 (18.59)
	1971	8613	7371644 (100.00)	8574	5583623 (75.74)	39	1788021 (24.26)	8529	5269099 (71.48)	67	562563 (7.63)	45	314524	22	248039	17	1539932 (20.89)
3.8.1 Eastern plateau	1961	9778	10984701 (100.00)	9698	9170426 (83.48)	80	1814275 (16.52)	9588	8413762 (76.60)	174	1365654 (12.43)	110	756664	64	608990	16	1205285 (10.97)
	1971	9761	13900056 (100.00)	9680	11370688 (81.80)	81	2529368 (18.20)	9482	9909317 (71.29)	256	2120310 (15.25)	198	1461371	58	658939	23	1870429 (13.46)
3.8.2 Western plateau	1961	5680	7528200 (100.00)	5628	5767570 (76.61)	55	1760630 (23.39)	5520	4984586 (66.21)	143	1172704 (15.58)	108	732984	35	389720	17	1370910 (18.21)
	1971	5625	9543743 (100.00)	5563	7056740 (73.94)	62	2487003 (26.06)	5397	5751131 (60.26)	203	1658238 (17.38)	166	1305609	37	352659	25	2134344 (22.36)
4.2.1 Maharashtra littoral	1961	4939	8690732 (100.00)	4893	3784969 (43.55)	46	4905923 (56.45)	4864	3580275 (41.20)	67	540284 (6.22)	29	204594	38	335690	8	4570233 (52.59)
	1971	4855	11505825 (100.00)	4801	4333728 (38.14)	54	7117097 (61.86)	4748	4026100 (34.99)	95	745691 (6.48)	53	382628	42	363063	12	6734034 (58.53)

sized towns have registered a cecline of 10 towns during the same period. Similarly the size of population has shown a remarkable increase in case of large sized urban centres and a trend of decline in population of small urban centres has been noticed in 1971 as compared to that in 1961 as the table 3 in the appendix shows.

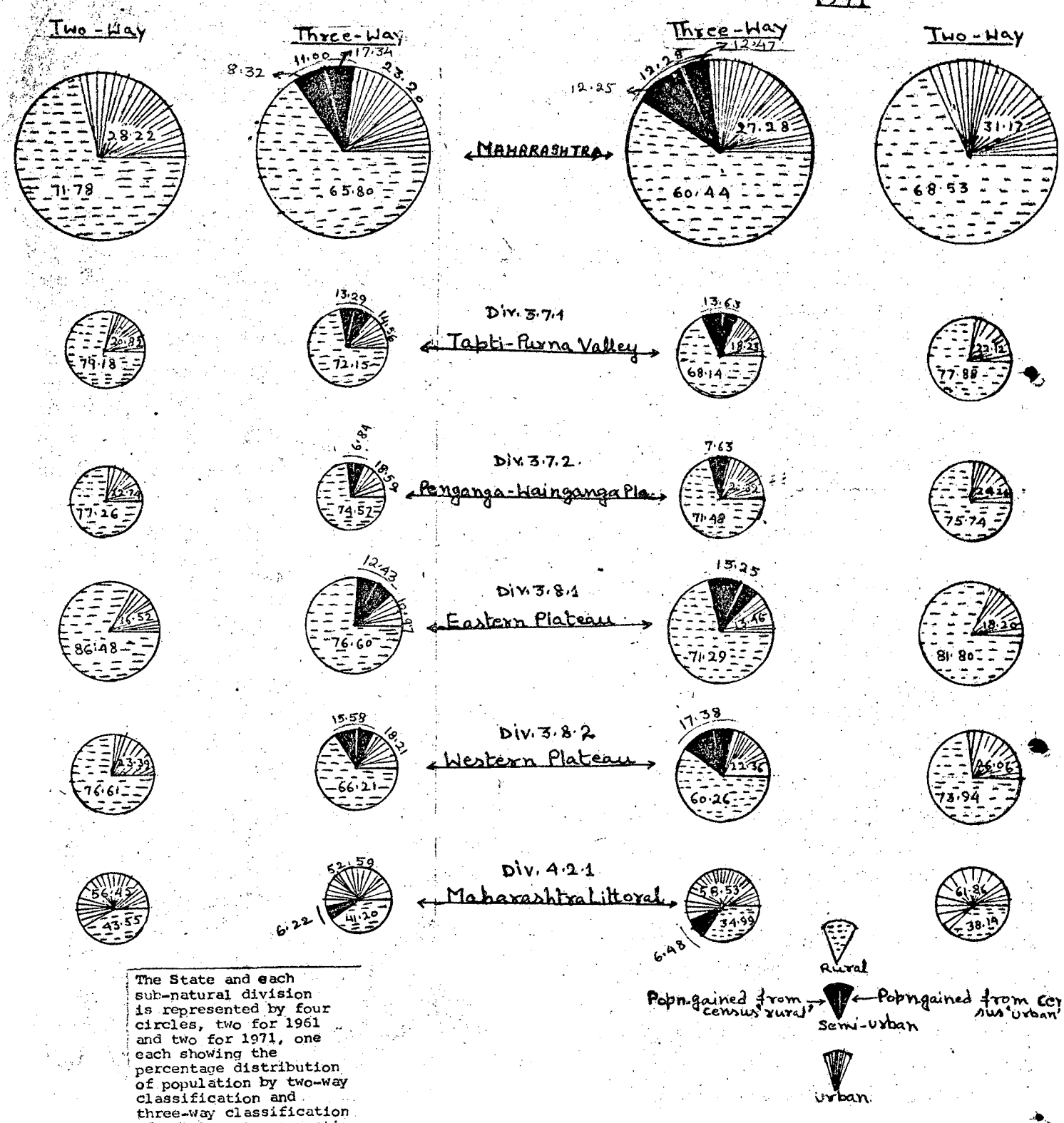
Semi-urban settlements out of the census URBAN settlements in sub-natural divisions of the state; 1961 & 1971 :

Similar to state's pattern, it is observed that each of the five sub-natural divisions have enjoyed an increase in the number of settlements and proportion of population of class I, II and III towns in 1971 as compared to that in 1961 while a trend of decline in the same respect has been onserved for the small sized towns. The number of urban settlements (large sized urban centres) and semi-urban towns (small sized towns) alongwith their population for each sub-natural division in 1961 and 1971, have been shown against the name of each sub-natural division in table No. 3 in the appendix. and Fig 4.

Distribution of settlements and population into 'rural', 'semi-urban' and 'urban' categories under trichotomous classification versus their dichotomous classification :

The table No. IV.1 summarises the distribution of

Percentage distribution of Population in Maharashtra State and within its Sub-natural divisions, by type of settlements under two-way and three-way classification, 1961 and 19



The State and each sub-natural division is represented by four circles, two for 1961 and two for 1971, one each showing the percentage distribution of population by two-way classification and three-way classification of settlements respectively. Percentage figures are also shown. The size of each smaller circle is based on the percentage the sub-natural division represents in the State as a whole.

Fig. 5

settlements and population in rural, semi-urban and urban categories of settlements under three tier system of classification of settlements versus the census classification of settlements in Maharashtra state at sub-natural-division level for 1961 & 1971 census.

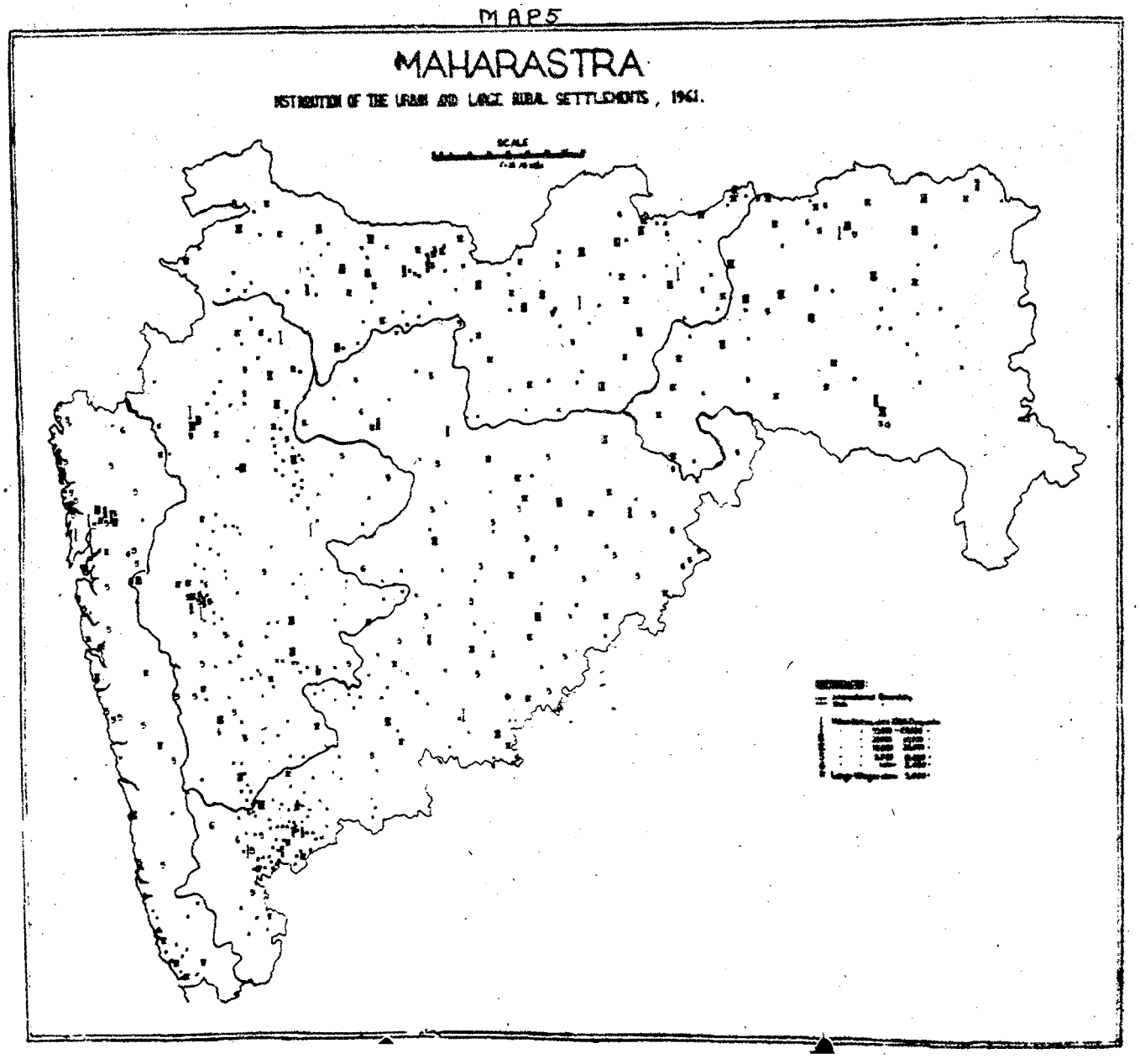
The table shows that under trichotomous classification, the number of rural settlements declines to 35,517 covering 65.80 per cent of state's population as rural vs. a number of 35,851 rural settlements covering 71.78 per cent of the state's population as rural according to census classification of settlements in 1961, The corresponding figures in 1971 are 35,211 settlements covering 60.44 per cent of the state's population (as rural) against 35,778 settlements having 68.83 per cent population as rural under census classification. This is so because 334 large sized villages covering 8.32 per cent of the state's census rural population in 1961 and 567 large sized villages covering 12.25 per cent of the state's census rural population in 1971 have shifted to the semi-urban category under three-way-classification of settlements. (Fig. 5)

In case of census urban settlements 72.18 per cent i.e. 192 settlements out of a total of 266 census urban settlements in 1961 and 62.98 per cent i.e. 182 out of 289 census urban settlements in 1971 have shifted to the

MAPS

MAHARASTRA

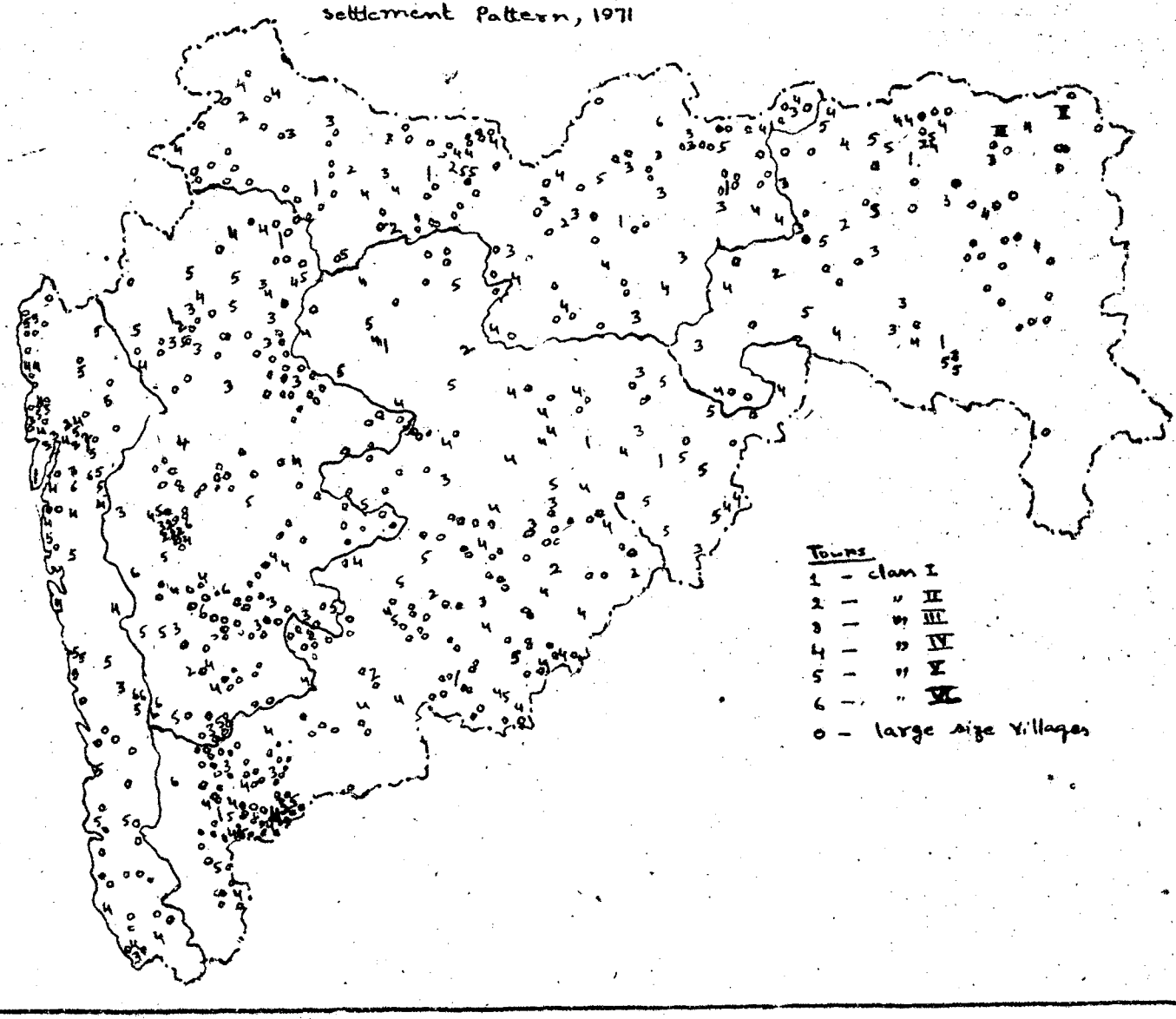
DISTRIBUTION OF THE URBAN AND LARGE RURAL SETTLEMENTS, 1961.



MAP 6

MAHARASHTRA

Settlement Pattern, 1971



semi-urban category under three-way-classification of settlements. Hence the number of urban settlements under three-way-classification reduces to 74 covering 23.20 per cent of states population as urban against there number as 266. Covering 28.22 per cent of state's population as urban under two-way-classification in 1961. In 1971 the corresponding figures are 107 settlements covering 27.28 per cent population versus 289 settlements covering 31.17 per cent population of the state as urban under three-way-classification and under census classification of settlements respectively. (Fig 5)

Finally, as a result of reclassification of large sized villages and small sized towns into'semi-urban' category, the number of semi-urban settlements in 1961 census, becomes 526 (334 large sized villages + 192 small sized towns) covering 11.00 per cent of state's population as 'semi-urban' whereas in 1971 this number becomes 749 settlements (567 large sized villages + 182 small sized towns), covering 12.28 per cent of state's population as semi-urban.

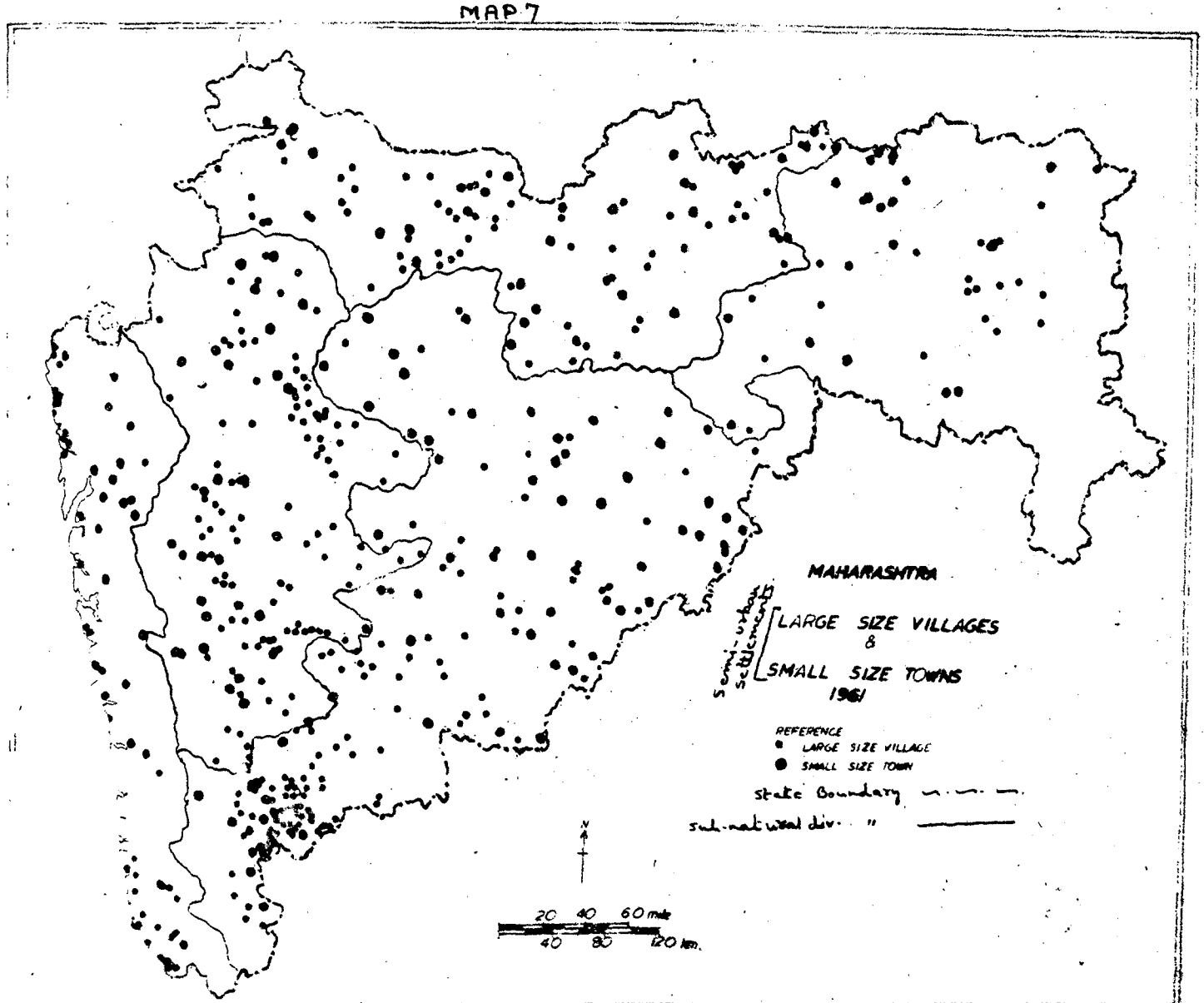
Sub-natural divisions and three-way-classification of Settlements (Map, No. 5 & 6):

Table No. IV.1 further shows the sub-natural-division-wise distribution of settlements along with their population into rural semi-urban and urban categories Vs. their

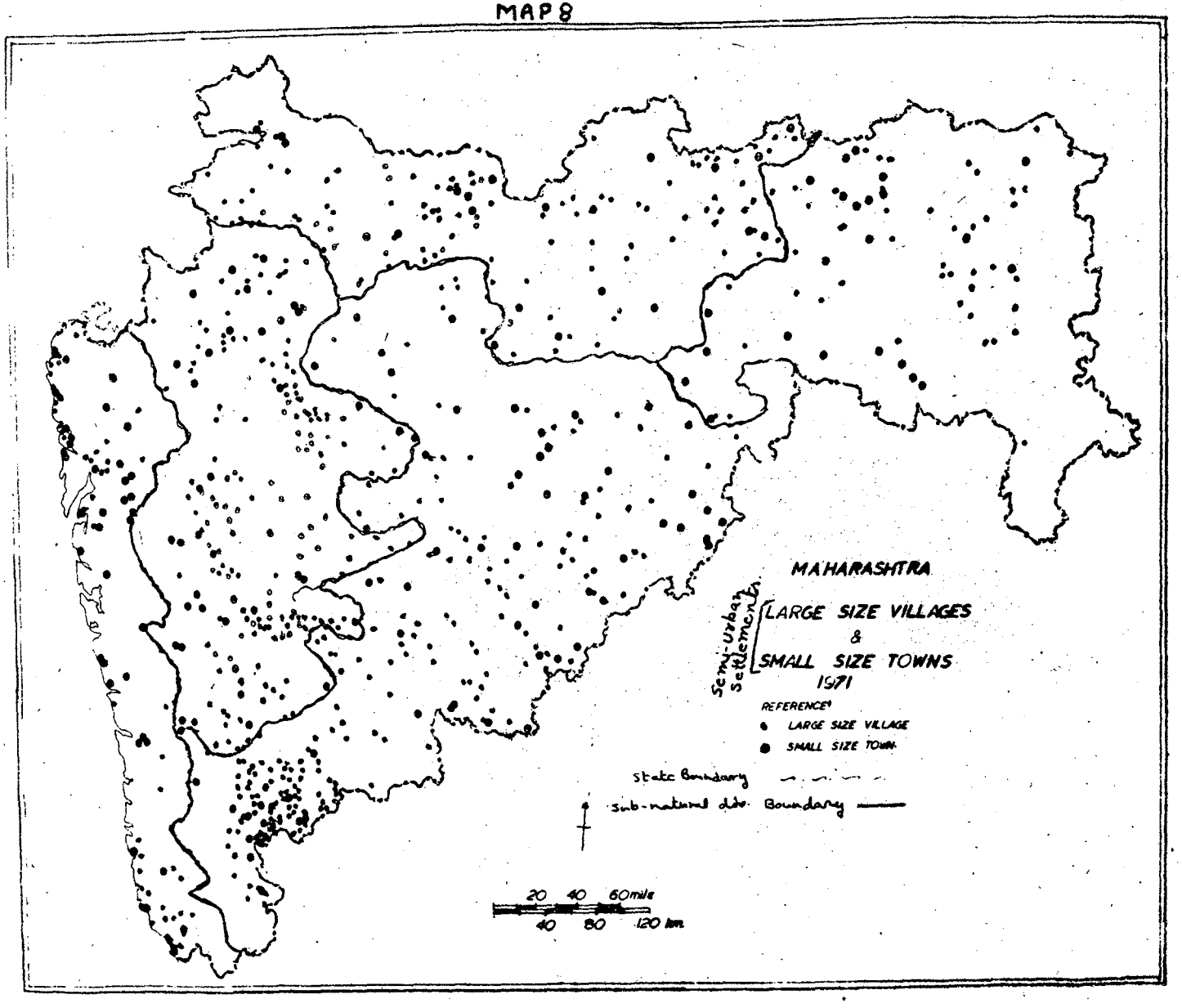
distribution into rural and urban categories under census classification in Maharashtra for 1961 and 1971 census. It is observed from the table that maximum no. of the semi-urban settlements of the state is found in the Eastern plateau division (division 3.8.1) followed by western plateau division because large sized rural settlements are found in maximum in these two divisions. As has been discussed earlier the most probable reason for this pattern of settlement in eastern and western plateau may be the faster development of agro-industries resulting in coming-up of large sized rural settlements at a speedy rate, in some districts of these divisions. In addition, small sized towns are also existing in maximun in Eastern plateau most probably due to the poor industrialisation, the urban centres are not developing much in this division.

The smallest proportion of large villafes is found in Penganga-Wainganga plateau (division 3.7.2) followed by Maharashtra littoral (division 4.2.1). In these two regions, most of the villages are small sized scattered hamlets, may be mainly due to the reason that the poor cultivation and the rugged topography of the divisions do not support the large sized rural settlements. In comparison to these regions the fertile parts of land in Tapti-Purna-valley support the large sized villages in the division (3.7.1). In short the largest no. of semi-urban settlements of Maharashtra lies in Eastern and Western

MAP 7


MAHARASHTRA
LARGE SIZE VILLAGES
&
SMALL SIZE TOWNS
1961
REFERENCE
LARGE SIZE VILLAGE
SMALL SIZE TOWN
State Boundary
sub-natural div. "
N
20 40 60 mile
40 80 120 km.

MAP 8


MAHARASHTRA
Semi-urban settlements
LARGE SIZE VILLAGES
&
SMALL SIZE TOWNS
1971
REFERENCE
LARGE SIZE VILLAGE
SMALL SIZE TOWN
State Boundary
Sub-national dist. Boundary
20 40 60 mile
40 80 120 km

plateau divisions of the state. Between all the divisions the population living in the semi-urban areas of the division in highest in western plateau (17.38 per cent in 1971) followed by Eastern Plateau (15.25 per cent in 1971) and Tapti-Purna-valley (13.63 per cent) divisions. Minimum no. of semi-urban settlements is found in Vidharba region (division 3.7.2) of the state while in terms of 'semi-urban' population, Maharashtra littoral is in the bottom (Fig. 3 & 4)

While map No. 5 and 6 show the location of all the urban settlements (class-wise) and large sized villages by transport pattern in the state in 1961 and in 1971 respectively, map no. 7 & 8 shows the sub-natural-division-wise location of all the semi-urban settlements only, in 1961 and 1971 respectively. Location of rural settlement i.e. small sized villages could not be shown in any map due to a huge amount (35,851 in 1961 & 35,778 in 1971) of small sized villages in the state.

C H A P T E R - V

SOCIO-ECONOMIC AND DEMOGRAPHIC IMPLICATIONS OF THREE-WAY-CLASSIFICATION OF SETTLEMENTS IN MAHARASHTRA

In the previous Chapter we have reclassified the census rural and urban settlements of Maharashtra into three categories viz. rural, semi-urban and urban. To confirm the validity of trichotomous classification over the dichotomous classification, we may look into the socio-economic and demographic implications of three-way-classification in the following two ways :-

I. Whether the two types of classification of settlements viz. (i) rural and urban and (ii) rural, semi-urban and urban show any variations between them with regard to their socio-economic and demographic characteristics.

II. Whether the semi-urban set of settlements shows any distinct socio-economic&demographic characteristics in comparison to that of rural and urban set of settlements under three-way-classification.

5.1 Selection of variables :

As has been mentioned earlier, the differentials in relation to socio-economic and demographic characteristics

between the different types of settlemtns have been studied in terms of the following variables;

1. Growth rate of population
2. Density of population per sq. km of area
3. Sex ratio
4. Literacy
5. Occupational structure of population.

It may also be mentioned here that the selection of these variables is not arbitrary. Throughout the World, these variables are regarded as the very important and basic indicators to assess the differentials in relation to socio-economic and demographic characteristics between the rural and urban type of settlements. This has become a common experience now that the values of the said variables vary considerably from one place to another depending upon the degree of urbanisation. Specially in a developing country like India, all these variable have always shown the contrasting values between the rural and urban settlements. Not only that but the inter-urban and inter-rural (of various size-classes of population) defferences (in respect to the above mentioned variables) are also found to be quite pronounced in India.+

Therefore, Growth Rate, Density, Sex ratio, Literacy and occupational structure of population have been considered

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+ As the table No. 1.1 of Chapter I, shows in case of Maharashtra State.

here as the important variables to study the socio-economic and demographic implications of three-way-classification of settlements in Maharashtra. Each of the five variables have been studied in the following sections. Hypothesis in relation to each variable is discussed in the concerned sections.

5.1.1 Growth of population :

Growth of population has been studied here in terms of 'percentage decadal growth rates'. The two time points for the same are 1961 & 1971 census.

Hypothesis:

The growth of population in a territory depends upon various@ factors but the degree of urbanisation in terms of industrialisation play a significant role in this respect, initially by attracting the mass immigration in search of job opportunities and afterwards by providing a broader base of population in terms of absolute number for the higher natural growth. This is a common fact now that the rate of population growth is slower in the settlements, based on agricultural economy while it is higher in those places which are industrialised. Therefore, the hypothesis in relation to population growth with reference to three-way-classification is framed as given below:

(1) Under the three-way-classification; Rural set of settlements have lesser rate of population growth against the rural set of settlements under two-way-classification;

@ Population Growth in a given region is determined by three components-births, deaths and migration. The first two are the natural elements of population change playing the positive and negative

(ii) Urban set of settlements show a higher population growth rate in comparison to the urban set of settlements under-two-classification;

(iii) Between the three types of settlements growth rate of population will be highest for urban settlements and lowest for rural set of settlements while for the semi-urban set of settlements it should be higher than the rural areas and lower than the urban set of settlements i.e. some what in between of the two (Rural and Urban)

To test the hypothesis we may look into the following table (No. V.1) presenting the percentage decadal growth of population of Maharashtra at sub-natural division level for the two sets of classification of settlements;

Table V.1

The percentage decadal growth of population during 1961-1971 for the settlements classified under two-way-classification and three-way-classification systems for Maharashtra at sub-natural division level.

State/Sub-natural division	Percentage decadal growth of population				
	Two-way-classification		Three-way-classification		
	R	U	R	SU	U
1	2	3	4	5	6
Maharashtra State	+22.22	+40.75	+21.87	+27.16	+42.09
Sub-natural divn.					
3.7.1 Tapti-Purna valley	+20.61	+30.30	+20.06	+25.13	+30.63
3.7.2 Pengnga-Waingnga Plateau	+25.65	+34.68	+25.24	+29.76	+36.68

functions respectively. Migration, with its selective nature of population readjustment, plays a crucial role in the regional and national economies. It is at the same time a consequence and a component of socio-economic change in a given territory.

1	2	3	4	5	6
3.8.1 Eastern Plateau	+25.53	+38.01	+23.99	+32.33	+39.42
3.8.2 Western Plateau	+22.35	+41.26	+21.94	+29.42	+49.06
4.2.1 Maharashtra Littoral	+16.18	+45.07	+15.96	+18.99	+58.98

I - Population growth in the rural and urban sets of settlements under three-way-classification Vs two-way-classification of settlements.

(1) RURAL: (a) <u>Within the State</u>;

Growth of rural population under three-way-classification is slower (+21.87 per cent) than the two-way-classification (+22.22 per cent) as per our hypothesis. However the observed differences are very small. The basic reason for this seems to be the fact that only a very small no. of settlements (pertaining to the class of 'large size' villages) from the census category of 'rural' has moved into the new category i.e. semi-urban set of settlements.

(b) <u>Within & between the sub-natural division</u>;

Within each sub-natural division the growth rate of population in the rural areas under three-way-classification is distinct from that of the rural areas under two-way-classification. Although the rate of population growth and the pattern of variations between the G.R.P. of the two sets of rural settlements varies from division to division and also

that the range of differences between the G.R.P. of two sets is not wider but each division follows a trend of variations similar to that of the State i.e. a slower GRP for the rural areas under three-way-classification in comparison to that under two-way-classification. For example under both the systems of classification, the rural areas of Penganga-Wainganga plateau followed by Eastern plateau have shown the highest growth rate of population whereas Maharashtra littoral division's rural areas have registered the lowest decadal growth of population, may be due to the different socio-economic and geographical conditions (discussed in Chapter III of the paper). But a trend of slower growth of population in the rural areas under three-way-classification Vs two-way-classification is clear within each division of the State.

(ii) URBAN (a) Within the State;

Supporting our hypothesis the growth of population is higher (+42.09) in the urban areas under three-way-classification Vs two-way-classification (+40.75) as the table No. V.1 reveals.

(b) Within and between the sub-natural divisions;

Within each sub-natural division, the growth of population appears to be faster in the urban set of settlements under three-way-classification in comparison to that under two-way-classification. It is true that the rates of population growth for both the sets of urban settlements varies from division to division and also that the pattern of

variation in relation to growth rates of population between two-sets of urban settlements is not of the similar nature for each of the five sub-natural divisions as the table No. V.1 shows. For example the GRP for the urban settlements under three-way-classification in Tapti-Purna valley (division 3.7.1) is +30.63 per cent which is slightly higher in comparison to that (+30.30 per cent) under two-way-classification, while in Maharashtra littoral division (4.2.1) the GRP for the urban set of settlements under three-way-classification is as high as +58.98 per cent showing a considerable percentage variation over the same (+45.07 per cent) under two-way-classification. But inspite of the differences between the five sub-natural-divisions, a trend of faster population growth in the urban settlements under three-way-classification in comparison to that under two-way-classification is quite clear within each sub-natural division of the State. Table No. V.1 shows the same.

II. Population growth and the Rural, Semi-urban and Urban sets of settlements.

(a) Within the State;

Obviously the growth rate of population is highest (42.09 per cent) in the urban set of settlements in comparison to its rural and semi-urban counterparts. The rural areas records the lowest (+21.87 per cent growth rate of population while semi-urban areas supporting our hypothesis, are quite distinct (+27.16 per cent from rural and urban in this respect as the column No. 4 5&6 of the table V.1 show.

(b) Within and between the NDS.

Each of the SND of the State follows the State's pattern in relation to the variations between the growth rate of population of three types of settlements. Within each division the growth rate of population is highest in urban areas, lowest in rural areas and some what in between of the two (Rural and urban) for semi-urban areas as the table No. V.1 shows. As per the hypothesis here, although the trend of variations between the growth rate of population of semi-urban to rural and semi-urban to urban is similar within each division but the pattern of variation between the three types of settlements varies from division to division in response to its socio-economic and geographical conditions.

As has been explained earlier due to the emergence of Greater Bombay- the fully urbanised and highly industrialised district- in Maharashtra littoral division, the growth rate of population becomes highest for the urban areas of this division in comparison to other division. Semi-urban areas and rural areas show a faster growth in eastern plateau division followed by Vidharba and western plateau division may be due to the developments of agro-industries in these areas.

In short supporting our hypothesis, a more realistic picture of rural-urban differences in respect of population growth is evident under three-way-classification in comparison to that under two-way-classification. Similarly the

the semi-urban areas under the three-tier-system of classification have also maintained the distinctiveness from rural set of settlements at one extreme and from the urban set of settlements at the other extreme at the State as well as at sub-natural-division level as the table No. V.1. represents.

5.1.2 Density of population:

As usual the density of population has been measured here in terms of number of persons living per sq. km. of area.

Hypothesis:

This is a common experience today that the density of population is very much related to the economic characteristic of the area. The areas which are industrialised have a greater concentration of population in comparison to those areas where agriculture is the main occupation. Hence it may be quite reasonable here to hypothesize that under three-way-classification of settlements:

I (i) Rural settlements should show a lower density in comparison to the rural set of settlements under two-way-classification because small sized villages are expected to be generally more agricultural based and sparsely populated.

(ii) Density should be higher for the urban areas in comparison to that of under two-way-classification because large size urban centres (under three-way-classification) are more industrialised than the small sized urban areas. Therefore under three-way-

TABLE No. V.2

Density of persons per sq. km. for the settlements under two systems of classification of settlements for Maharashtra State at sub-natural division level for the year 1961 & 1971.

State/Sub-natural division	Year	Two-way-classification		Three-way-classification		
		Rural	Urban	Rural	Semi-urban	Urban
1	2	3	4	5	6	7
Maharashtra	1961	95	1694	90	268	3742
	1971	115	2554	108	277	4202
Sub-natural divisions						
3.7.1 Tapti-Purna valley	1961	148	1258	99	337	3081
	1971	111	2438	103	338	3025
3.7.2 Penganga-Wainganga plateau	1961	69	1962	67	641	2899
	1971	87	2830	83	689	3924
3.8.1 Eastern plateau	1961	97	716	94	220	1859
	1971	121	1140	117	206	1959
3.8.2 Western plateau	1961	101	1243	96	204	2949
	1971	128	1700	112	241	3213
4.2.1 Maharashtra littoral	1961	132	4676	128	518	6786
	1971	150	6447	142	601	8700

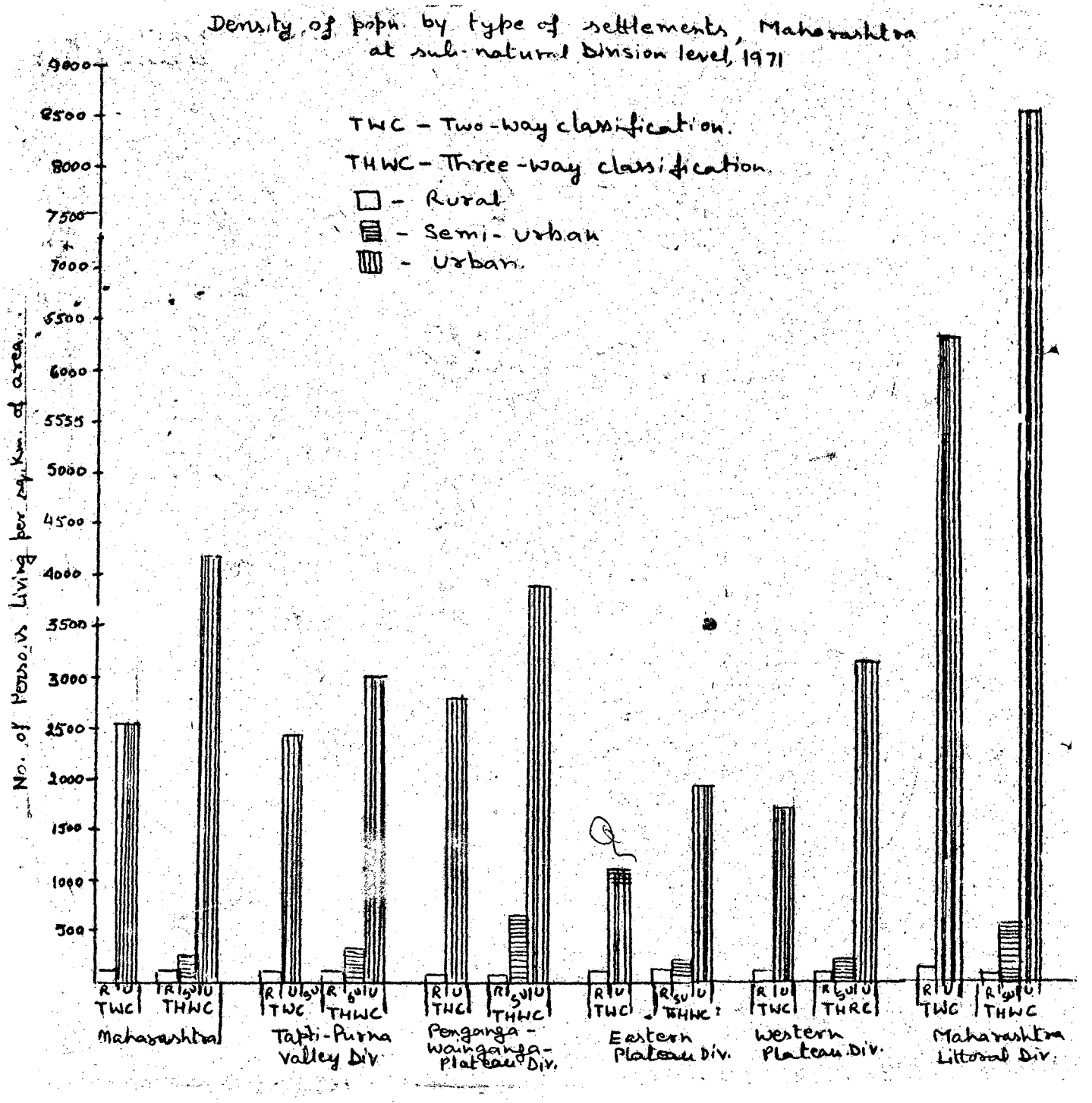
Density of popn. by type of settlements, Maharashtra at sub-natural Division level, 1971
TWC - Two-way classification.
THWC - Three-way classification.
- Rural
- Semi-Urban
- Urban.
No. of persons living per sq. km. of area.
9000
8500
8000
7500
7000
6500
6000
5555
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
R U TWC
R SU U THWC
Maharashtra
Tapti-Purna Valley Div
Penganga-Wainganga-Plateau Div.
Eastern Plateau Div.
western Plateau Div.
Maharashtra Littoral Div.

Fig. 6

classification after the exclusion of small size urban centres from the census urban, the density should be higher for the urban set of settlements than that under two-way-classification.

II. The semi-urban set of settlements should show higher density than that of rural settlements because large sized villages and small sized towns, generally, are not as much agricultural based from the view point of economic activity of the people as the smaller rural settlemtnts and are expected to be more densily populated than in rural areas whereas in comparison to urban set of settlements semi-urban areas should show lower density of population because big/large sized urban centres are highly industrilised and are thickly populated.

Table No. V.2 presents the density of population for different categories of settlements under the two classification system for Maharashtra State and its SNDs. for 1961 and 1971.

I. <u>Density and rural and urban set of settlements under two classification systems</u> (Fig 6)

(1) <u>Rural, 1961 & 1971. (a) Within Maharashtra State</u>: Supporting our hypothesis, the density of persons for the rural set of settlements is lower under three-way-classification in comparison to that of the rural areas under two-way-classification. Although the differences between the two sets is not

very striking in 1961 as well as in 1971 but some how it reveals the trend, the coulmn No. 3 and 5 of table V.2 reveals the same.

(b) Within and between the sub-natural divisions;

Like the State itself, the pattern of density for the two sets of rural settlements is found to be repeated in relation to the sub-natural divisions of the State for the year 1961 & also for 1971. Of course the density and pattern of variations between the two sets of 'rural' vary from division to division as has been shown in cols 3 and 5 of table V.2.

(ii) Urban, 1961 & 1971, Maharashtra State and within and between the sub-natural divisions.

The density for the urban set of settlements is remarkably higher under three-way-classification than that under two-way-classification. This supports our hypothesis strongly whether we take two time points or the State itself or its five sub-natural divisions.

Although like rural areas, the density and the pattern of variations between the density of two sets of urban settlements under two systems of classification varies from division to division but a striking difference between the density of two sets of urban settlements is apparent within each of the five sub-natural division.

II - Density and Rural, Semi-urban and Urban set of settlements: 1961 and 1971: Maharashtra State and its five sub-natural divisions:

Table V.2 also shows the density of population for semi-urban set of settlements alongwith the rural and urban set of settlements under three-way-classification system (col. 5,6 & 7 of the table). It may be observed from the table that semi-urban set of settlements shows somewhat distinctive density figures in comparison to that of rural and urban areas. Although the figures for semi-urban areas are not just inbetween of the 'rural' and 'urban' rather are more closer to rural areas* than its urban counter part, but supporting our hypothesis density is lowest in rural areas where the villages are sparesly inhabited and man-land ratio becomes lower while in urban areas where the population is concentrated alongwith the concentration of various types of industries within a smaller area (in comparison to agricultural land) the man-land ratio becomes quite high and the density figures are found to be highest in urban areas. Semi-urban areas which are expected to have mixed rural-urban economy, show the density lower than that of urban areas but higher than that of rural areas. This is true for the state itself and for each of its sub-natural-

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* Because the population surveys show that larger urban settlements cover comparitively a very smaller area of land inhabited by a larger number of persons whereas the rural and semi-urban settlements cover a larger part of area with a smaller number of residents, Table No.III of chapter III of the study shows the percentage distribution of area among rural and urban classes and confirms the same.

division and for both the time points. Although as the table No. V.2 shows, the density and the pattern of variations between the density of three types of settlements may vary from one division to another according to the degree of concentration of industries, fertility of land affecting the cropping pattern and the establishment of agro-industries in the area and the transport network of the division, but still a noticeable distinction between the three types of settlements in respect of density is observed within each sub-natural-division of the State.

In other words three-tier-system of classification of settlements does not only bring forward the semi-urban category of settlements with all its distinctiveness from rural and urban areas in respect of density of population but also represents a more pronounced distinction between the density of population of rural and urban set of settlements in comparison to that of rural and urban set of settlements under census classification i.e. two-way-classification. As the table V.2 reveals, it is true for the State as well as for each of its sub-natural-division at both the time point i.e. 1961 and 1971 census. Fig 4 represents the above analysis for the year 1971.

5.1.3 Sex Ratio :

Sex ratio being the next variable to be studied here in relation to the study of socio-economic and demographic implication of three-way-classification of settlements, has been worked out in terms of "Number of females per 1,000 males.

Hypothesis :

The sex composition of population in a settlement, although also depends on sex composition at birth and sex differences of mortality but the differences between the sex ratio of the rural and urban settlements is mainly a function of male selective migration from rural to urban places. It is inversely related to the rate of urbanisation, may be due to the reason that higher the concentration of industries in urban centres, higher the male selective immigration in the hope of better employment opprotunities and lower the sex ratio in these areas. Generally, in the rural set-up where agriculture is the main occupation, sex ratio is found to be higher in comparison to that for urban areas which are highly industrialised. Therefore, regarding sex ratio, it may be quite relevent to frame the hypothesis in the following manner:-

II. The range of differences between the sex ratio of rural and urban set of settlements under three-way-classification would be higher in comparison to that of the sex ratio for the rural and urban areas under two-way-classification because in comparison to two-way-classification the sex ratio under three-way-classification

(i) Should be higher in the rural areas which are small sized villages having mainly the agricultural economy.

TABLE No. V.3

Sex ratio for the settlements of classified under the two systems of classification of settlements for Maharashtra State at natural-division level for the year 1961 & 1971.

State/Sub-natural Division	Year	Type of settlements according to Two-way-classification		Three-way-classification		
		Rural	Urban	Rural	Semi-urban	Urban
1	2	3	4	5	6	7
MAHARASHTRA	1961	995	801	998	943	777
	1971	985	820	991	935	807
Sub-natural division						
3.7.1 Tapti-Purna valley	1961	964	903	965	936	896
	1971	958	907	959	937	904
3.7.2 Penganga-Wainganga plateau	1961	988	901	989	943	895
	1971	975	902	977	928	901
3.8.1 Eastern plateau	1961	969	908	971	934	898
	1971	961	894	966	927	888
3.8.2 Western plateau	1961	997	878	1003	937	872
	1971	983	879	997	935	877
4.2.1 Maharashtra littoral	1961	1115	692	1117	989	677
	1971	1102	737	1113	961	727

(ii) Should be lower in the urban areas (i.e. large sized urban centres, comparitively more industrialised).

II. Among the three types of settlements- rural, semi-urban, urban obviously, the sex ratio should be lowest for urban areas because industries are mainly concentrated in the big/large sized urban units. It should be highest for the rural areas due to the agricultural set up and for semi-urban areas, it should be somewhat in between of 'rural' and 'urban' because semi-urban settlements, according to our observations, generally have mix rural and urban characteristics from the view point of economic activity.

The hypothesis should be true for Maharashtra State and for each of its sub-natural divisions for both the time points i.e. 1961 & 1971 census. Table No. V.3 presents the data on sex ratio and enables us to follow the discussion on the above mentioned points.

I Sex Ratio and Rural and Urban set of settlements under three-way-classification Vs two-way-classification of settlements:-

1961 The State and Sub-natural divisions:

As per our hypothesis the sex ratio for rural areas is higher (998) and for urban areas is lower (777) under three-way-classification in comparison to that of the rural (995) and urban (801) areas under two-way-classification.

Hence the range of differences between the rural and urban sex ratio becomes wider under three-way-classification (221 units Vs 94 units under two-way classification) presenting a more realistic picture of the rural and urban differentials in relation to sex ratio (Col. 3, 4 and 5, 7 of table V.3)

Similar to State's trend, each of the five sub-natural divisions also shows a higher sex ratio for rural areas and lower for urban areas under three-way-classification in comparison to that under two-way-classification. Although, the sex ratio and the variations between the sex ratio varies from division to division for two types (rural and urban) settlements under both the systems of classification but the trend of differences under two systems remains the same in each division. For example, the sex ratio for the urban areas is lowest in Maharahstra littoral division, most probably because the highly industrialised Greater Bombay district-attracting the male selective immigration from within and outside the State, falls under this division. The highest sex ratio for rural areas is also the characteristic of Maharashtra littoral division. This is so because of the traditional male selective out migration, particularly from the villages of Ratnagiri and Kolaba districts which have remained underdeveloped or undeveloped due to certain socio-economic and geographical factors, is more common in this division in comparison to the other divisions where some agro-industries have started developing. But inspite

of such type of variation between the sub-natural division, the range of differences between the sex ratio of rural and urban set of settlements is wider within each sub-natural division under three-way-classification in comparison to that under two-way-classification. The table No. V.3 shows the same.

1971, Within the State and within and between the sub-natural divisions of the State.

Although in 1971, some changes have taken place in relation to the sex ratio for both the rural and urban areas in respect of State as well as each of its sub-natural division but like 1961, in 1971 also the differentials between the sex ratio of rural and urban areas is more clearly represented under three-way-classification than that under the two-way-classification. This is true for the State as well as for the sub-natural divisions as the table V.3 reveals.

II Sex ratio and Rural, Semi-urban and Urban set of settlements.

1961 and 1971 Maharashtra State and its Sub-natural divisions;

While looking into Cols. 5, 6 and 7 of table No. V.3, at first instance one finds that between the three-types of settlements sex ratio is highest for the urban set of settlements, lowest for the rural set of settlements while for semi-urban set of settlements it is some what inbetween of the 'rural'and 'urban' sex ratio. Thus supporting our

hypothesis for semi-urban areas the sex ratio, showing the considerable differences, is lower than that of urban areas and is higher than that of rural areas in respect of State as well as each of its sub-natural divisions whether we take 1961 point of time or 1971.

It may also be mentioned here that the temporal changes over a period of decade or the inter-divisional variations due to the different types of economy do not bring any change in relation to the trend of differentials between the three-types of settlements.

In short we can say that rural-urban differentials in relation to sex ratio are pronounced under three-way-classification than that under two-way-classification and also that supporting our hypothesis the semi-urban set of settlements retains its distinctiveness from rural and urban set of settlements whether we take the two time points or the State or the sub-natural divisions of the State.

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* The definition of 'Literates' is that of the Census of India 1961 and 1971 for both the time points respectively.

** The literacy rate calculated in this manner may be regarded as crude literacy rate because we have taken the whole population as denominator, whereas the population between age group 0-4 (as per 1971 Census of India) is not exposed to education. But, since we do not have village level information on age distribution of population, we have taken the total population.

Section 5.1.4 Literacy*:

Literacy is another important indicater of distinguishing the urban areas from the rural areas, specially in a developing country like India where the literacy rate for an urban area is generally found to be quite high in comparison to that of a rural area. In the present paper the literacy has been studied in terms of number of total male and female literates per hundred of total male and female population respectively.**

Hypothesis:

I As the Census of India show the literacy rates for urban areas are generally found to be much higher than that of rural areas. But under three-way-classification the corresponding figures for :

(i) rural areas should show a further decline and
(ii) for urban areas, the literacy rates should come forward with an upward lift against that of rural and urban areas under two-way- classification.

II Between the rural, semi-urban and urban types of settlements, obviously the literacy should be found highest in urban areas, lowest in rural areas whereas for semi-urban areas it should be somewhat inbetween of the rural and urban level of literacy.

The hypothesis is based on the facts that the socio-economic conditions, particularly in terms of social norms,

*, **] see the page No. 106

T A B L E - V.4

Literacy rates, by sex, for Rural and Urban and Rural, Semi urban and urban settlements according to two-way-classification and three-way-classification of settlements respectively, for Maharashtra State at sub-natural division level for the year 1961 and 1971.

State/Sub-natural division	Year	Two-way-classification						Three-way-classification								
		RURAL			URBAN			RURAL			SEMI - URBAN			URBAN		
		P	M	F	P	M	F	P	M	F	P	M	F	P	M	F
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MAHARASHTRA	1961	21.46	33.51	9.34	51.07	61.62	37.90	20.52	32.47	8.55	33.37	49.34	16.42	54.49	63.02	43.51
	1971	30.63	43.22	17.84	58.07	66.88	47.33	29.39	42.19	16.47	42.20	53.22	30.41	59.53	67.94	49.10
Sub-natural-divisions																
3.7.1 Tapti-Purna valley.	1961	26.64	40.24	12.55	45.18	58.49	30.42	25.70	39.42	11.49	38.82	51.74	25.03	46.69	59.90	31.95
	1971	35.64	48.09	22.65	53.78	64.36	42.13	34.59	47.15	21.50	45.05	56.68	32.65	54.57	64.93	43.11
3.7.2 Pengana-Waingang plateau.	1961	19.90	32.47	7.18	47.21	61.03	31.87	19.45	31.88	6.90	37.23	53.17	20.34	48.73	62.14	33.74
	1971	29.89	42.19	17.26	55.15	65.54	43.62	29.19	41.41	16.68	43.81	56.84	29.77	56.50	66.59	45.30
3.8.1 Eastern plateau.	1961	16.79	27.65	5.58	40.22	54.02	25.02	15.83	26.46	4.89	30.40	43.94	17.64	43.33	56.99	28.09
	1971	25.78	38.75	12.28	48.16	60.51	34.34	24.37	37.89	10.37	36.08	46.00	25.39	51.82	64.38	37.64
3.8.2 Western plateau.	1961	24.20	36.72	11.64	51.42	62.72	38.55	23.09	35.54	10.68	36.04	48.84	22.36	53.07	64.00	40.53
	1971	32.63	45.73	19.36	58.71	68.49	47.58	31.06	44.35	17.73	42.52	54.49	29.72	59.54	69.09	48.65
4.2.1 Maharashtra Littoral.	1961	23.53	35.49	12.81	57.64	64.68	47.48	22.65	34.53	12.03	46.08	57.62	34.41	58.17	64.93	48.18
	1971	33.74	43.21	23.27	63.19	69.32	54.87	32.47	44.04	22.08	53.42	63.29	43.16	63.44	69.39	55.26

availability of educational facilities and nature of occupation are usually found to be different not only between the rural and urban areas but inter-rural and inter-urban (according to size class of population). Variations are also found to be quite pronounced in this respect. In rural areas where agricultural occupation is a predominant economic activity, Children also help their parents and thus child labour becomes an important part of labour force participation in agricultural activities. Therefore, due to higher opportunity cost of child education, rural parents do not prefer to send their children to the school. Besides this major reason (attitude towards education) the facilities for education are also limited in rural areas in comparison to that in urban places while in case of urban areas apart from the availability of educational facilities, urban parents generally prefer also to send their children to the schools.

To test the hypothesis let us examine the table No. V.4, presenting the literacy rates by sex for Maharashtra and its sub-natural-divisions for the years 1961 and 1971.

I Literacy Rates and Rural and Urban areas under three-way-classification Vs Two-way-classification. (T

1961 & 1971 The State and Sub-natural-division :

One may observe from the table that literacy rates for the total population as well as for 'male' and 'female' population are lower for the rural areas and are higher for

111 (a)

Literacy Rate, by Sex, for Rural, Semi-Urban and Urban Settle., Maharashtra and its Sub-natural-div., 1971

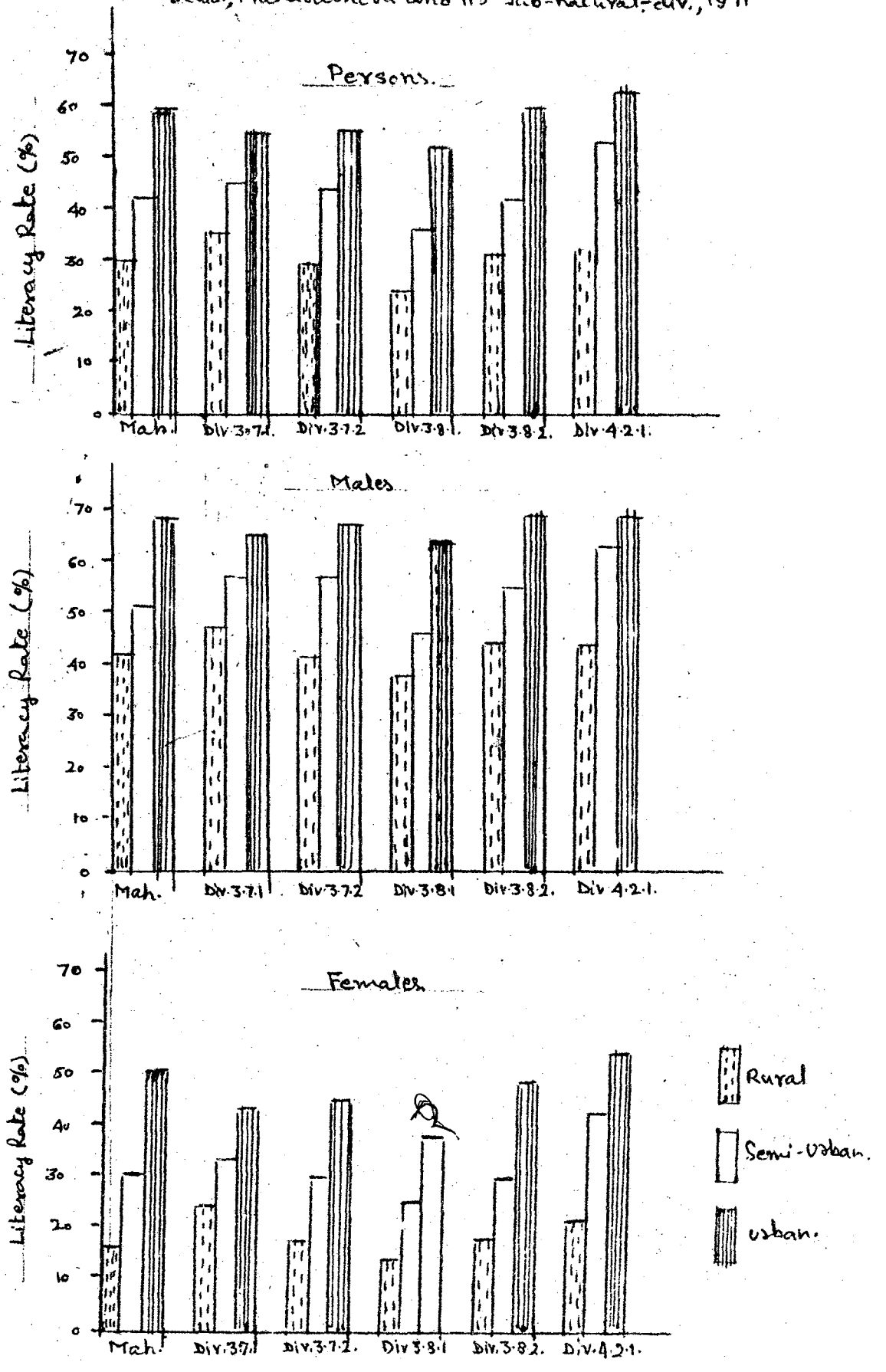

Fig 7

the urban areas under three-way-classification in comparison to that under two-way-classification. It may be mentioned here that: although the differentials in relation to literacy rates between the two sets of rural and urban areas are only marginal but a particular trend in this respect is very clear. The variations between the rural and urban sets of settlements in relation to literacy becomes more pronounced under three-way-classification disclosing the rural-urban differentials more clearly than that under census classification. This is true for Maharashtra State as well as for each of its sub-natural-divisions and for both the time points i.e. 1961 and 1971. Although, like other variables, the inter-divisional and inter-temporal study of the literacy shows that the literacy rates and the pattern of variations between the literacy rates of two sets of rural and urban settlements vary from one division to another and from one time point to another but in any case the differences between the 'rural' and 'urban' are more apparent under three-tier-system of classification than that under two-way-classification Table No. V.4 confirms the same.

II Literacy Rates and three types of settlements under three-way-classification of settlements : 1961 and 1971. (Fig 7.)

From the Cols. 8 to 17 of table V.4 we further observe that the literacy rates by sex are quite distinctive from each other in the rural, semi-urban and urban type of settlements. As per our hypothesis the literacy rates both

for males and females are highest in urban areas, lowest in rural areas while for semi.urban set of settlements these are higher than rural areas and lower than urban areas. This is true whether we take Maharashtra State or its sub-natural division or consider the same in terms of time scale i.e. 1961 and 1971 census.

It is true that, there have been a significant increase in the male and female literacy rates over a decade in all over the State in relation to each of the three types of settlements. But the pattern of differentials between three types of settlements for both the time points and within each S.N.D. of the state remains almost the same. Of course the literacy rates and the differentials between the literacy rates of the three types of settlements varies from division to division in response to the different type of socio-economic and geographical conditions of the different divisions. For example due to the high industrialised urban areas of Greater Bombay and Thana districts of Maharashtra littoral division the literacy rates are highest in the urban areas of this division in comparison to all the other divisions. Similarly in case of semi-urban areas also the literacy rates are found to be highest in Maharashtra littoral division most probably due to the better availability of social amenities in the small sized town and large sized villages in and around Thana district and around Greater Bombay district. But the case is not the same for the literacy rates of rural areas of Maharashtra littoral. The

lowest literacy rates for rural, semi-urban and urban areas are attached with the Eastern plateau division which is a poorly resourced and agriculturally backward part of the State. In addition social amenities are also less concentrated in this division in comparison to other division of the state.

But inspite of the inter-divisional variations, the table V.4 indicates clear-cut differentials between the rural, semi-urban and urban set of settlements in relation to literacy rates within the State as well as within each of its sub-natural divisions. Fig 5 represents the above analysis for Literacy for the year 1971.

5.1.5. Occupational Structure of Population.

This is the last but a very important variable to be studied in relation to the present paper. Following the Indian Census definition of 'workers' and 'Non-workers', the occupational structure of population among the different types of settlements has been studied in terms of :-

(a) Work-participation rate (WPR) by sex.

(b) Per thousand distribution of workers among Primary, Secondary and Tertiary sectors of economic activity.

(c) Percentage of male workers engaged in non-agricultural traits.

(d) Ratio (in percentage) of non-agricultural workers to agricultural workers.

Hypothesis

Main factors responsible for the intra-rural, intra-

urban and rural-urban differential in respect of occupational structure of population are the mode of production, age and sex composition of population, age at the time of entry in the labour force, level of educational attainment, employment opportunities and so on.

For example, the work participation rate in an agricultural economy, like India, is found to be higher in rural area in comparison to that in urban areas. The reasons observed for such a trend are (i) that in rural areas males generally enter in the labour force earlier on the average and continue working to a more advanced age than do in cities and (ii) that the services of female workers are utilised more frequently in rural areas than that in urban economy. The entrance of children into labour force at an earlier age and the utilisation of females' and old persons' services in economic activity in rural areas are largely a function of the mode of production and the social norms with regard to the level of educational attainment which are generally, altogether different in the urban areas.

It may also be mentioned here that disguised unemployment in the rural areas also inflates significantly the rural WPR in comparison to that in urban areas.

Female WPR which is generally found to be lower in comparison to male WPR, is still lower in urban areas than that in rural areas. Once again this is due to the differences between the socio-economic and cultural factors in the rural and urban areas.

The statistics relating to the industrial composition of workers* are also regarded as the important indicators of urbanism because a high degree of corelation has been observed between industrialisation and urbanisation. The participation rate of economically active population into non-agricultural activities is the basic approximation of the settlement's entry from the close traditional economy to the fast expanding modern industrial economy and of its degree of urbanisation and urban potentiality. In predominantly agrarian society a larger proportion of workers is engaged in primary section. But as the level of development increases and the economy experiences industrialisation, a structural change in the pattern of economic activity of the people, involving a shift from primary to secondary and tertiary sectors, takes place.

Therefore, the WPR, Per 1000 distribution of workers among Primary, Secondary and Tertiary sectors of economic activity and percentage ratio of non agricultural workers to agricultural workers have been considered here as important indicators to study the differentials between rural, semi-urban and urban sets of settlements under three-way-classification Vs. two-way-classification of settlements. The hypothesis relating to the statistics is framed as given below:

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* Following the Internation Standard Industrial Classification (ISIC) scheme, the Consus of India has classified the whole working population for both sexes into 363 minor groups which were regrouped into 45 major groups and nine industrial categories On the basis of this classification we have studies the occupation sturcture by dividing the working population into Primary, Secondary Tertiary sectors or into agricultural and non agricultural categories of work.

(i) We expect that set of settlements which is more rural in character will have higher work participation rate (both for males and females), higher proportion of workers engaged in primary sector and, therefore, the ratio of workers engaged in non-agricultural occupations will be lower in comparison to that set of settlements which is less rural. On the other hand, the reverse will be the situation in urban areas. Thus the 'rural' of the three-way-classification should show more pronounced characteristics than the rural in two-way-classification ~~should show more pronounced characterstics than the rural in two-way-classification~~ and urban in three-way-classification will similarly show more pronounced urban characterstics.

(ii) In the three-way-classification the above characteristics of semi-urban areas will be between the rural and the urban i.e. in 'semi-urban' the work participation rate and workers (both male and female) engaged in primary sector of economic activity would be lower than the 'rural' and higher than the 'urban' areas while per 1000 distribution of workers engaged in secondary and tertiary sectors and percentage ratio of non-agricultural workers to agricultural workers would be higher than rural areas and lower than the urban areas.

The hypothesis should be true for the State including each of its five sub-natural divisions and for both the time points (1961 & 1971).

To test our hypothesis we may look into table No.V.5 V.6(a), V.6(b), V.7 and V.8 which present the data on work

T A B L E - X.5

Work participation rate per 100 of Total, Male and females population for Maharashtra State at sub-natural division level by type of settlement under two-way and three-way-classification of of settlements for 1961 & 1971

State/Sub-natural division		RURAL			URBAN			RURAL			SEMI & URBAN			URBAN		
		P	M	F	P	M	F	P	M	F	P	M	F	P	M	F
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MAHARASHTRA	1961	52.42	58.07	46.74	36.43	54.83	13.45	53.11	58.46	47.75	41.23	52.70	29.06	36.32	55.54	11.58
	1971	38.60	52.59	24.39	31.80	51.06	8.31	39.24	52.93	25.42	32.72	49.47	14.95	32.02	51.49	7.90
3.7.1 Tapti-Purna valley	1961	51.39	57.58	44.96	34.54	50.20	17.18	52.08	57.98	45.97	41.47	52.77	29.40	32.90	49.46	14.41
	1971	40.87	52.87	28.34	28.45	45.32	9.84	41.53	53.30	29.26	34.92	49.19	19.69	27.78	44.85	8.92
3.7.2 Penganga-Wainganga Plateau	1961	58.55	61.58	55.50	35.85	51.34	18.66	58.89	61.80	55.94	44.70	54.09	34.74	34.52	50.91	16.20
	1971	44.59	55.68	33.21	28.76	45.65	10.04	45.18	56.09	34.01	34.37	49.23	18.35	27.93	45.02	8.96
3.8.1 Eastern Plateau	1961	52.02	59.77	44.02	33.85	49.52	16.59	52.80	60.26	45.13	40.86	53.20	27.64	31.87	48.44	13.40
	1971	36.26	53.39	18.44	27.56	45.51	7.48	36.84	53.70	19.39	31.31	50.04	11.12	27.01	44.90	6.83
3.8.2 Western Plateau	1961	51.76	56.33	47.18	32.21	49.02	13.07	52.61	56.61	48.61	41.97	52.78	30.44	31.95	48.96	12.46
	1971	36.32	50.77	21.69	28.81	46.90	8.24	36.76	50.98	22.51	33.17	49.16	16.06	28.83	46.96	8.14
4.2.1 Maharashtra Littoral	1961	48.59	52.77	44.85	33.85	52.50	12.40	48.95	53.03	45.30	37.62	50.02	52.07	33.14	53.60	8.22
	1971	37.42	48.90	27.02	31.52	51.67	7.91	37.78	48.87	27.82	31.78	49.12	13.75	32.20	52.92	6.84

Participation Rate, Per 1000 distribution of total workers (by sex) among the Primary, Secondary and Tertiary sectors of economic activity, Percentage number of male workers engaged in non-agricultural economic activities and Ratio of non-agricultural workers to per 100 of agricultural workers respectively.

(a) Worke[illegible]articipation Rate.

(i) Rural and Urban - Three-Way-Classification Vs. Two-Way-classification

Our hypothesis in case of two sets of rural settlements becomes quite true i.e. the work participation rate both for males and females becomes higher in the rural areas of three-way-classification in comparison to that under two-way-classification. It is true whether we take the State itself or its sub-natural divisions or any of the time points i.e. 1961 or 1971@. Cols. 3 to 5 and 9 to 11 of the table V.5 show the same.

In case of two sets of urban settlements we find that the hypothesis is true for the female WPR but for male WPR the hypothesis (that the WPR for male workers would also be lower in the urban areas under three-way-classification than that under two-way-classification) does not become fully true because, as the Col.No.16 Vs.Col.No.17 of table V.5 shows against our expectations the male WPR is found to be higher in Maharashtra littoral division (both for 1961 & 1971) and in Western plateau division (1961)

@ Due to the difference in the concept of workers in the 1961 and 1971 Census, the data are not strictly comparable. But comparison of work participation in different settlements do not make any difference in relative terms.

which also affect the overall WPR for these divisions and the State itself. The main reason for such a deviation from our hypothesis may be the different type of age and sex composition of population in the most industrial city of Greater Bombay and other cities existing in the Maharashtra littoral and Western Plateau division of the State. But in rest of the three divisions where industries are not well developed the hypothesis becomes true for both the time points.

(ii) Rural, Semi-Urban and Urban.

As the Col No.9 to 17 of table V.5 show the WPR for semi-urban areas lies in between of the rural & urban sets of settlements. like two sets of urban settlements the hypothesis (highest WPR for rural areas lower for semi-urban areas and lowest for urban areas) is quite true for female WPR. In relation to Male WPR it is true for all the divisions except Maharashtra littoral division where we find that male WPR is highest in urban areas and is lowest in rural areas and in contrast to other divisions, the semi-urban set of settlements of this division retain male WPR higher than the rural areas and lower than the urban areas of the Division. The reason as mentioned above may be the different type (than other divisions) of age & sex composition of population of Greater Bombay-the most industrialised city district of the State falling in the Maharashtra littoral division. It also affects accordingly the overall and the male WPR for the State itself for both the time points.

TABLE No. V.6 (a)

Per 1,000 distribution of Total, Male and Female workers among the primary, Secondary and Tertiary sectors of economic activity by type of settlements under two systems of classification in Maharashtra State and its sub-natural divisions, 1961.

State/ Sub-natural division	Sectors of economic activity	Two-way (Census) classification of settlements						Three - way - classification of settlements								
		RURAL			URBAN			RURAL			SEMI - URBAN			URNAN		
		P	M	F	P	M	F	P	M	F	P	M	F	P	M	F
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MAHARASHTRA	Primary	884	836	944	122	87	301	894	850	950	598	504	777	64	48	168
	Secondary	60	81	34	364	376	304	56	75	30	155	182	103	400	404	367
	Tertiary	56	83	22	513	537	395	50	75	20	247	314	121	536	548	465
3.7.1 Tapti-Purna valley	Primary	912	867	972	319	232	596	924	883	976	648	547	839	238	168	498
	Secondary	41	57	17	214	229	167	40	52	15	119	142	75	242	250	206
	Tertiary	47	75	11	467	538	237	40	65	9	233	310	86	522	580	296
3.7.2 Penganga/ Wainganga Plateau	Primary	868	825	918	161	120	290	875	835	922	505	404	674	94	73	167
	Secondary	77	92	59	369	358	403	74	88	57	198	208	179	409	390	477
	Tertiary	54	84	22	469	521	307	51	77	21	297	388	147	497	537	356
3.8.1 Eastern Plateau	Primary	892	851	950	236	186	402	900	862	955	633	557	792	115	95	194
	Secondary	56	78	26	321	323	312	53	72	24	139	172	92	408	385	460
	Tertiary	51	72	24	444	491	287	47	66	21	227	281	116	477	509	346
3.8.2 Western Plateau	Primary	869	807	942	94	68	207	888	833	952	602	494	804	54	40	115
	Secondary	76	108	36	335	329	365	67	97	31	179	241	95	352	335	419
	Tertiary	55	85	21	571	603	429	46	70	16	219	369	101	596	540	466
4.2.1 Maharashtra Littoral	Primary	869	806	937	160	121	351	878	815	944	472	382	651	47	36	138
	Secondary	49	36	13	333	357	214	47	69	25	168	192	122	428	441	319
	Tertiary	81	123	36	507	522	435	75	116	32	360	426	227	525	523	543

P = Persons, M = Males, F = Females

TABLE No. V.6 (b)

Per 1,000 distribution of total Male and Female workers among Primary, Secondary and Tertiary sectors of economic activity by type of settlements under two systems of classification in Maharashtra State and its sub-natural divisions, 1971.

State/Sub-natural divisions	Sectors of economic activity	Two-way-classification of settlements						Three-way-classification of settlements								
		RURAL			URBAN			RURAL			SEMI & URBAN			URBAN		
		P	M	F	P	M	F	P	M	F	P	M	F	P	M	F
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16
MAHARASHTRA	Primary	874	842	948	111	92	247	893	862	953	635	580	836	72	62	164
	Secondary	59	70	34	376	390	266	53	64	33	139	160	69	397	411	294
	Tertiary	66	82	19	514	518	486	54	74	14	225	260	95	539	527	542
3.7.1 Tapti-Purna valley	Primary	903	875	975	342	278	665	921	894	980	725	653	915	296	240	608
	Secondary	35	45	13	200	217	108	31	40	11	90	112	33	210	225	126
	Tertiary	57	80	12	458	506	227	48	66	9	185	224	52	487	535	266
3.7.2 Penganga - Wainganga Plateau	Primary	860	832	906	172	147	306	872	848	909	544	476	747	115	101	199
	Secondary	83	86	78	313	312	321	78	81	77	183	195	154	335	331	356
	Tertiary	57	82	16	513	543	373	49	71	14	172	329	99	550	568	445
3.8.1 Eastern Plateau	Primary	887	864	959	213	195	352	903	882	964	672	635	842	131	122	195
	Secondary	53	62	23	298	299	293	45	54	22	121	135	62	345	342	374
	Tertiary	60	74	18	488	508	354	51	64	14	207	230	96	524	536	431
3.8.2 Western Plateau	Primary	854	816	947	100	85	202	881	848	954	648	582	867	72	62	139
	Secondary	65	82	29	360	368	311	56	96	27	140	167	50	377	381	341
	Tertiary	80	103	24	539	548	487	63	83	18	212	251	83	551	557	520
4.2.1 Maharashtra Littoral	Primary	846	781	953	114	96	237	864	803	959	444	383	670	44	37	116
	Secondary	69	97	23	422	447	234	60	86	21	227	257	114	491	515	516
	Tertiary	85	123	24	465	456	528	76	111	20	329	359	218	485	448	612

P = Persons, M = Males, F = Females

(b) Per 1000 Distribution of Workers (By Sex) Among Primary, Secondary and Tertiary Sectors of Economic Activity.

(i) Rural and Urban under three-way-classification Vs.two-way-classification:-

As we expected the per 1000 share of workers in the primary sector of economic activity is found to be higher in the rural areas and lower in the urban areas under three-way-classification in comparison to that under two-way-classification and reverse is the case in relation to the per 1000 share of workers in secondary and tertiary sectors. This is true for both, the male and female workers and consequently for the total workers also for Maharashtra State as well as for each of its sub-natural divisions and for both the time points i.e. 1961 and 1971. The data presented in Cols.3 to 11 and 15-17 of tables V.6(a) and V.6(b) show the same.

(ii) Rural, Semi-urban and Urban :-

Like the two sets of rural and urban settlements a clear-cut distinction is found between the rural, semi-urba n and urban sets of settlements in relation to per 1000 distribution of workers the primary, secondary and tertiary sectors of economic activity.

Presenting the significant variations the share of primary workers to total workers in semi-urban areas is quite low in comparison to that in rural areas and is quite high in comparison to that in urban set of settlements. Similarly, supporting our hypothesis the share of secondary and tertiary workers in semi-urban set of settlements is

Table V·7

Number of Non-agricultural Male Workers to per hundred of total Male workers for Maharashtra at sub-natural division level by type of settlement under two-way and three-way classification for 1961 and 1971.

State/sub-natural division		year	Two-way classification		Three-way classification		
			Rural	Urban	Rural	Semi-Urban	Urban
1		2	3	4	5	6	7
MAHARASHTRA		1961	19.8	93.2	18.4	53.3	96.7
		1971	18.1	92.7	16.0	45.4	95.4
3.7.1	TAPTI-PURNA VALLEY	1961	15.0	78.2	13.4	46.9	84.5
		1971	13.7	74.3	11.8	36.0	78.1
3.7.2	PENGANGA-WAIN GANGA PLATEAU	1961	22.2	91.1	21.2	64.3	95.4
		1971	20.3	89.4	18.7	57.6	93.5
3.8.1	EASTERN PLATEAU	1961	18.8	83.4	17.8	46.7	91.8
		1971	15.6	82.8	13.8	38.7	89.8
3.8.2	WESTERN PLATEAU	1961	21.2	94.3	18.7	52.2	97.0
		1971	20.4	93.3	17.1	44.0	95.6
4.2.1	MAHARASHTRA LITTORAL	1961	24.7	94.8	23.2	76.4	98.5
		1971	26.2	94.8	23.2	72.8	98.3

found to be higher in comparison to that in rural areas and significantly lower in comparison to that in the urban set of settlements. These observations are true whether we take Maharashtra State or each of its sub-natural divisions or any of the time points i.e. 1961 or 1971 as the Cols.9 to 17 of tables V.6(a) and V.6(b) show.

(c) Percentage number of non-agricultural male workers to total male workers :-

This is one of the important criterion adopted by the Census of India to differentiate the 'urban' from the 'rural' According to the Census Of India if an area, alongwith satisfying some other criterion, shows 75% of its male working force engaged in non-agricultural persuits, the area can be classified as urban otherwise it should be declared as rural.

But, it may be observed from the table No.V.7 that on this basis a three-way-classification of settlements as rural, semi-urban and urban would be more desirable than th e dichotomous classification of settlements into rural and urban. As the table shows, in urban areas a very high percentage (ranging between about 90% to 98.5% except for Tapti-Purna Valley division where it is 78.1% in 1971 and 84.5% 1961) of male workers is engaged in non-agricultural activities while such participation is very low in rural areas in comparison to that in urban areas. But between these two extremes there lies a set of settlements (semi-urban) which shows this percentage significantly higher than that in rural areas and quite low in comparison to that in urban areas i.e. somewhat in between of the two extremes. This is true either

Table V.8

Ratio of Non-agricultural workers to per 100 of Agricultural Workers for Maharashtra State at sub-natural division level for Rural, semi Urban and Urban set of settlements, 1961 & 1971.

State/sub-natural division		Year	Type of settlements		
			Rural	Semi-Urban	Urban
1		2	3	4	5
MAHARASHTRA		1961	14.58	76.29	1925.74
		1971	14.43	135.78	1673.32
3.7.1	TAPTI-PURNA VALLEY	1961	9.67	57.58	345.24
		1971	9.39	38.19	268.94
3.7.2	PENGANGA-WAIN GANGA PLATEAU	1961	18.51	111.35	1361.35
		1971	18.22	100.86	1137.90
3.8.1	EASTERN PLATEAU	1961	14.13	62.17	881.44
		1971	12.72	53.49	796.93
3.8.2	WESTERN PLATEAU	1961	14.44	69.75	2155.38
		1971	15.56	58.76	1738.60
4.2.1	MAHARASHTRA LITTORAL	1961	18.43	195.14	4639.25
		1971	19.34	191.37	4887.32

we take the State itself or any of its sub-natural divisions at both the time points. Of course, due to a higher level of industrial development the semi-urban areas of Maharashtra littoral and Pengaga-Wainganga plateau divisions show somewhat urban biased data but it is so only because of the emergence of Greater Bombay City and Nagpur city-the most industrialised cities-in these divisions respectively. But in any case, we find a clear cut distinction between the three types of settlements throughout the State.

Ratio of Non-agricultural workers to per 100 of Agricultural workers

As the table No.V.8 shows the ratio of non-agricultural workers to per 100 of agricultural workers is very high in the urban areas according to three-way-classification because big towns generally perform a core role with major activities in production and services other than agricultural whereas agriculture is the predominant sector of economy in the rural areas and the ratio declines steeply in these areas. In semi-urban area this ratio is not as low as the rural areas but it is also not as high as the urban ones because these areas are not as industrialised as the big sized urban units. Small towns generally perform the role of marketing and service centres.[1] The study of size class of urban centres and function specialisation of settlements show that as appose to manufacturing the number of/ settlements

1. Nasin, G.R.Town"size and Functions", article in "Market Towns and Spatial Development", NCAER, pp. 127-135.

in the service sectors increases as the urban size class decreases. The data in table V.8 indicate very clearly that the semi-urban areas on one hand do not show the urban character as strongly as the large urban centres but on the other hand these settlements are also not as much rural as the smaller villages and bear somewhat semi-urban character.

This is true for the State as well for each of its sub-natural divisions and for both the time points. Of course the ratio varies for all the three types of settlements from one division to another (being lowest in Tapti-Purna Valley and Highest in Maharashtra littoral) according to the level of economic and industrial development.

While concluding our analysis of the socio-economic and demographic implications of three-way-classification of settlements we may specify the fact that the three-way-classification is validated and justified by the presence of socio-economic and demographic differences. All the five selected variables in this regard have shown more or less a trend of expected values. More apparent rural-urban differential and a clear-cut distinction between rural and semi-urban and between semi-urban and urban is observed in relation to each variable at State level as well as at sub-natural division level for both the time points.

Obviously the pattern of variations between the values of socio-economic and demographic characteristics among the three types of settlements varies from one division to another according to the level of socio-economic and industrial development of the region. A study of the 'Levels of Regional Development'[2] helps us to understand this phenomenon.

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[2] 1961 Census of India had divided the country into four development regions at district level. The four groups A, B, C and D refer to this grading from Highly developed to very under developed regions. Taking 63 indicators in relation to geological, topographical, cultural and socio-economic factors etc. the districts of India were classified (on the basis of ranking device) into one of the four levels of development, Asok Mitra, Levels of Regional Development; Census of India 1961, Vol.1, Part I-A.

C H A P T E R - VI

SUMMARY AND CONCLUSION

Since the begining of population census in India, the study of man and land has been carried out in two classes viz. rural and urban. The dichotomous classification of settlements by Indian census organisation is based on the distinct differentials of one place from another in relation to some of the socio-economic, demographic and administrative characteristics. But analysis of the available statistics on these aspects of the rural and urban settlements and their population in different size groups has generally revealed pronounced inter-rural and inter-urban differences. Studies have also shown that census urban category includes a number of small sized towns (urban centres with population below 20,000) which are not as urban in their form and structure as well as in thinking and behaviour as the large sized urban centres having population 20,000 and above more particularly, the places having population 1,00,000 and above. Similarly among the rural settlements the large sized villages (with population 5,000 and more) are not as rural as the smaller ones particularly, in respect of the availability of social amenities, infra-structure and the way of life of the people living in them. On the other hand, large sized villages and small sized towns show certain characteristics

somewhat similar to each other and therefore, need to be classified in a separate category representing their characteristics more clearly and identifying their independent entity (from rural and urban) for their potential development.

The present study was, therefore, planned to develop a concept of 'semi-urban' category of settlements to classify the large sized villages and small sized towns as semi-urban. In order to reclassify the settlements into three categories viz. rural, semi-urban and urban the size of population of the settlements has been taken as the sole criterion in the present study (This study was a part of the major study on the question of reclassification of settlements and other researchers have used other criteria).

The study was conducted by selecting the State of Maharashtra as the area of the study and by covering the census classification of settlements in the State at two time points i.e. 1961 and 1971. To assess the pattern of distribution of three types of settlements among the different parts of the State in context of the geographical setting of the area, the sub-natural division of the State has been considered as the meaningful unit for the present study.

After reclassifying the census rural and urban settlements into three categories at the state and sub-natural division level, the socio-economic and demographic

implications of three-way-classification were studied on the basis of certain selected variables like growth of population, density, literacy, sex ratio and occupational structure of the population.

Findings:

By using the criterion of population size below 20,000, a major number of census urban settlements in Maharashtra, have been classified as semi-urban at both the time points i.e. 72 per cent of the total census urban settlements in 1961 and 63 per cent of the total census urban settlements in 1971 can be classified as semi-urban settlements.

In contrast to the above pattern of the classification of urban settlements, a very few of the census rural settlements have been reclassified as semi-urban. In State as a whole only 0.93 per cent and 1.69 per cent of the total census rural settlements in 1961 and 1971 respectively have shifted to the new category i.e. semi-urban category of settlements.

The distribution of all the three types of settlements and population living therein is highly uneven between the five geographical regions of the state. Most of the population living in a few big/large sized urban centres is concentrated in the highly industrialised parts of the state while most of the semi-urban population is confined to the

regions where the development of agro-industries is taking place at a faster speed. This is evident from the increase in the number of small towns and larger villages in these areas in 1971 in comparison to that in 1961.

The two sets of rural as well as urban settlements classified under two-way-classification and three-way-classification - show different values while compared with each other in relation to the variables disclosing socio-economic and demographic characteristics. Of course some times presenting a wide range of differences the variations are strikingly high as in case of density of population between the two sets of urban settlements but some times the variations are nominal as in case of literacy rates for rural as well as for urban sets of settlements. But in any case a clear trend of variations is observed between the two rural and urban sets under two systems of classification and hence the rural-urban differential with regards to certain socio-economic and demographic characteristics is found more pronounced under three-way-classification than that found under the census classification of settlements. This is true whether we take State as a whole or any of the sub-region of the State at any time point i.e. 1961 or 1971.

Semi-urban set of settlements between the most rural and most urban set of settlements shows quite distinct character than that of 'rural' and 'urban'. Growth rate of

population, literacy rate -both for 'males' and 'females', density of population per sq. km. of area and the share of secondary and tertiary workers bear a positive relationship whereas the sex ratio and the work participation rate, particularly the female work-participation rate, shows an inversee relationship with the increasing size of the population of the rural and urban settlements. Hence we find that the villages with population below 5,000 show the lowest growth rate, literacy, density of population and share of secondary and tertiary workers while these values are higher for the rural settlements of population 5,000 and above and for the urban settlements with population below 20,000 i.e. the semi-urban areas according to the present study. But for the urban areas of the higher size group of population the values of the said variables are highest. Similarly the position is just the reverse if we consider the values of sex ratio and work-participation rate by size of population of the rural and urban settlements. This is true more or less, for the different sub-natural-divisions of the State at both the time points.

Recommendations :

The study has shown that the three types of settlements identified by applying the 'size of population' criterian to the already existing Census rural and urban settlements do present a clear-cut distinction between them (rural, semi-urban and urban) in relation to certain socio-economic and demographic characterstics and also that the rural urban differentials in respect to these characterstics is found to be more pronounced

under three tier system of classification in comparison to that under Census classification. Therefore, it should be considered justified to recommend that a three-fold classification of settlements by applying the 'size of population' criterion, as discussed in this study should be adopted for all the practical purposes and especially for the Census enumeration and tabulation.

Here one may raise the question that the 'size of population' criterion based on the cut off points at the population size of below 5,000 as 'rural' and 5,000 and above as 'semi-urban' in case of re-classification of Census rural areas and at the population size below 20,000 as 'semi-urban' and 20,000 and more as 'urban' in case of reclassification of Census urban areas, is an arbitrary dividing line between rural, semi-urban & urban types of settlements because a further study of the so classified semi-urban settlements may reveal that the small towns covered by the urban agglomeration or the small towns & larger villages located around or near the big industrial cities show a higher degree of urbanization.* while compared with other semi-urban settlements situated at a different location and site. Further, some villages with population below

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* In terms of literacy level, percentage of workers engaged in non-agricultural persuits, availability of social amenities way of thinking and beheviour and so on.

5,000 and urban places with population above 20,000 may also show the semi-urban characterisation. A couple of suggestions can, therefore, be forwarded for extending the upper and lower limits of the cutting points of the 'size of population' of the Census urban and rural settlements respectively to arrive at the semi-urban category or it may also be considered more useful that each settlement of a particular size group of population should be tested before its re-classifications as rural, semi-urban or urban on the basis of availability of certain predominant social amentities or population characteristics e.g. density, literacy rate and proportion of workers in secondary and tertiary sectors for the ~~workers of primary sector~~ of economic activity as has been done in the other three parts of the main study on the problem.@

But it may be noted that the methodologies suggested in the preceding para to arrive at the semi-urban category of settlements are based on certain assumptions and are more time consuming excercises involving a lot of calculation work and as such may be more useful for the research and theortical purposes but are less practical from the view point of their applicability as the criteria for the

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@ As has been indicated earlier this study is a part of a big study on the problem of re-classification of Census rural & urban settlements into three categories. The other three studies have adopted different criteria for three-way classification of settlements in Maharashtra State.

three way classification of settlements at all India level. Moreover we should not forget that in any case we will be selecting some 'arbitrary' dividing line to distinguish the three types of human settlements because inspite of a number of international conferences and seminars on the issue no universal point could be identified from where the rural ends and urban starts or vice-versa.

Therefore, the only question now stands is : How to select the best possible dividing line between rural and semi-uraban and between semi urban and urban on the basis of which (i) maximum of the rural, semi-urban and urban types of settlements may be identified under the three respective categories of settlements and (ii) which may conveniently be adopted by the Census Organisation of India. As all of us know, in India, the Census Organisation is the primary agency to classify the settlements into different categories (rural, semi-urban or urban) throughout the country. Therefore, we must remember here that the selected criterion/criteria for trichotomous classification should be of course be scientific and syatematic but it should also be simple enough from the view point of its adoption by the Census Organisation alongwith its utility and ability to maintain the comparability of data between

the past and future censuses. Secondly, the methodology developed for three-way classification is to be based on the Census data only, which may be 'Secondary' for a research student but provide 'Primary' material to the Census Organisation for the purpose of reclassifying the settlements. Hence, inspite of all limitations (including the limitations of Census Organisation itself) in relation to data collection, any further research for developing the methodology for three-fold classification would have to be based upon the Census data itself.

Keeping in mind the above mentioned points it may be considered justified to recommend that 'size of population' criterion should be adopted for developing a three-tier system of classifying the settlements. This criterion is more practical and simple in comparison to other methodologies & can be applied more conveniently at all India level because the required data for the purpose of reclassificatio are available in a uniform pattern in all over the country and for different time points. Leaving aside certain exceptions comparatively most of the rural, semi-urban and urban types of settlements can be covered under their respective categories-classified by applying the 'size of population' criterion as explained in the study.

Planning and Policy matters

The data presented in this study for the State of Maharashtra have clearly brought out the socio-economic and

demographic differentials which emerged while the settlements of this State were classified into three categories as rural, semi-urban and urban instead of their usual dichotomous classification into rural and urban and have provided a basis for certain rethinking in this regard on the part of planners and policy makers.

The identification of semi-urban areas and a crystal-clear picture of socio-economic, socio-cultural, geographical and demographic characteristics of these areas would be of a great use to the planners and policy makers of the national developmental programmes in India. Semi-urban areas can play a crucial role particularly with reference to the town planning in regional context, decentralisation of industries and thereby minimising a series of problems associated with the rural-urban migration and the growing congestion in a few big urban centres and in minimising the economic and social costs involved in laying the foundation of modern agriculture and industry.

Our five-year Plans, specially Fourth and Fifth Five Year Plans have laid special emphasis on the balanced regional growth and integrated area development. The semi-urban areas, which as this study has brought out, are more in number than the urban centres and at present are not evenly distributed over the space, can play a vital role in this respect. A balanced and effective distribution of semi-urban areas over the space with adequate infrastructure would minimise the regional and sub-regional imbalances in the developmental process. Many of the

'semi-urban areas due to their favourable site & location, can accommodate the decentralised industries. Thus by creating the employment opportunities the migration channel can be directed and if possible redirected from the rural and big urban centres respectively to the semi-urban areas. The diversion of migration channel from the big urban centres and improved economic opportunities in semi-urban areas are essential to check the further flow of population to the already conjested metropolitan cities in favour of healthy and orderly urbanisation particularly in the coming years. It has been estimated that rural areas by the year 2001, will not be able to support more than 500 million people[1] (out of the 669 million projected rural people[2]) even at the present standard of living. That means the remaining 169 million rural people will move out of the rural areas on the other hand the larger urban centres would not be able to absorb their 'surplus' of rural people because already a larger number of people goes on living in these areas beyond their degree of economic development justifies. It is here that by locating the decentralised industries and thereby creating more employment opportunities, the semi-urban areas can be utilised for accommodating the 'surplus'

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[1] Chander Sekher, C., Chief Town Planner, India quoted by W.J. Cousins, Approach to Urban Activities; Preliminary document, UNICEF, New Delhi, 1977.

[2] Expert Committee on Population Projections, Projected Population by Sex, All India 1971-2001; Planning Commission, Govt. of India, 1971.

rural population as well as to disperse the urban population. The economic cost for providing the social facilities to improve the quality of life of the people in semi-urban areas would also be minimised by the utilisation of already available infrastructure in these areas.

Further if the Central and State Governments pay adequate attention the semi-urban areas i.e. the small sized towns which are quite often seen as the 'bridge' between the urban and rural universe[3] can play a crucial role in agricultural and rural development. These areas can provide necessary links between rural and urban areas and thus can provide the needed services for improving agricultural practices and development of agro-industries alongwith a whole range of small scale industries in relation to the moderanisation of agriculture and minimising the social and economic costs involved in it.

In other words if the proper attention is paid and adequate investments are made the semi-urban areas which are on the transitional stage towards urbanisation, can play an important role as the nurseries of industrialisation and urbanisation and would work as the 'counter-magnets' to the existing migration towards big cities. The semi-urban areas if developed as the nodal points and growth centres can abridge the rural-urban dichotomy in the social-economic and spatial terms.[4]

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3. Ruth Glass in her 'Introduction' to Urban-Rural Differenc in Southern Asia; UNESCO Research Centre on Social and Economic Development in Southern Asia, Delhi 1964; p.13.

4. R.P.Misra; 'Growth Centres and Rural-Urban Continuum' in A.D.Moddie's (Ed) Approaches to Rural Development.

With the stress on integrated rural development in Indian planning one should expect growth of large sized villages and smaller towns in a greater proportion in a next couple of decades in India and this stresses the need for understanding the characterstics of these areas much more clearly in view of the above mentioned points. But all this would only be possible if the Census Organisation of India decides to adapt a three-tier-system of classifying the settlements into rural, semi-urban and urban instead of the present two-way-classification of settlements in India.

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APPENDIX

TABLE - 1

Statement showing the administrative division, districts, towns and villages in Maharashtra as per 1971 census.

Division	District	No. of towns	No. of villages (inhabited)
1	2	3	4
Maharashtra State	26	289	35778
Bombay	Gr. Bombay	1	-
	Thana	24	1538
	Kolaba	14	1699
	Ratnagiri	15	1514
	Nasik	20	1628
	Dhulia	7	1379
	Jalgaon	15	1423
Sub - Total	7	96	9231
Poona	Ahmed nagar	6	1312
	Poona	22	1481
	Satara	14	1142
	Sangli	7	539
	Sholapur	10	948
	Kolhapur	11	1083
Sub - Total	6	70	6505
Aurangabad	Aurangabad	10	1866
	Parbhani	12	1505
	Bhir	7	1028
	Nanded	11	1324
	Osmanabad	13	1387
Sub - Total	5	53	7110

1	2	3	4
Nagpur	Buldana	9	1232
	Akola	9	1489
	Amravati	13	1637
	Yeotmal	8	1647
	Wardha	6	962
	Nagpur	13	1625
	Bhandara	5	1500
	Chandrapur	7	2840
Sub - Total	8	70	12932

Table IV.2

Percentage Distribution of Total Villages and Rural Population among Different Size Groups of Population for Maharashtra and its Sub-natural Divisions at District Level for 1961 and 1971

State/Sub-natural Division/District	Year	All Classes		SIZE CLASS OF VILLAGES WITH POPULATION															
				Less than 500		500-999		1000-1999		2000-4999		Sub-total of villages below 5000 population		5000-9999		10000+		Subtotal of villages with pop. above 5000	
		Total Number of Villages	Total Number of Persons	Percentage Number of Villages	Percentage Number of Persons	Percentage Number of villages	Percentage Number of Persons	Percentage Number of villages	Percentage Number of Persons	Percentage Number of villages	Percentage Number of persons	Percentage Number of villages	Percentage Number of persons	Percentage Number of villages	Percentage Number of Persons	Percentage Number of villages	Percentage Number of Persons	Percentage Number of villages	Percentage Number of Persons
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
MAHARASHTRA	1961	35851	28,391,157	47.72	15.02	28.55	25.71	13.62	28.55	6.18	22.40	99.07	91.68	0.85	7.04	0.08	1.28	0.93	8.32
	1971	35778	34,701.024	49.52	10.68	29.43	21.80	20.79	29.40	8.67	25.87	98.41	87.75	1.38	9.44	0.21	2.81	1.59	12.25
Sub-natural Divisions																			
3.7.1 Tapti-Purma Valley	1961	7137	5,224,573	52.11	16.80	26.85	25.83	14.73	27.32	5.42	21.35	99.10	91.30	0.80	7.10	0.10	1.60	0.90	8.70
	1971	7160	6,301,245	55.82	12.67	28.84	23.51	17.60	27.44	7.23	23.87	98.53	87.50	1.24	9.36	0.22	3.14	1.47	12.50
Dhulia	1961	1360	1,135,380	46.62	13.52	26.54	23.05	18.90	30.97	6.91	24.10	98.97	91.64	0.88	6.36	0.15	2.00	1.03	8.36
	1971	1379	1,374,445	40.32	10.24	27.56	20.15	21.25	29.75	8.99	26.09	98.12	86.23	1.59	10.15	0.29	3.62	1.88	13.77
Jalgaon	1961	1435	1,367,826	40.70	11.36	30.52	22.52	18.82	27.30	8.43	25.66	98.47	86.84	1.18	8.71	0.35	4.45	1.53	13.16
	1971	1423	1,620,975	34.01	8.53	31.62	20.29	20.66	25.29	11.53	29.79	97.82	83.90	1.55	9.04	0.63	7.06	2.18	16.10
Amravati	1961	1609	910,586	65.20	23.65	21.19	26.29	9.32	21.93	3.48	18.93	99.19	90.80	0.81	9.20	-	-	0.81	9.20
	1971	1637	116,526	58.52	19.00	25.33	23.94	12.77	25.28	3.85	16.73	98.47	84.95	1.47	14.08	0.06	0.97	1.53	15.05
Akola	1961	1508	926,521	57.42	22.38	27.06	30.57	11.14	24.68	3.85	16.37	99.47	94.00	0.53	6.00	-	-	0.53	6.00
	1971	1489	1,148,129	47.21	15.54	30.83	28.28	15.18	26.38	6.11	22.36	99.33	92.45	0.54	5.46	0.13	1.98	0.67	7.44
Buldhana	1961	1225	884,260	47.84	16.54	30.04	29.10	16.82	30.98	4.73	18.84	99.43	95.46	0.57	4.54	-	-	0.57	4.54
	1971	1232	1,041,170	41.48	12.39	31.98	27.22	19.32	31.25	6.17	21.07	98.95	91.93	1.05	8.07	-	-	1.05	8.07
3.7.2 Panganga-Wainganga Valley	1961	8495	4,443,719	64.45	26.41	22.55	30.38	10.04	25.69	2.68	14.23	99.73	96.71	0.27	3.29	-	-	0.27	3.29
	1971	8574	5,583,623	55.75	19.35	25.60	27.75	13.87	28.71	4.26	18.46	99.48	94.28	0.48	4.88	0.05	0.84	0.52	5.72
Nagpur	1961	1653	725107	73.32	36.75	19.12	29.50	5.26	16.15	2.06	14.34	99.76	96.74	0.24	3.26	-	-	0.24	3.26
	1971	1625	887,331	64.06	27.87	24.68	30.75	7.69	18.51	3.02	16.76	99.45	93.89	0.55	6.11	-	-	0.55	6.11
Bhandara	1961	1486	1,132,025	44.89	14.23	28.80	27.13	20.52	37.21	5.59	19.83	99.80	98.40	0.20	1.60	-	-	0.20	1.60
	1971	1500	1,405,067	36.00	9.57	30.27	23.31	24.00	36.10	9.13	26.96	99.40	95.94	0.60	4.06	-	-	0.60	4.06
Chanderpur	1961	2755	1,142,380	74.19	32.61	17.50	29.75	6.28	20.05	1.63	11.12	99.60	93.53	0.40	6.47	-	-	0.40	6.47
	1971	2840	1,473,037	66.62	24.96	20.95	28.48	9.15	22.96	2.71	14.72	99.43	91.12	0.46	6.38	0.11	2.50	0.57	8.88
Yeotmal	1961	1629	959,945	56.10	24.37	28.55	34.49	12.52	27.52	2.58	11.11	99.75	97.49	0.25	2.51	-	-	0.25	2.51
	1971	1647	1,229,728	45.90	16.52	29.81	28.39	19.79	35.72	4.13	15.60	99.63	96.23	0.31	2.94	0.06	0.83	0.37	3.77
Wardha	1961	972	484,262	65.64	28.63	23.15	32.66	8.64	22.69	2.47	14.48	99.90	98.66	0.10	1.34	-	-	0.10	1.34
	1971	962	588,460	57.28	21.77	26.40	30.68	12.27	26.19	3.53	16.02	99.48	94.66	0.52	5.34	-	-	0.52	5.34

Contd. --

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3.8.1 Eastern Plateau	1961	9698	9,170,426	35.85	10.82	33.97	25.87	21.06	30.37	7.99	24.57	98.87	91.63	1.04	7.09	0.09	1.28	1.13	8.37
	1971	9680	11,370,688	27.22	6.88	32.58	19.32	26.73	31.24	11.43	29.53	97.96	86.98	1.84	10.46	0.21	2.56	2.04	13.02
Sholapur	1961	946	1,340,245	13.64	2.89	33.93	17.39	33.19	32.44	16.91	34.50	97.77	87.22	2.12	9.87	0.21	2.91	2.32	12.78
	1971	948	1,637,288	10.34	1.87	29.11	12.91	34.49	28.61	21.94	37.04	95.88	80.43	3.59	14.25	0.53	5.32	4.12	19.57
Kolhapur	1961	1086	1,288,718	27.44	6.74	31.22	19.14	26.89	31.92	12.43	30.84	97.98	88.64	1.84	9.61	0.18	1.75	2.02	11.36
	1971	1083	1,607,804	21.88	4.53	26.41	12.98	30.29	28.80	17.63	35.22	96.21	81.57	3.42	15.11	0.37	3.36	3.79	18.47
Sangli	1961	526	1,038,286	9.70	1.35	23.58	8.83	36.31	25.76	22.62	34.94	92.21	70.88	6.84	23.75	0.95	5.37	7.79	29.12
	1971	539	1,252,972	7.24	0.86	19.67	6.33	35.99	30.07	27.83	37.43	90.73	66.69	7.23	22.22	2.04	11.09	9.27	33.31
Nanded	1961	1325	923,806	45.21	18.30	36.60	37.64	13.96	27.07	4.00	15.12	99.77	98.13	0.23	1.87	-	-	0.23	1.87
	1971	1324	1,169,577	33.08	10.99	37.16	30.42	22.51	33.73	6.80	21.50	99.55	96.64	0.45	3.36	-	-	0.45	3.36
Parbhani	1961	1517	1,039,534	47.67	19.36	34.34	35.80	13.71	26.43	4.15	17.32	99.87	98.91	0.13	1.09	-	-	0.13	1.09
	1971	1505	1,264,833	39.80	15.36	36.82	28.28	21.26	33.38	5.45	18.37	99.33	95.39	0.67	4.61	-	-	0.67	4.61
Osmanabad	1961	1388	1,321,390	31.92	10.21	35.30	26.98	23.99	34.14	8.21	25.26	99.42	96.59	0.58	3.41	-	-	0.58	3.41
	1971	1387	1,659,699	21.85	5.74	34.03	20.85	30.35	34.98	11.97	29.01	98.20	90.58	1.80	9.42	-	-	1.80	9.42
Aurangabad	1961	1879	1,315,630	45.88	17.63	34.59	35.09	15.38	29.26	3.94	16.10	99.79	98.08	0.21	1.92	-	-	0.21	1.92
	1971	1866	1,641,745	35.42	11.85	35.96	29.65	21.71	33.27	6.43	21.47	99.52	96.24	0.48	3.76	-	-	0.48	3.76
Bhir	1961	1031	902,817	36.08	12.75	35.30	29.13	22.31	34.41	5.53	18.32	91.22	94.61	0.78	5.39	-	-	0.78	5.39
	1971	1028	1,136,820	25.29	7.57	34.73	22.66	28.60	35.22	9.62	24.42	98.25	89.87	1.75	10.13	-	-	1.75	10.13
3.8.2 Western Plateau	1961	5628	5,767,570	37.31	10.22	29.83	20.97	21.54	28.93	9.40	26.20	98.08	86.32	1.71	11.19	0.21	2.49	1.92	13.68
	1971	5563	7,056,740	29.26	6.76	28.96	16.53	25.35	27.71	13.45	30.50	97.02	81.50	2.43	12.89	0.56	5.61	2.98	11.17
Nasik	1961	1652	1,380,264	42.50	14.29	32.14	27.55	18.28	29.32	6.11	20.94	99.03	92.10	0.97	7.90	-	-	0.97	7.90
	1971	1628	1,690,749	32.25	9.38	32.86	22.67	23.83	30.83	9.40	25.95	98.34	88.83	1.60	10.38	0.06	0.79	1.66	11.17
Ahmadnagar	1961	1318	1,588,654	26.10	7.16	33.99	20.33	26.78	30.44	10.47	24.70	97.34	82.63	2.05	11.46	0.61	5.91	2.66	17.37
	1971	1312	2,017,617	16.62	3.74	32.55	15.38	30.56	28.00	16.08	30.05	95.81	77.83	3.20	14.16	0.99	8.67	4.19	22.83
Poona	1961	1498	1,526,974	42.05	11.03	27.50	19.40	18.76	25.68	9.35	26.60	97.66	82.29	2.07	14.04	0.27	3.25	2.34	17.29
	1971	1481	1,848,255	35.72	7.93	26.13	15.13	22.15	24.62	12.56	29.59	96.56	77.27	2.63	14.55	0.81	8.18	3.44	22.73
Satara	1961	1160	1,271,678	36.55	8.63	24.83	16.51	23.79	30.55	12.93	33.33	98.10	89.02	1.90	10.98	-	-	1.90	10.98
	1971	1142	1,500,119	31.17	6.42	22.94	12.90	25.66	27.60	17.34	37.37	97.12	84.29	2.45	11.98	0.44	3.73	2.88	15.71
4.2.1 Maharashtra	1961	4893	3,784,869	47.78	16.68	29.22	26.87	16.35	28.63	6.05	22.42	99.41	94.60	0.57	4.94	0.2	0.46	0.59	5.40
Littoral	1971	4801	4,388,728	39.29	12.26	31.33	24.22	20.68	31.03	7.60	23.98	98.90	91.50	1.02	7.29	0.08	1.21	1.10	8.50
Greater Bombay	1961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thana	1961	1599	1,153,350	51.66	19.77	30.46	30.33	12.01	21.86	5.25	21.24	99.38	93.20	0.56	5.28	0.06	1.52	0.62	6.80
	1971	1588	1,454,915	40.74	12.83	32.37	24.97	18.20	26.68	7.05	22.20	22.36	86.68	1.51	11.10	0.13	2.22	1.64	13.32
Kolaba	1961	1778	952,174	62.49	29.95	25.93	33.15	8.94	22.36	2.53	13.04	99.89	98.50	0.11	1.50	-	-	0.11	1.50
	1971	1699	1,110,413	52.21	22.30	30.96	32.41	13.01	26.81	3.53	15.59	99.71	97.11	0.29	2.89	-	-	0.29	2.89
Ratnagiri	1961	1516	1,679,345	26.45	7.03	31.79	20.92	29.62	36.83	11.02	28.55	98.88	93.33	1.12	6.67	-	-	1.12	6.67
	1971	1514	1,823,400	23.25	5.71	30.65	18.64	31.90	37.06	12.75	30.50	98.55	91.91	1.32	6.94	0.13	1.15	1.45	8.09

TABLE - 3

DISTRIBUTION OF URBAN SETTLEMENTS AND POPULATION BY SIZE CLASS FOR MAHARASHTRA STATE AND ITS SUBNATURAL DIVISIONS AT DISTRICT LEVEL FOR 1961 AND 1971

State/Sub-natural Divisions/District	Year	All classes		CLASS OF TOWNS																	
				I		II		III		Sub-total of class I+II+III		IV		V		VI		Sub-total of class IV+V+VI	
		Number of Settlement	Number of Persons	Number of Towns	Percentage Number of Persons	Number of Towns	Percentage Number of Persons	Number of Towns	Percentage Number of Persons	Number of Towns	Percentage Number of Persons	Number of Towns	Percentage Number of Persons	Number of Towns	Percentage Number of Persons	Number of Towns	Percentage Number of Persons	Number of Towns	Percentage Number of Persons
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
MAHARASHTRA	1961	266	11,162,561	12	60.49	15	9.17	47	13.00	74	82.66	89	11.17	88	5.65	15	0.52	192	17.34
	1971	289	15,711,211	17	64.75	25	11.07	65	11.71	107	87.53	98	8.78	70	3.39	14	0.30	182	12.47
3.7 North Maharashtra: Sub-natural Div.																			
3.7.1 Tapti-Puna Valley	1961	52	1,373,552	2	18.47	3	18.44	15	33.04	20	69.95	25	26.54	6	3.42	1	0.10	32	30.05
	1971	53	1,789,722	4	33.86	4	14.53	22	34.01	30	82.41	18	15.49	4	1.96	1	0.14	23	17.59
Dhulia	1961	7	215,856	-	-	1	45.81	2	28.67	3	74.48	4	25.52	-	-	-	-	4	25.52
	1971	7	287,736	1	47.66	1	18.79	2	15.96	4	82.41	3	17.59	-	-	-	-	3	17.59
Jalgaon	1961	14	397,221	-	-	2	38.86	4	32.60	6	71.45	7	27.26	1	1.29	-	-	8	28.55
	1971	15	502,146	1	21.25	2	30.34	5	28.48	8	80.07	5	16.73	2	3.20	-	-	7	19.93
Amravati	1961	13	322,194	1	42.79	-	-	3	25.55	4	68.33	6	26.19	2	5.06	1	0.42	9	31.67
	1971	13	424,683	1	45.63	-	-	6	38.38	7	84.01	4	13.15	1	2.25	1	0.59	6	15.99
Akola	1961	9	262,833	1	44.04	-	-	3	32.11	4	76.16	3	17.47	2	6.37	-	-	5	23.84
	1971	9	353,349	1	47.67	-	-	5	42.37	6	90.03	2	7.29	1	2.68	-	-	3	9.97
Buldhana	1961	9	175,438	-	-	-	-	3	54.60	3	54.60	5	40.40	1	5.00	-	-	6	45.40
	1971	9	221,808	-	-	1	24.21	4	48.25	5	72.46	4	27.54	-	-	-	-	4	27.54
3.7.2 Wardha - Penganga Waingang Plateau	1961	36	1,308,171	1	49.20	2	8.24	10	24.48	13	81.72	13	13.37	9	4.57	1	0.33	23	18.28
	1971	39	1,788,021	1	48.44	5	19.04	11	18.65	17	86.13	12	9.69	10	4.18	-	-	22	13.87
Nagpur	1961	12	787,700	1	81.71	-	-	2	8.07	3	89.78	4	5.96	5	4.26	-	-	9	10.22
	1971	13	1,055,357	1	82.06	1	5.06	1	2.57	3	89.69	6	7.73	4	2.58	-	-	10	10.31
Bhandara	1961	5	136261	-	-	1	41.33	2	38.62	3	79.95	2	20.05	-	-	-	-	2	20.05
	1971	5	180,513	-	-	1	43.21	2	38.30	3	81.51	2	18.49	-	-	-	-	2	18.49
Chanderpur	1961	5	95,690	-	-	1	53.80	1	21.27	2	75.07	1	14.79	1	5.57	1	4.57	3	24.93
	1971	7	167,100	-	-	1	44.96	2	35.69	3	80.66	2	7.05	-	12.29	-	-	2	19.34
Yeotmal	1961	8	138,525	-	-	-	-	1	32.91	1	32.91	6	62.44	1	4.65	-	-	7	67.09
	1971	8	193,949	-	-	17	33.43	3	37.84	4	71.27	3	24.00	1	4.73	-	-	4	28.73
Wardha	1961	6	150,015	-	-	-	-	4	90.35	4	90.35	-	-	2	9.65	-	-	2	9.65
	1971	6	191,102	-	-	1	36.13	3	54.54	4	90.67	-	-	2	9.33	-	-	2	9.33

Contd ....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3.8. 1 Eastern Plateau	1961	80	1,814,275	2	28.94	7	25.60	7	12.22	16	66.76	25	18.49	32	13.19	7	1.57	64	33.25
	1971	81	2,529,368	5	41.50	7	19.93	11	12.52	23	73.95	36	19.68	20	6.11	2	0.27	58	26.05
Sholapur	1961	10	519,874	1	64.93	1	9.69	2	12.83	4	87.45	4	9.47	2	3.08	-	-	6	12.55
	1971	11	616,552	1	64.61	2	18.82	1	4.30	4	87.72	5	11.19	1	1.10	-	-	6	12.28
Kolhapur	1961	11	307,775	1	60.90	1	16.56	-	-	2	77.47	4	13.97	3	6.64	2	1.92	9	22.53
	1971	11	440,245	1	58.84	1	19.93	-	-	2	78.77	5	16.07	2	3.62	2	1.53	9	21.23
Sangli	1961	6	192,430	-	-	2	66.09	1	10.82	3	76.91	3	23.09	-	-	-	-	3	23.09
	1971	7	286,898	1	40.13	1	27.05	2	16.99	4	84.17	2	12.74	1	3.09	-	-	3	15.83
Nanded	1961	11	155,868	-	-	1	52.02	-	-	1	52.02	1	9.39	7	32.89	2	5.70	10	47.98
	1971	11	228,185	1	55.45	-	-	1	9.53	2	64.98	3	15.19	6	19.83	-	-	9	35.02
Parbhani	1961	12	166,702	-	-	-	-	2	36.11	2	36.11	5	39.14	5	24.74	-	-	10	63.89
	1971	12	241,938	-	-	1	25.45	2	21.92	3	47.37	7	45.81	2	6.82	-	-	9	52.63
Osmanabad	1961	13	156,266	-	-	-	-	1	26.18	1	26.18	4	36.94	7	33.81	1	3.07	12	73.82
	1971	13	236,988	-	-	1	29.60	2	24.44	3	54.04	7	35.83	3	10.13	-	-	10	45.96
Aurangabad	1961	10	216,711	-	-	2	71.40	-	-	2	71.40	2	11.07	5	15.69	1	1.83	8	28.60
	1971	10	329,261	1	45.70	1	27.67	-	-	2	73.37	4	17.12	4	9.51	-	-	8	26.63
Bhir	1961	7	98,649	-	-	-	-	1	33.52	1	33.52	2	37.64	3	23.79	1	5.05	6	66.48
	1971	7	149,301	-	-	-	-	3	72.85	3	72.85	3	23.23	1	3.92	-	-	4	27.15
3.8.2 Western Plateau with Protruded Hills	1961	55	1,760,630	4	55.04	2	7.06	11	18.32	17	80.42	14	11.94	17	6.73	4	0.90	35	19.58
	1971	62	2,487,003	4	53.97	5	14.02	16	17.83	25	85.82	16	8.82	15	4.52	6	0.84	37	14.18
Nasik	1961	15	474,982	2	53.16	-	-	4	27.34	6	80.51	5	14.32	3	4.16	1	1.01	9	19.49
	1971	20	678,472	2	54.23	1	8.17	5	18.60	8	91.00	6	12.47	6	6.53	-	-	12	19.00
Ahmadnagar	1961	5	187,315	1	63.54	-	-	2	23.77	3	87.31	1	9.01	1	3.68	-	-	2	12.69
	1971	6	251,500	1	47.01	-	-	4	49.34	5	96.35	-	-	1	3.65	-	-	1	3.65
Poona	1961	22	939,906	1	63.58	2	13.23	3	7.45	6	84.26	5	8.31	9	6.72	2	0.71	16	15.74
	1971	22	1,329,774	1	64.38	3	17.06	4	7.74	8	89.18	7	7.62	4	2.37	3	0.89	14	10.82
Satara	1961	10	158,427	-	-	-	-	2	49.32	2	49.32	3	29.81	4	18.12	1	2.75	8	50.68
	1971	14	227,257	-	-	1	29.23	3	39.67	4	68.90	3	14.67	4	12.44	3	4.00	10	31.11
4.2 Western Coastal Region																			
Sub-division																			
4.2.1 Maharashtra Littoral	1961	46	4,905,923	3	88.89	1	1.50	4	2.77	8	93.16	12	3.29	24	3.40	2	0.15	38	6.84
	1971	54	7,117,097	3	88.66	4	4.02	5	1.94	12	94.62	16	2.97	21	2.18	5	0.23	42	5.38
Greater Bombay	1961	1	4,152,056	1	100.00	-	-	-	-	1	100.00	-	-	-	-	-	-	-	-
	1971	1	5,970,575	1	100.00	-	-	-	-	1	100.00	-	-	-	-	-	-	-	-
Thana	1961	20	499,328	2	41.83	1	14.72	3	20.78	6	77.52	2	5.78	11	15.75	1	0.95	14	22.48
	1971	24	826,749	2	41.02	4	34.65	2	6.38	8	82.05	6	8.90	9	8.47	1	0.57	16	17.94
Kolaba	1961	12	106,681	-	-	-	-	-	-	-	-	5	56.09	6	41.24	1	2.67	12	100.00
	1971	14	152,590	-	-	-	-	1	17.43	1	17.43	7	59.96	4	19.06	2	3.55	13	82.57
Ratnagiri	1961	13	147,858	-	-	-	-	1	21.03	1	21.03	5	49.17	7	29.80	-	-	12	78.97
	1971	15	167,183	-	-	-	-	2	34.99	2	34.99	3	27.67	8	33.43	2	5.11	13	65.01

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