REGIONAL STRUCTURE OF HIGHER EDUCATION IN INDIA

Dissertation submitted in partial fulfilment of the
requirements for the Degree of
MASTER OF PHILOSOPHY

SUNITA BAHADUR

CENTRE FOR THE STUDY OF REGIONAL DEVELOPMENT
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067
1981

CENTRE FOR THE STUDY OF REGIONAL DEVELOPMENT

SCHOOL OF SOCIAL SCIENCES

JAWAHARLAL NEHRU UNIVERSITY

I certify that the dissertation entitled "Regional Structure of Higher Education in India" submitted by Miss Sunita Bahadur in partial fulfilment of the Degree of Master of Philosophy (M.Phil) of the University is a bonafide work, to the best of my knowledge and may be placed before the examiners for their consideration.

AIJAZ AHMAD
Supervisor

MOONIS RAZA
Chairman
31.1.81

Forwarded to the Registrar

January 1981
New Delhi 110 067

CONTENTS

ACKNOWLEDGEMENT

This challenging problem was accomplished under the able guidance of my Supervisor, Dr Aijaz Ahmad who has always extended all possible help and assurance which I needed during the course of this study. I am also indebted to Professor Moonis Raza whose valuable suggestions and personal encouragement is beyond verbal expression.

Let me take the opportunity to express my deep sense of gratitude to Mr Aslam Mahmood who has always been a source of inspiration during my work. My thanks are also due to all the faculty members of the Centre for the Study of Regional Development.

I am highly grateful to the staff of the Statistical Section of the University Grants Commission for not only providing congenial conditions for me to work but also giving the much required data without which the present work could not have been completed. My thanks are also due to the staff members of the Documentation Centre, ICSSR.

My friendly thanks to Anil Khosla, Ratna Rao and Neera Kongari, and to all those who encouraged me in their own personal capacity. I also take great pleasure in thanking Mr Murlidhar and Mr Parimal Kongari for doing my computer work and also Shri Tyagi and Shri Chinmoy Nath for having assisted me in the cartographic work.

I am highly grateful to Mr Shiv Sharma and Mr. H.K. Taneja for having typed the dissertation with utmost care and patience and also within a very short period of time.

Sunita Bahadur

SUNITA BAHADUR

LIST OF TABLES

LIST OF ILLUSTRATIONS

Chapter I

INTRODUCTION

1.1.1 Anything that exists on the surface of the earth must have its geography. The location of educational institutions too, has a spatial bias which is not homogeneous in its nature of development or growth. Education, like many other aspects of society is hierarchical in nature, ranging from primary through middle, secondary, college and university. This whole structure is spread over a wide spectrum of various size-classes of urban and rural centres. This hierarchical ordering of the educational system is not distributed homogeneously over space.

1.1.2 Recently geographers have been more keenly interested in studying the internal organizations of a distribution, the location of the elements of the distribution with respect to each other. This kind of location is always relative. Geographers frequently talk about the pattern of a distribution using terms like 'dense', 'sparse', 'agglomerated', 'dispersed' and 'linear'. The way these terms simultaneously relate the location of these elements of a distribution and to the entire distribution are subtle and important. In recent years internal relative location has often been called the 'spatial or regional structure' which undoubtedly forms the title of the dissertation.

1.1.3 Spatial structure and spatial process are circularly causal. Structure is a determinant of process as much as process is a determinant of structure. Hence we can safely

say that spatial structure is a concept applicable to both static distributions and to processes which appear to us as dynamic. Primarily for this reason we tend to analyse the very basis of the organization of any structure which is often arranged in a hierarchy.

1.1.4 The term 'organization' refers to a system of consciously co-ordinated activities or forces of two or more important elements. Sometimes two or more organizations which are separate legal entities are closely related to and dependent on each other, they form a system of primary and secondary organizations. A system is considered to be a complex unit, formed of many diverse parts subject to a common plan or serving a common purpose. The sub-units of the system are regarded as secondary organizations, they interact with each other and such interaction make the system larger than the mere sum of its part. Such a system may form part of a still larger and more complex organization. In view of this, the present research work in wider perspective incorporates the 'systems approach'. "A system is a set of inter-connected parts or elements. Each part may be called a sub-system formed by still smaller parts. Thus there is a hierarchy of systems smaller ones forming parts of the larger ones." For all purposes of convenience and uniformity universities will be viewed as a system with colleges of Post-Graduate, Graduate and under-Graduate standard forming the sub-system, all of which are dynamic in its nature and character of development.

1.1.5 Therefore, the hierarchic nature of any system is equally synonymous to the system of education as well. This system of education incorporates an important element of the Theory of Central Places propounded by Walter Christaller in 1864. His theory related to the hierarchy of urban functions from the highest order centre to the lowest order. The terminology of Christaller is straight forward. Central places are broadly synonymous with towns that serve as centres for regional communities, by providing them with central goods and services. Central places often vary in importance. Higher order centres stock a wide array of goods and services, lower order centres stock a smaller range of goods and services - that is some limited part of the range offered by the higher centre. Complementary regions are areas served by a central place. Therefore, the higher order centres are large and overlap the small complementary regions of the lowest order centre.

1.1.6 Schools provide a good example of a central place organization. The local elementary school provide a lower order centre (to use Christaller's term) which serves a small part of the city or a single rural community. There are a larger number of such schools in any state and they teach children drawn only a few sq. miles (i.e., they have small complementary regions or small catchment areas). Above the elementary schools come the higher order services provided by the high schools and colleges of various kinds. As we move higher up the educational ladder the number of centres

becomes smaller and their complementary regions become larger. At the top of the ladder, stands the state university, often a single institution, serving students drawn from the whole state and outside its complementary regions. Education is just one range of central good and central services that give character to the central place organization and helps to distinguish the central place functions of one settlement from those of another. From the above description, it is clear how central place theory is applicable to higher education. "The principle that the city is the product of its region, and the region is served and transformed by its city illustrates the reciprocal and dynamic nature of relationship between the city and its region. It is this reciprocality that constitutes the logic of central place theory and integrates urban centres with the region. Both the urban and regional structures are changing and constitute a set of inter-related sub-systems resting in an upward hierarchic manner from the lowest order sub-systems to the national system".[1]

1.2 STATEMENT OF THE PROBLEM

1.2.1 The present dissertation deals with one of the neglected aspects in India's social geography, i.e., education. The study analyses the regional structure of higher education in India, first, by identifying the

---

1 V.L.S. Prakasa Rao, V.K. Tiwari and H. Ramachandran, "Urban System and the Regional Economy", Paper presented at the Indo-French Seminar, Jawaharlal Nehru University, New Delhi 1979, p.1.

university domains; and secondly, by disaggregating enrolment in the affiliated colleges for each size-class of urban and rural centres. Finally, it brings to light the regional imbalances in the process of educational development by selecting a set of indicators.

1.2.2 Education in India is not uniformly distributed over space and is hierarchical in its nature. The purpose of the study is to highlight the disparities in the spatial distribution of institutions of higher learning. This is done by grouping all colleges into a hierarchic order based on the size-classification of cities and villages. This approach makes clear the conflicting and complex processes of education and gives one a clear spatial picture of the existing reality.

1.2.3 But knowing university-level variation is not enough. We must also find out the degree of development of higher education in various states. For this purpose a state-wise analysis is undertaken. In the analysis of such distributions, it is important to observe that location forms the prime focus of the study. The dissertation also includes a broad historical survey of the development of education in India. An understanding of the existing pattern leads to recognize the essentially dualistic nature of educational development in the country. The coastal areas witnessed a more vigorous development in the colonial period, while the interior areas lagged far behind.

1.2.4 The present study stresses the importance of disaggregating the data at the state, university and college levels as a first necessary step for making more meaningful generalizations. In the words of Professor V.K.R.V. Rao, "location of colleges will have to be carefully planned to see that every college attains a viable size, where it is both economical and efficient within three to five years and to ensure that there is no unhealthy educational competition between college and a college".[2]

1.2.5 In order to show a hierarchical spread of education, the location of the colleges in a particular university has been categorised on the basis of census definition of various classes of urban and rural centres.

1.2.6 A considerable growth has taken place in literacy and education in India during the period since Independence. It is, however, well known that this progress is mainly in urban areas while the vast rural areas have remained relatively backward in educational infrastructure.

1.2.7 One of the serious lacunae in our existing educational system is the lack of proper planning so far as the location of colleges are concerned. The need for correcting the situation was felt because higher education in India continues to be highly urban oriented. In recent years there has been a

---

2 V.K.R.V. Rao's address in the Proceedings of the Conference of the Vice-Chancellors, 21-23 April 1969, p.14.

shift towards establishing institutes in rural areas. However, these attempts are still in a preliminary stage. For example, in 1964-65 only one out of seven institutions was located in rural areas. In case of enrolment the position was even worse, i.e., only one out of eleven students in university institutions came from the rural areas. There has been some improvement in the situation in the recent past, but we have to go a long way in expanding facilities for higher education in and for the rural areas. Our objective of improving the lot of the common man is certainly incompatible with the concentration of university institutions only in the urban areas. This distance between the universities and rural areas does not help in bridging the gulf between the perspective elite and the masses and the confrontation with the rural masses prevents the university from making any worthwhile contribution to the solution of this problem. "No where in India was there a class of farmers putting into the land the seeds of learning. The high schools and colleges did not teach them about manures and rotation, tillage and soil treating".[3]

1.2.8 The technological advance led to the establishment of a diversified system of education and with increasing demands for varying degrees of applied and professional

---

3 Anil Seal, The Emergence of Indian Nationalism Competition and Collaboration in the Late Nineteenth Century, London, Cambridge University Press, 1968 p.114.

skills renumerated at different levels, there arose a much wider range of differentiation between the classes of employed persons. Diversification in the courses began with the development of the economy of the country. But since education in India lacked the foresight of proper development it resulted in the creation of a pool of educated unemployed. This was because our education system was not employment oriented. Only recently the Government of India has launched the programme of vocational education.

1.2.9 The period since Independence has been marked by an explosive growth of universities as well as student enrolment (Appendices 'E' and 'F'). It is evident from the nature of enrolment that arts students form the bulk of the student population. In science the peak in enrolment was reached in the year 1965-66. In commerce faculty the rate of growth in enrolment declined sharply in early sixties and then increased, reaching its second peak in the year 1967-68, and then declining slightly. This may be because of the fact that trade and commerce activities in our economy have grown throughout the period. In engineering faculty the rate of growth came down sharply in the early sixties. Because of emphasis on industrialisation in the second plan in the late fifties and early sixties enrolment in this faculty was considerably high. But by 1961-62 it was observed that the supply of engineering graduates was much more than what the economy could absorb. After 1964-66,

emphasis was shifted to industrialisation, enrolment in engineering again increased. During the late sixties it again declined sharply. As a result of a breakthrough in electronics engineering and chemical technology in the seventies, demand for engineering graduates appeared to have picked up again. This shifting tendency from one subject to another according to the demands of the economy appears to be a very salient question.

1.2.10 Thus it is clear that though education is recognized as playing a central role in national development, and that substantial growth in education has taken place during the period since Independence, the situation undoubtedly is far from satisfactory. It is not that the oft-repeated aims and objectives have not been achieved and the targets set for such important sectors of education have not been fulfilled. But the whole structure betrays serious weaknesses of a fundamental character which appear to be more or less inherent in the system. Moreover, the differential nature of progress of education during the last thirty years has created great unevenness between regions, widening the gap between the developed and under-developed regions.

1.2.11 In a nutshell, the main objective of the dissertation is to highlight the structural and spatial imbalances in levels of educational development. In view of the above stated objective, it has been posited here that education

in India has a very strong urban bias mainly resulting from the distorting influences exerted by the policies of the colonial rulers. Over the years the colonial character of higher education has been further accentuated. The gap between educational enrolment and population in each class of urban and rural centres displays disparate from one university to another.

1.3 Significance of the Study

1.3.1 The importance of this study lies in the fact that it brings to light the regional variations in the structure of higher education. The state of education in India has been changing from time to time depending on the political, social and economic situation - obtaining at a given point of time.

1.3.2 The significance of the study lies in the fact that it brings out the development potential of certain areas so far neglected.

1.3.3 The identification of such a structure is only possible if the problem is analysed spatially. As needs or demands differ from place to place, it is necessary for adequate development of education to undertake areal surveys on micro-level to understand areal problems more closely. "Why an educational institution of that particular nature or level is there where it is?" This important question can only be answered if distribution of educational institutions

is analysed spatially.

1.3.4 This study also highlights the fact that decisions regarding the location of new colleges should be based on locational principles emphasizing demand or threshold, distance among various centres, their size and hierarchical network, so that equal opportunity of education may be provided to all sections of society irrespective of caste, creed, religion and political idealogy.

1.4 Data Base

1.4.1 The data used for computational work was obtained from University Rounds and B4 forms available at the University Grants Commission. Data included (a) location of higher education institutions, (b) enrolment of students according to types and levels. The types included:

1. General Education

   (i) Arts, (ii) Science, (iii) Commerce, and (iv) others.

2. Professional Education

   (i) Education, (ii) Law, (iii) Agriculture, (iv) Engineering/Technology, (v) Medicine including dentistry and public health, (vi) Veterniary Sciences, and (vii) other colleges of professional education.

3. Other types of higher education. Levels of education are : (i) Universities, (ii) Research Institutions, (iii) Post-Graduate, (iv) Graduate and (v) Under-Graduate or Pre-University level.

1.4.2 For the other part of the analysis in which levels of educational development have been determined at the state level data was derived from Education in India, 1969-1970 - A Statistical Survey. The data relates to the year 1969-70 and for the sake of uniformity the academic year has been taken to coincide with the financial, i.e., it extends from April 1969 to 31st March 1971. The statistics relate only to registered institutions in those institutions in which the course of study followed is either prescribed by the Government of by a University and those which attain a reasonable stand of efficiency. Research institutes have been taken into account which provide facilities for teaching. The data obtained relates to the following variables:

1. Number of Educational Institutions of Universities;
2. Enrolment of Students;
3. Teachers;
4. Direct Expenditure.

Levels include:

1. Universities;
2. Institutions deemed to be Universities;
3. Intermediate Education;

4. Colleges for General Education and other education;
5. Colleges for Research;
6. Colleges for Professional Education Graduate as well as Post-Graduate levels;
7 Institutions meant for teacher's training - basic training colleges (P.G., U.G.) and non-basic training colleges, arts and crafts (U.G.), pre-Primary/pre-basic under graduate training colleges.

1.4.3 The enrolment of students and number of teachers follow the same pattern of categorisation of college education. It is customary to classify the sources of educational finance as follows (i) Central Government, (ii) State Government, (iii) Local Bodies, (iv) Fees, (v) Enrolments and (vi) Others. Clearly the first three categories make up the total expenditure component as used in this study.

1.4.4 The other data needed included population figures for various classes of rural and urban centres and for age groups 16-26 years. The latter data were needed to remove the bias of scale. The population figures according to urban/rural classification were derived from the District Census Handbooks of 1971. The following other tables may be mentioned:

1. State and District Population Tables, 1971.

2. General Population Tables, India.

3. All Primary Census Abstract, 1971.

1.4.5 Accordingly the classification of location of colleges into various categories of urban/rural was obtained from various District Census Handbooks. The population data relating to age group 16-26 years in various states are actually been calculated by adding up single age population returns.[4] Total workers statewise have also been obtained from the Census Volume.[5]

1.4.6 Besides a vast number of reports and journals were also consulted in the course of this study.

1.5 Limitations of Data

1.5.1 The available data are not always classified in a manner which can be conveniently used for this purpose. Then one is faced with the wide discrepancies between the educational data that relates to the year 1975-76 and the other data that pertain to the census year 1971. Moreover, the population of the age-group corresponding to higher education for the first part of the analysis could not be obtained, because it was not available in the format required.

---

4 Census of India, 1971 - Unpublished Table IV, Social and Cultural Tables.

5 Census of India, 1971, Selected Economic Tables 7.

Hence, total population has been taken into account and this might slightly distort the results.

1.5.2 Then one is faced with wide discrepencies between the aggregative data from different publications such as the Annual Reports of the Ministry of Education and the Reports of the decennial population censuses. Taking in view such constraints, the figures relating to Education of 1969-70 have been deflated by the population by age-group and total workers of 1971 respectively. This deflation of the quantitative indicators was indispensable for comparison purposes. Moreover, since education is mostly a state subject there are differences in the organisation of data in different states. Then, there were problems of administrative organization. Since the education data pertain to the year 1969-70, the state of Assam included Meghalaya. After the split in 1971-72, Meghalaya emerged as separate entity. For matter of convenience and for comparative reasons the figures relating to population according to age-groups and total workers of Meghalaya were added to Assam population and workers respectively.

1.5.3 With the help of available data an attempt has been made to study the immediate problem which relates to identifying regional disparities and inherent contradiction in our Indian educational system.

1.6 Methodology

1.6.1 In pursuance of the objectives of the dissertation particular methods have been adopted to measure the extent of the regional disparities of the educational structure in India. Since universities vary greatly in the number of colleges they affiliate and the number of districts (MapI.1)they encompass, the task, therefore, involved the delienation of the University Domains (see Map I.2). In order to see the hierarchical spread of educational facilities, the location of each college has been classified into various size classes of urban and rural centres as recognised by the census. Since the crux of the problem involves the task of highlighting the spatial disparities in the availability of higher education facilities, a map has been drawn showing the location of universities and colleges in each state (Map I.3).

1.6.2 Secondly, in order to measure the gap between population and enrolment in each category of urban/rural centres for different universities, percentages have been calculated. This is followed by the depiction of data in the form of simple line - graphs for all affiliating universities.

1.6.3 There exist today great inequalities in our higher education facilities. Therefore, it becomes challenging to measure these inequalities through the application of a statistical method. The most appropriate technique found

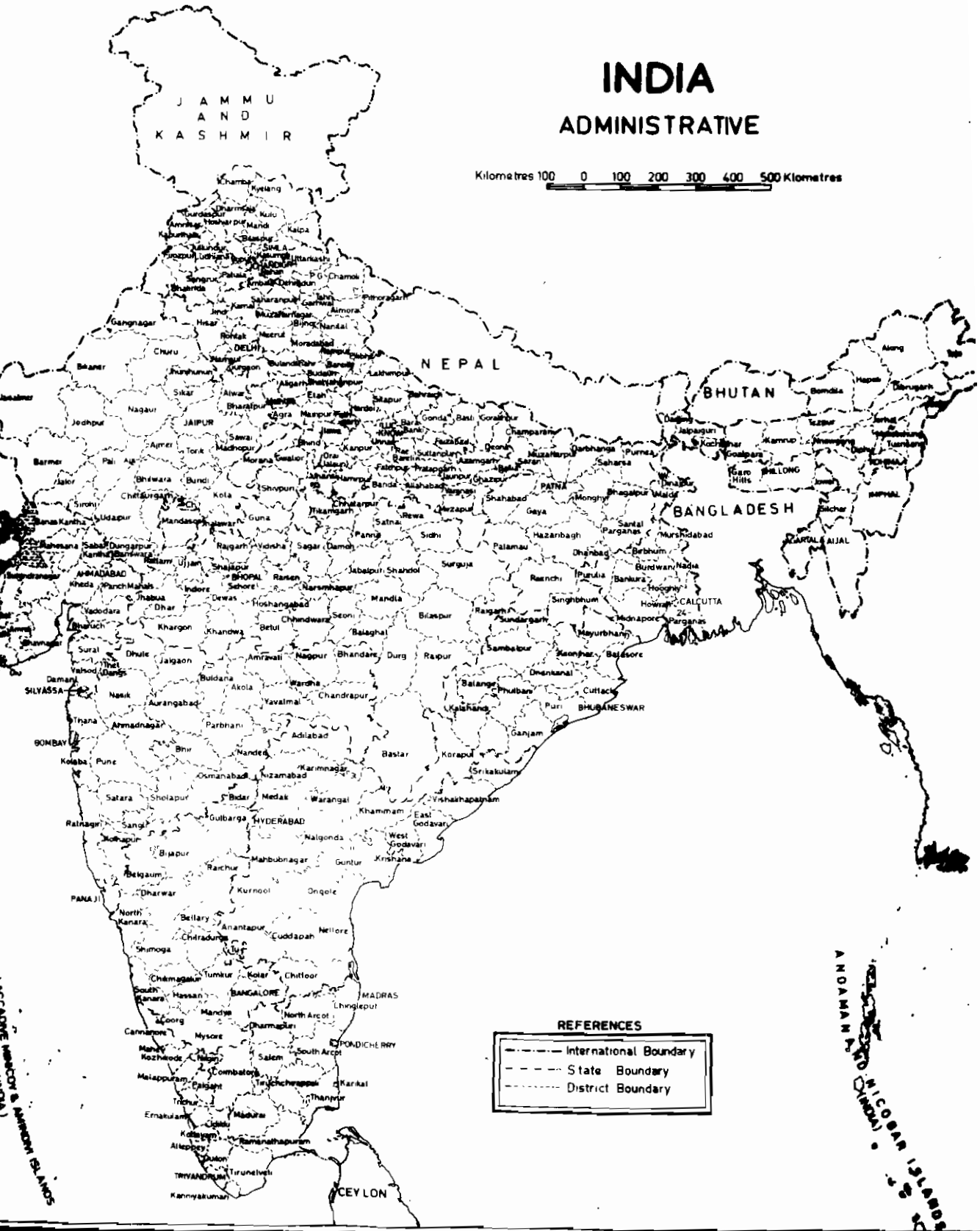

INDIA
ADMINISTRATIVE
Kilometres 100 0 100 200 300 400 500 Kilometres
JAMMU AND KASHMIR
NEPAL
BHUTAN
BANGLADESH
DELHI
JAIPUR
PATNA
CALCUTTA
BHUBANESWAR
BOMBAY
HYDERABAD
BANGALORE
MADRAS
PONDICHERRY
CEYLON
SILVASSA
PANAJI
AHMADABAD
BHOPAL
SHILLONG
REFERENCES
International Boundary
State Boundary
District Boundary

Fig 1 1

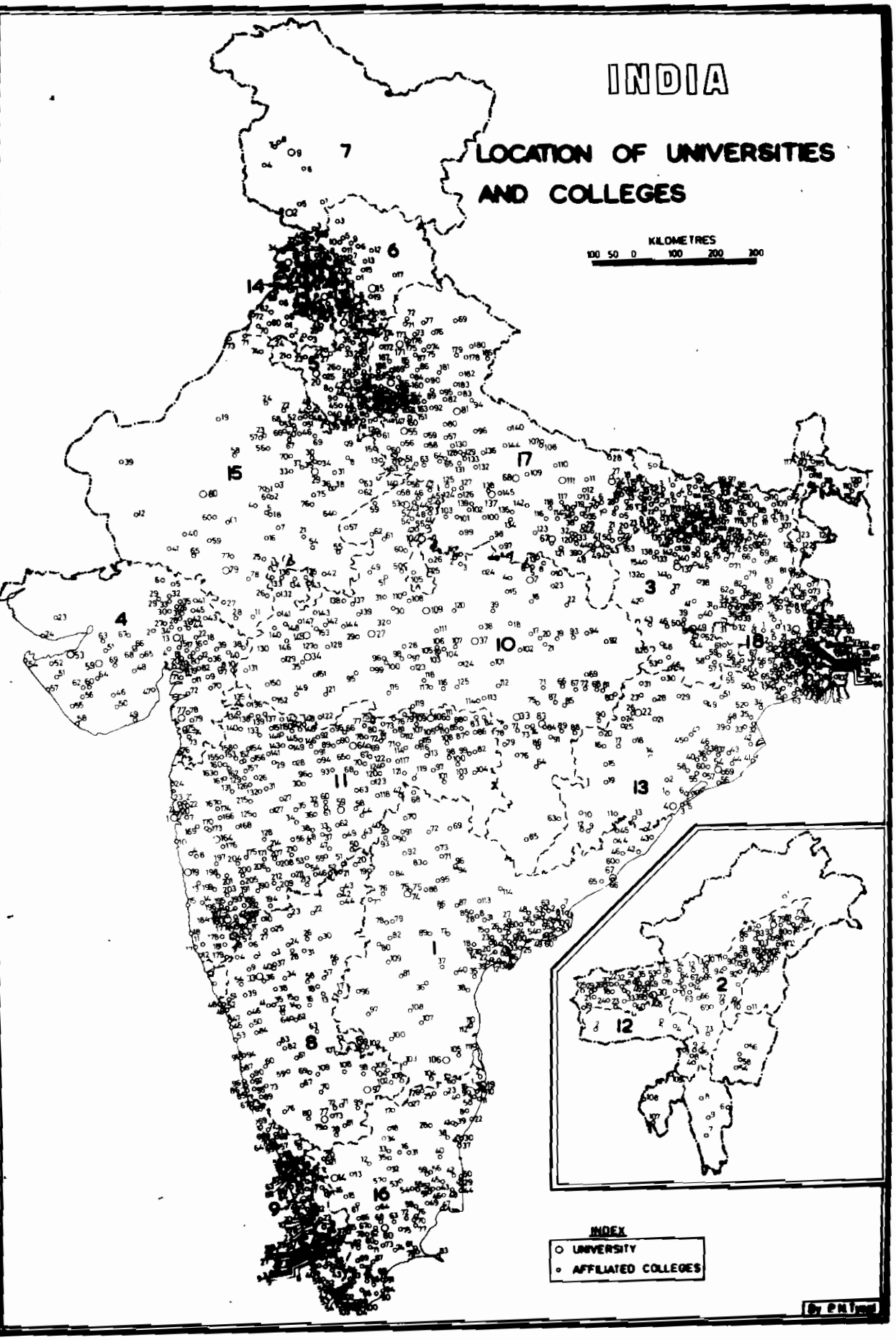

INDIA
LOCATION OF UNIVERSITIES AND COLLEGES
KILOMETRES
100 50 0 100 200 300
INDEX
UNIVERSITY
AFFILIATED COLLEGES
By P.N.Tiwari

Fig. 1-2

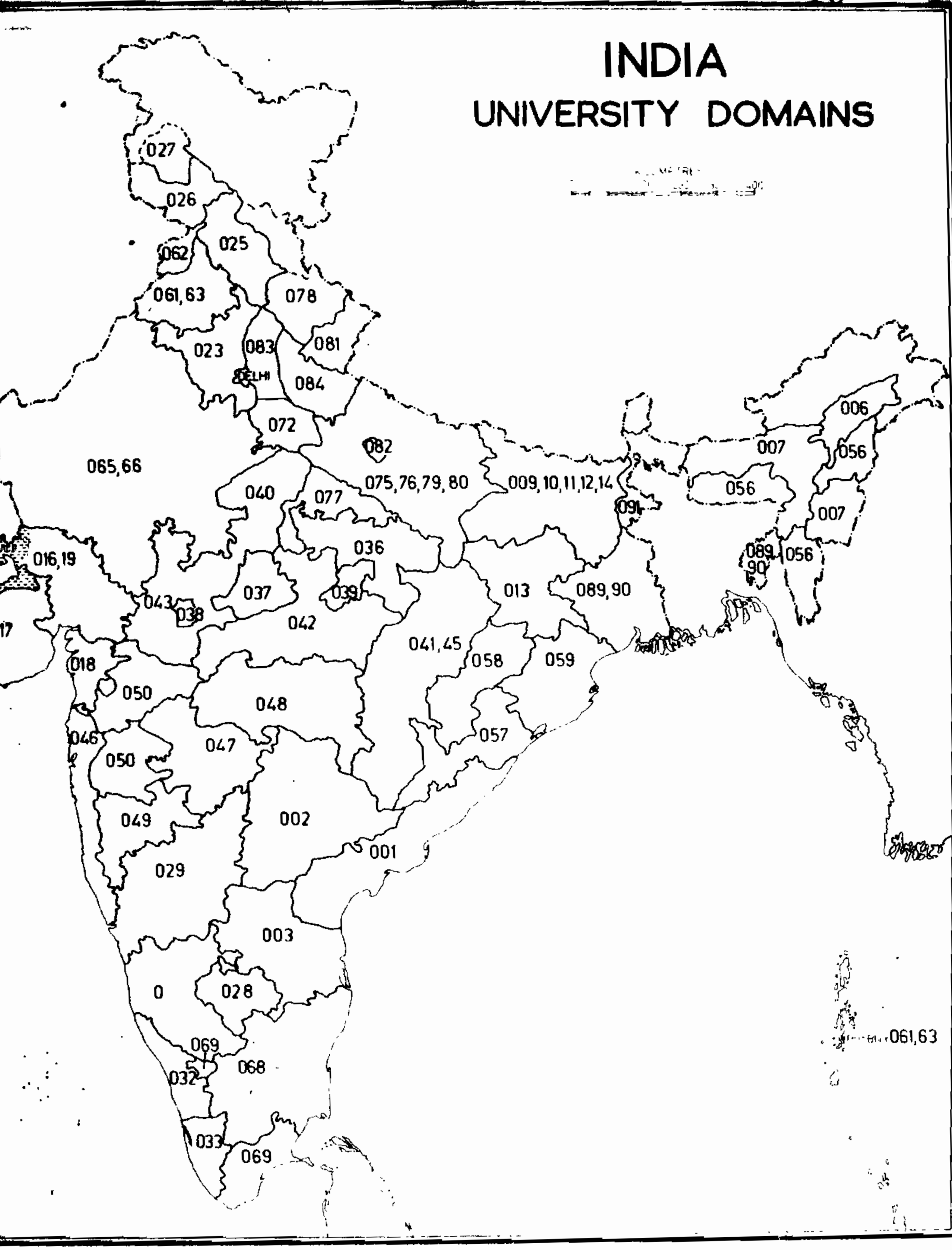

INDIA
UNIVERSITY DOMAINS
027
026
025
062
061,63
078
081
023
083
DELHI
084
072
082
065,66
075,76,79,80
009,10,11,12,14
006
007
056
056
040
077
091
007
016,19
036
089
90
056
037
039
013
089,90
043
038
042
041,45
058
059
018
050
048
046
047
057
050
049
002
001
029
003
0
028
069
068
032
033
069
061,63

Fig 1.?

to measure the degree of inequality is the Gini's coefficient which seeks to project here such inequalities between the urban and the rural areas served by particular universities. The two variables that have been taken into account are enrolment in higher education institutions according to the size class of cities and villages and their corresponding population. In order to make the exercise worthwhile, certain universities have been clubbed together because they served an overlapping region. This resulted in the reduction of the number of Gini's coefficient to forty-nine. It is important to note that to get accurate values the first step was to find out the ratio of enrolment to population for all classes of rural/urban centres separately. This was done so that the percentages of enrolment and population could be arranged in the descending order for each hierarchical order of urban and rural places. It was then possible to apply the formula without any discrepancy. Gini's coefficient is notationally expressed as:

$$G = \frac{1}{100 \times 100} \left| \sum_{i=1}^{n} X_i Y_{+1} - \left(\sum X_{i+1} Y_i \right) \right|$$

Lorenz curves have been drawn for all universities except those of national importance, and institutions deemed to be universities.

1.6.4 To determine the level of educational development of states, a Composite Index has been evolved. There are four chosen indicators : (i) Institutions, (ii) Enrolment, (iii) Teachers and (iv) Direct Expenditure. Since the objective is to study the regional disparities of State/ Union Territories it was necessary to remove the bias of scale. Accordingly, the number of educational institutions were deflated by the population per 1,000 population with the age-group 16-26 years. The same procedure for other indicators was followed by deflating it per 1,000 population within the age group 16-26 years, as the latter coincides with the time period assigned to finish higher studies. Exception was in the case of the number of teachers which was deflated by per 1,000 working population for each state. The final form of this data involves the compositing of the various indicators. The problem has two major aspects : first, the problem of eliminating the bias of scale, and secondly, that of determining weightages to different variables. "If the observations on variables are divided by their respective means, one can get rid of scale bias without affecting the dispersion or the relative position of observations in the series".[6] This method has, of course, its limitations. Once the bias of unit of measurement is removed from the observation the crucial problem remains that

---

6 A. Kundu, "Construction of Indices for Regionalisation : An Enquiry into Methods of Analysis", Geographical Review of India.

DISS
378.54
B1475 Re
TH751

DISS
T,4·44-02
M1

378.54
B147SRe
TH-751

JAWAHARLAL NEHRU LIBRARY

of assigning appropriate weightages to variables. If one has sufficient insight into the nature and magnitude of the inter-relations among the selected variables, one might choose to determine the weightages through judgement. This method, however, is open to criticism and hence no such attempt has been made. Hence for all purposes of convenience, after having standardised the variables, all the four indicators for each state have been added together separately to give us the composite index. It is always better, to give equal importance to all variables when there are no sufficient reasons to believe otherwise. Spatial analysis of this kind has been further substantiated with choropleth maps for all indicators used in the study.

1.7 LITERATURE SURVEY

1.7.1 Since education is positively related to the development of a nation and is a function of socio-economic and political set up of a particular place, it would be correct to classify the entire gamut of literature on education into the following categories:

(a) Education and Economic Development

(b) Education and Social Development

(c) Education and Political Development

(d) Spatial Aspects of Educational Development.

1.8 Education and Economic Development[7]

1.8.1 The relationship between education and economic development is not a new discovery. Interest in human capital dates back to the days of Adam Smith who includes "the acquired and useful abilities of all the inhabitants or members of society in his concept of fixed capital".[8] Alfred Marshall, emphasised the importance of "investing in human beings".[9] The relevance of human factor in economic development, has thus been accepted long before, yet the mainstream of economic thought held that it is neither appropriate nore practical to apply the concept of capital

---

7 (i) For some important literature on this theme, see Theodore Schultz, The Economic Value of Education, New York, Columbia University Press, 1963.

(ii) H.M. Philips, Education as a Basic Factor in Economic and Social Development - Final Report, Addis Abba, UNESCO, May 1961, pp.97-106.

(iii) William G. Bowen, Economic Aspects of Education, Princeton, New Jersey, Princeton University Industrial Relations Section 1964, and Anderson C. Arnold and Mary Jean Bowman (ed.), Education and Economic Development, Chicago Aldine, 1965.

8 Adam Smith, The Wealth of Nations, Modern Library Edition Book II, pp.265-66.

9 Alfred Marshall, Principles of Economics, Macmillan, 8th Edition, p.216.

to human beings.[10] T.W. Schultz has attempted to establish a relationship between expenditures on education and income from physical capital formation.

1.8.2 In neo-classical writings which concentrated on how to optimize the allocation of given resources, considerations of education as an investment were neglected until they were rediscussed by educational planners at the top level during the 1960s.[11] That provision of trained manpower contributes to the growth of national product has become an accepted principle in the formulation of economic policy.[12]

1.8.3 The following are some of the methods used/ suggested for the purpose of educational planning - assessing educational needs of the nation at some future date:

1. Social demand as a measure of educational needs.
2. Economic models.
3. Returns - to - Education as a guide to educational investment.
4. Forecasting manpower requirements as the basis for educational planning.

---

10 M. Blaug (ed.), Economics of Education, vol.I, H.G. Shaffar, A Critique of the Concept of 'Human Capital'.

11 Gunnar Myrdal, Asian Drama : An Inquiry into the Poverty of Nations, vol.3, Harmondsworth, Middlesex, Penguin Books 1968, pp.1689-90.

12 Paul Streeton, "Economic Development and Education", in Desai (ed.), Essays on Modernization, vol.I.

1.8.4 Education has become a major source of skills and trained talent and this seems to be a crucial role. The economy needs a spectrum of skills and abilities of various kinds which are developed by education to a great extent.[13]

1.8.5 Harbison and Myers have explained the importance of manpower in economic development. They define human resource development as "the process of increasing knowledge and skills and capacities of all the people in a society", and the most obvious way of doing this is by formal education.[14]

1.8.6 "Expenditures on education constitute an important form of investment in economic development".[15]

1.8.7 Commenting on the place of education in economic growth, Vaizey writes:

> Since the greater part of the world is poor and since almost all countries in the poor parts of the world are trying to raise their income per head, it follows that education has an important part to play in these countries in directly helping them economically.[16]

---

13 John Vaizey, The Economics of Education, London, Faber and Faber, 1962, Chap.7.

14 (i) F.Harbison and A. Charles Myers, Education, Manpower and Economic Growth, Oxford and IBM Publishing Co., 1974, p.2.

(ii) John Kenneth Galbraith, Economic Development in Perspective, Cambridge, Mass. Harvard University Press, 1962, has emphasised the vital role of education in increasing human capital.

15 V.K.R.V. Rao, Education and Human Resources Development, Bombay, Allied Publishers, 1966.

16 Vaizey, op.cit., p.125.

1.8.8 Another way in which education can contribute to economic growth is by generating "a climate for growth" by giving the masses a capacity for thinking beyond their immediate needs and troubles.[17] In fact Adam Smith, David Ricardo, Robert Malthus and J.S. Mill had recognized that education not only develops aptitudes but also attitudes conducive to economic progress.[18]

1.8.9 If Education at all levels were systematically planned and fully integrated into national development programmes it would fasten the actual rate so urgently needed in India by its multi-million people and which in turn will condition the extent to which India can expand her educational system.[19]

1.9 Education and Social Development[20]

1.9.1 "'Education' is what a word that summarizes something that is good in itself. It represents for many the key to knowledge and to the good things of life that comes from discrimination and from calmness and integrity", says Vaizey.[21]

---

17 ibid., p.127.

18 ibid., pp.19-20, and Streeton, op.cit., p.325.

19 Lord Butler, Survival Depends on Higher Education Delhi, Vikas for I.C.C.R., 1972, p.22.

20 There is abundance of literature on this theme especially in the philosophy of education. Some of the leading works are:

(a) Herbert Spencer, Education Intellectual, Moral and Physical, London, Walts, 1949.

(ii) John Dewey, Democracy and Education New York, Macmillan, 1966.

21 Vaizey, op.cit., p.152.

Hanson and Brembeck make the same point when they write "always implicit in education is some conception of what makes up the good life and good society".[22] The role of education in personal and social development has been emphasized from the time of classical social philosophers and economists like J.S. Mill[23] right upto the meeting of the African education leaders assembled at Addis Ababa in 1961.[24]

1.9.2 Almost all the text books on sociology of education, emphasize the role of education in the socialization process. Formal education not only contributes towards the secondary socialization of individuals but it makes what Armer and Youtz[25] say "Individual Modernity".

1.9.3 The second aspect of the role of education in social development is that of women's education. "The loss to the poorer nations through the under-education and under-development

---

22 John W. Hanson, and Cole Brembeck (ed.), Education and the Development of Nations, New York, Holt, Reinhart and Winston, 1966, p.77.

23 J.S. Mill, The Principles of Political Economy, London, 1967, esp. Ch. 13 in Book II.

24 U.N.E.S.C.O., Final Report, Conference of African Stocks on the Development of Education in Africa, Addis Ababa, 15-25 May 1961.

25 Michael Armer, and Robert Youtz, "Formal Education and Individual Modernity in our African Society", American Journal of Sociology, 76(4), January 1971, pp.604-26.

of women is enormous". According to Curle,[26] Myrdal[27] comments that it is realization on the part of reformers in South Asia "that development will be hampered if women remain ignorant and backward". This has resulted in their recommendation that "at all levels of schooling, women be given opportunities equal to men". Independence in India, however, brought the constitutional acceptance of women's equality and their need to play multiple roles in society - not only as wives and mothers - but also as citizens, workers and leaders to bring about national development. It will not be out of place to mention here that the education of scheduled castes and tribes and other backward classes has the same importance to the nation, (Upward social mobility). Various studies relating to SC/ST have been carried out in India.

1.9.4 Another concept which seems to be intrinsically related to education is freedom. "In the great awakening, to use Myrdal's apt term for the universal surge towards freedom and national betterment, education is the first thing to aim for".[28]

1.9.5 Finally there is also a growing realization that education can be an effective instrument of social change.[29]

---

26 Adam Curle, Educational Strategy for Developing Societies, 2nd Edition, London, Tavistock, 1970, p.138.

27 Myrdal, op.cit., p.1649

28 Curle, op.cit., p.84.

29 Robert J. Havighurst, "How Education Changes Society?", in Confluence : An International Forum, 6(1), Spring 1957, pp.85-86. See also C.Anderson Arnold, "Education and Social Change", School Review, 80, May 1972, pp.433-58.

Bloom[30] has discussed the school as an integral part of the social environment and as determiner of the extent and kind of change. Nasatir[31] emphasises the role played by the university in the creation of an elite for economic and social change. Mead[32] describes the new function of education as that of helping students to adapt to a rapidly changing world.

1.9.6 In fact, social reformers in India saw the new education as the flame of knowledge which dispelled the darkness of ignorance and expected that it "would open a new vista of thought and philosophy and help promote social reform in the country".[33]

1.9.7 In India, the subject on sociology of education itself had a late beginning. Consequently, systematic studies on the sociological aspects of Indian education have been few and far between. Pioneers amongst this field are Ruhela, Gore, Suma Chitnis and I.P. Desai, and Kamat.

---

30 Benjamin S. Bloom, Stability and Change in Human Characteristics, New York, John Wiley and Sons, 1964.

31 David Nasatir, "Education and Social Change : The Argentine Case", Sociology of Education, 39(2), Spring 1969, pp.167-82.

32 Magaret Mead, "A Redefinition of Education", NEA Journal, 48(7), October 1959, pp.15-17.

33 Saiyidaian, "Education for a Better Social Order", in Education, Culture and Social Order, Bombay, Asia Publishing House, 1958, pp.23-38.

1.10 Education and Political Development[34]

1.10.1 The relationship between education and political life has been historically a concern and discussion among philosophers and social scientists. Plato and Aristotle were among the first to point to the crucial role that education played in relation to the state. J.J. Rousseau, J.S. Mill, John Locke and many other philosphers like John Dewey and Dean Rusk have all stressed the importance of education in a democratic political order. According to Lipset, "many people have suggested that higher the education level of a national population, the better the chances of democracy and the comparitive data available supports this proposition".[35] Sri Prakasa[36] has emphasised the importance of education. The writings of political - social scientists according to Massialas[37] consider formal education which performs the following important functions in the political system:

---

34 For an intensive analysis on this theme, see James S. Coleman (ed.), Education and Political Development, Princeton, New Jersey, Princeton University Press, 1965, and Byron G. Massialas, Education and Political System, Reading, Mass. Addison Wesley, 1969.

35 Seymour Martin Lipset, Political Man, New Delhi, 1973, p.55, see also pp.55-60.

36 Sri Prakasha, "Education in a Democracy", in S.N. Mukherjee (ed.), Education in India: Today and Tomorrow, Baroda, AcharyaBook Depot, 1969, pp.4-5.

37 Massailas, op.cit., p.12.

(a) "socialization of youth into political culture;[38]

(b) selection, recruitment and training of political leaders;[39]

(c) political integration of a community or society and

(d) political input role (teacher unions and students organisations".

1.10.2 Weiner[40] feels that education is the only panacea to all political problems.

1.11 Spatial Aspects of Educational Development

1.11.1 The major objective of education for all cannot be achieved unless spatial dimension of this problem is taken into consideration. Fluid attempt has been made to prepare projects which enhances the importance of the location of a college. The research project on "The Economics of Education in some West Bengal Colleges" purports to cover the economics of education in West Bengal[41] in which location is an important

---

38 K.N. Venkatarayappa, Education and Society in India", in S.P. Ruhela (ed.), Social Determinants of Educability in India, New Delhi, Jain Brothers, 1969, p.24.

39 Myrdal, op.cit., p.1650.

40 Myron Weiner, "Political Problems of Modernizing Pre-Industrial Societies" in Desai (ed.), Essays on Modernization, vol.I, pp.166-74.

41 Partha Basu, Kajal Lahiri and Amilan Datta, Report on "The Economics of Education in Some West Bengal Colleges with special reference to size, technique, and location," Calcutta, World Press Pvt Ltd 1974.

consideration. It is realised that "Spatial Studies" on institutions can suggest sites for new colleges and also indicate if the scale of operation of a college should be increased to cope with increased demand for education. Another such attempt has been made by E. Ahmad[42] to study the geography of the Ranchi University. Some studies dealing with spatial planning of institution in a region are those of Donald W. Maxfield,[43] Fred L. Haul,[44] and C. Arnold Anderson and Mary Jean Bowman,[45] W.T.S. Gould,[46]

---

42 E. Ahmad, "Geography of Ranchi University" in Geographical Review of India, vol.xxx, March 1968, no.1.

43 Donald W. Maxfield, "Spatial Planning of School Districts" in Annals of the Association of American Geographer, vol.62, no.4, December 1972.

44 Fred L. Haul, "Location Criteria for High Schools", University of Chicago Research Papers 150, 1973.

45 Arnold C. Anderson, and Mary Jean Bowman (ed.) "Patterns and Variability in the distribution and diffusion of schooling" in Education and Economic Development, Chicago, Aldine, 1966, pp.314-55.

46 W.T.S. Gould, Planning the Location of Schools - Case Studies, Ankola District, Uganda, Parris, UNESCO and IIEP, 1973.

and that of Jacques Hallack,[47] Makhija's[48] work entitled "Locational Study of Educational Institutions of Udaipur District" is an humble attempt to study the locational aspects of the phenomena of education as origin and evolution in Udaipur district, the distribution of various types of educational institutions, population served by their catchment areas, means or physical facilities for movement to avail the service of education, their future locational pattern and also future prospects. Other investigators in this field like Stephen P. Heyneman[49] are mainly concerned with the equality of educational opportunity.

1.11.2 There are a few reports and documents concerned with the reorganisation of higher education. Amongst the notable is that of work conducted in Sweden.[50] In 1968, the Swedish Minister of Education appointed the 1968 Educational Commission (U68) to elaborate a comprehensive plan for post-secondary education. The four different

---

47 Jacques Hallack, Planning the Location of School - Case Studies 1 County, Siligo, Ireland, UNESCO, IIEP, Paris 1973.

48 Makhija, Locational Study of Educational Institutions of Udaipur District, Doctoral Thesis.

49 Stephen P. Heyneman, "Relationship between the Primary School Community and Academic Achievement in Uganda" in Journal of Developing Areas, vol.II, January 1977, pp.245-59.

50 Report and documents, "The Reorganisation of Higher Education in Sweden" in Minerva - Review of Science, Learning and Policy, vol.xii, no.1, January 1974.

factors under study were : the proximity of educational facilities to the students, the proximity of education facilities to job opportunities, contact between education and resource environment of higher education.

1.11.3 In India there has been little work on locational aspects of education. So far education has been treated more align to its locale and therefore is devoid of its practical relevance for people for which it is being planned. Works like Bhave,[51] Das,[52] Desai,[53] Kamat[54] and Sharma[55] deal only with the historical or structural aspects of the problem and has nothing to do with functional

---

51 W.V. Bhave, Development of Education in Madhya Pradesh, Doctoral Thesis, Jabalpur University, 1967.

52 K.K. Das, Evolution of the System of Elementary Education in Orissa, Doctoral Thesis, Utkal University, 1968.

53 M.G. Desai, A Critical Study of the Growth of Secondary Education in Kaira District, Doctoral Thesis, Sardar Patel University, 1968.

54 A.R. Kamat, Progress of Education in Rural Maharashtra, Gokhale Institute of Politics and Economics, Poona, 1968.

55 A.L. Sharma, Development of Professional Education in Rajasthan, Doctoral Thesis, Udaipur University, 1971.

objective of education. Theoretical readings of available materials from the writings of foreign and Indian scholars[56] related to the present problem of investigation were made.

1.11.4 The foregoing literature survey clearly illustrates the paucity of research on the spatial aspects of education. Other related studies exist, but overall the attempts in spatial analysis have been of an insignificant nature and practically non-existent. The need for such research is thus rendered imminent, especially considering the importance of education in modern economy and the growing realization of the seriousness of the problems of educational development. For this reason, it becomes interesting and challenging to study the problem from a geographical point of view and examine the reasons for such nation-wide disparities.

---

56 (i) Peter Hagget, Locational Analysis in Human Geography, London, Edward Arnold Publishers, 1970.

(ii) R. Cox Kevin, Man, Location, Behaviour : An Introduction to Human Geography, New York, John Wiley and Sons, 1972.

(iii) A.L. Joseph, and G.S. David (ed.) Education in Cities, London, Evas Brothers Ltd., 1970.

(iv) A.S. Altekar, Education in Ancient India, Varanasi, Nand Kishore and Brothers, Banspathak, 1965.

(v) Nagoc Chau Ta, Demographic Aspect of Educational Planning, Paris, UNESCO, IIEP, 1969.

Chapter II

EDUCATION IN INDIA : AN HISTORICAL SURVEY

2.1.1 Education has a history no less renowned than that of any other subject. Yet history of education in our country is rarely, if ever presented as a meaningful development of many aspects of a nation's life. An attempt to interpret the trend in a field of research like history of education, and to see the spatial processes that have generated the present educational structure is thus of considerable importance in an understanding of the regional structure of higher education.

2.1.2 Almost all developing countries have inherted from colonial powers a system of higher education built up along the lines of western institutions and meant primarily to consolidate colonial dominance.[1] In India too, like many other developing countries, education had had a definite colonial bias. Inspite of the concerted efforts made to adopt this system to their requirements, developing countries continue to find it largely irrelevant to their societal needs. Its irrelevance is evident from the following facts:

(i) Its benefits go mostly to the privileged section of the society and it does not meet the rising expectations of the traditionally deprived

---

1 Anil Bordia, Seminar on the Problems Involved in Setting up New Types of Higher Education Institutions and Programmes in Developing Countries. Innovations in Higher Education, Paris, 5-8 October 1976, p.1.

sections or the growing demand for democratisation of educational opportunity;

(ii) it does not serve the requirements of rapid economic and social development, which demands high level technologists and experts in several allied fields;

(iii) it is urban-centred in societies which are predominantly rural. Even the students drawn from the rural areas tend to be absorbed in the urban sectors of economy. Thus rather than serving the villages, it further empowerishes them.[2]

2.1.3 After having stated briefly the factors of irrelevance to our societal needs, it is imperative to look into the process of development of education in India that has generated the imbalances in our educational structure today. This survey is divided into two parts : (a) Pre-Independence Era, and (b) Independent Era.

(a) PRE-INDEPENDENCE ERA

2.2 Education in Ancient India

2.2.1 The main and perhaps the only fountain head of creative energy in ancient times in India was religion.[3]

---

2 ibid., p.1.

3 R.D. Mookerji, Ancient Indian Education (Brahmanical and Buddhist), Macmillan and Co. Ltd., 1951, p.xix. See also, A.S. Altekar, Education in Ancient India, Varanasi, Nand Kishore and Bros. Banasphatak, 1965.

R.N. Saksena's[4] paper on the traditional system of education in India focusses attention on the influence of religion on education in India since ancient times. He outlines the salient features of vedic education, the Buddhist system of education and the education under the Mohammedan rulers. This was more than a set of beliefs and rituals. It was a totality of ideas and ideals, practices and conduct called dharma.[5] Religion determined laws for social life and organisation including economic pursuits. Education, as it was understood was life long even though its initial and formal stage terminated when a person was about twenty five years of age.

2.2.2 It is not clear whether the explosion of knowledge, lay in religion which led to the establishment of universities which brought about the explosion of knowledge, or whether there was a pervasive renaissance of life and culture from about the 7th century B.C. to the 7th century A.D., which created an intellectual ferment manifesting itself among other things in the depths and diversity of knowledge and the emergence of university level institutions.

2.2.3 One of the earliest universities to have come up was located at Taxila. This institution in time became the centre of attraction for scholars from far and wide. There

---

4 R.N. Saksena, "The Traditional Systems of Education in India", in Gore et.al. (ed.), Papers in the Sociology of Education in India, New Delhi, NCERT, 1967, pp.78-90.

5 F.E. Keay, A History of Education in India and Pakistan, Calcutta, Oxford University Press, 1959, p.13.

were special learning centres for the sciences, arts and crafts which included elephant lore, magic, charms, hunting, archery, medicine etc.

2.2.4 Another renowned institution was Nalanda which had all the characteristics of a university as the term was understood in mediaeval Europe. It had an organisation appropriate to a University, a well-defined campus stable and ever increasing sources of revenue, a graduated curriculum, embodying the best scholarship of the times and a student - teacher body which reached the enrolment of 8,588[6] residential students and 1,500 teachers at one time. The student population was drawn from various parts of India and the neighbouring countries. Teachers, too were not local but drawn from all parts of the country and outside. The curriculum again was directed to the religious beliefs of the Brahmans, Buddhists and Jains, but subjects like grammar, logic, medicine, yoga and samkhya philosophy were also taught.

2.2.5 Next was the university of Varanasi which gained momentum as it became the seat of Hindu learning. Besides Taxila, Nalanda and Varanasi, there were other seats of learning which continued to flourish even after the great ancient universities ceased to exist.

2.2.6 The ancient Indian system of higher learning had several characteristics. It was essentially religious. The

---

6 Anil Bordia, op.cit., p.6.

system was primarily Brahmanical,[7] in the sense that it was the prerogative of a learned caste whether of Hindus, Buddhists or Jains. The period marked the beginning of the caste system in India, and gradually the education became merely restricted to the upper castes, viz., the Brahmins. Gough has outlined the social implications of literacy in traditional India,[8] and has analysed the distribution and function of literacy to different castes, its implications to the caste system in traditional Kerala and literacy in modern Kerala.[9] Duskin[10] in her study of a 20th century anti-Brahmin movement in a South Indian Princely state (Mysore) has analysed the role of English Medium education in a minority (Brahmin) castes capturing majority of the governmental positions. She has also discussed the educational measures to uplift 'backward classes' in this state.

---

7 Santosh Kumar Das, The Educational System of the Ancient Hindus, Calcutta, Mitra Press, 1930, pp.48-62.

8 Kathleen Gough, "Implications of Literacy in Traditional China and India", in Jack Goody (ed.), Literacy in Traditional Societies, Cambridge, Cambridge University Press, 1968, pp.70-84.

9 Kathleen Gough, "Literacy in Kerala", in Jack Goody (ed.), op.cit., pp.133-60.

10 Lelah Duskin, "The Non Brahmin Movement in Princely Mysore", Ph.D. Thesis, Philadelphia, University of Pennsylvania, 1974.

2.3 Mediaeval Period

2.3.1 After the ancient period followed a series of Muslim conquests. The northern part of the country became vulnerable to the foreign invasions from all sides. Muslim conquests took place at a time when Hindu, Buddhist and Jain institutions of higher learning, although in a state of decline were full of intellectual activity. The establishment of madrassahs in the period between the 13th and the 16th centuries A.D. serves as a proof of attempts made by Muslim rulers to promote education in the country. One of the noted Muslim ruler, viz., Feroze Tughlaq, is credited for having established thirty colleges. At Delhi, he found a madrassah, a residential university, where students and teachers were maintained at government expense.

2.3.2 Despite concerted efforts made by the Muslim rulers to accelerate education in India, the Muslim population in general remained a backward community. Akbar, the great Muslim ruler was the one responsible for giving a definite direction to education in Mediaeval India. His educational policies were without biasbecause he tried to strike the balance between the Hindus and the Muslims and respected both in their own individual capacity. In these colleges they were taught ethics, arithmetic, accountancy, agriculture, geometry, astronomy, economics, physics, logic, natural philosophy and history. The college at Delhi had a distinguished faculty consisting of Arabic, Persian and

Sanskrit scholars. Akbar built state-supported colleges[11] in all principal cities and opened their doors to all who sought higher education. During Akbar's rule the country was definitely set on the path of the synthesis of two cultures, and institutions of higher learning were designed as instruments of such synthesis.

2.3.3 Surprisingly the Muslim rulers in general gave sufficient impetus to higher learning. Jahangir, we are told, was equally keen about higher education. The period saw the setting up of new imperial colleges, but he was less methodical and lacked the vision that guided Akbar's educational policies.

2.3.4 But the bright phase of the Muslim rule in India ended up with Aurangzeb, the last of the Mughal emperors. His religious fanaticism made him destroy the Hindu seat of learning. He completely reversed Akbar's policy of equal respect for diverse faiths and culture. All the same he did a lot to further Muslim theological education all over the country.

2.3.5 Just as religion played an important part in determining education in India during ancient times, it played an equally important part in the mediaeval period. In many respects, the two systems were similar. Education in ancient Indian universities and colleges was philosophical, abstract and theological. The curriculum was wide-ranging

---

11 Anil Bordia, op.cit., p.8.

and included mathematics, astronomy, sciences, medicine, logic, jurisprudence. "Institutional elitism was ensured by the use of Arabic and Persian in the madrassah just as Sanskrit held sway during the ancient period".[12]

2.4 Higher Education in British India

2.4.1 The origin of the present system of education can be treated to the beginning of the nineteenth century when Macaulay presented his famous minute. It was not just a matter of chance that British introduced education in India at a particular period of their rule. The educational policy could be said to have taken a definite direction from 1835 when official seal was put on Macaulay's minute. A lot has been said and written on Macaulay's minute and its effect on the course of Indian education.[13] This period is especially important as it marked the turning point in the history of educational development in India.

2.4.2 There is, in fact, a vast amount of literature available and research being conducted in the history of education under the British rule. Studies by

---

12 ibid., p.8.

13 (i) Nurullah and Naik, A Student's History of Education in India (1880-1961), Delhi, Macmillan & Co., 1962, p.61.

(ii) S.N. Mukherji, History of Education in India (Modern Period), Baroda, Acharya Book Depot, 1966, pp.73-74.

(iii) B.D. Srivastava, The Development of Modern Indian Education, Bombay, Orient Longmans, 1963, pp.173-78.

Saini,[14] Goel,[15] Shukla,[16] Upreti[17] mainly concern with the critical examination of the various trends in the socio-economic and political background regarding the development of education and its implications in respect to the history of education. Hennessy,[18] in his paper on British education for an elite in India, has described the historical background of the impact of British education on India between 1780 and 1947. He analysed the emergence of India's middle classes and examined the issue of mass vs. elite education in India since 1854. Chitra[19] has examined the nature of the relationship between education and society in Mysore during the British rule by tackling some of the problems raised by questions such as "How did society react

---

14 S.K. Saini, "The Socio-Economic and Political Factors in the Development of Education in British India during 1921-1947 A.D., Ph.D. Thesis, MSU., 1975, in M.B. Buch (ed.), Second Survey of Research in Education (1972-78), Baroda, Modern Printers, 1978, p.60.

15 B.S. Goel, Development of Education in British India (1905-1929), Ph.D. Thesis, Delhi University, in M.B. Buch (ed.), Survey of..... ibid., p.59.

16 S.C. Shukla, Educational Development in British India (1854-1904), Ph.D. Thesis, Delhi University, 1958, in M.B. Buch (ed.), ibid., p.78.

17 D.C. Upreti, Political Development and Growth of Education in British India, 1904-1947, Ph.D. Thesis, MSU., 1972, in M.B. Buch, Survey.... ibid., p.81.

18 Jossleyn Hennessy, "British Education for an Elite in India (1780-1947)" in Rupert Wilkinson, (ed.), Governing Elites, New York, Oxford University Press, 1969, pp.135-92.

19 M.N. Chitra, "Higher Education and Society in Mysore under British Rule", Sociological Bulletin, 21(2), September 1972, pp.152-75.

to the challenge posed by western education?" How did the two react upon each other and with what consequences?" Misra,[20] in his attempt to trace the growth of the Indian middle classes in modern times dwells on the educated middle class at length analysing their growth for over a century under the East India Company and the educational policy in the period towards expansion and maturity, 1854-1947. R.P. Singh's[21] book on the historical retrospect of the Indian public schools is another of its kind. All such studies merely highlight the importance of the English system of education in India.

2.4.3 The Charter of 1813 established the responsibility of the Company for education in India. It centred around four principal issues:

(i) Should the Company encourage western literature and knowledge or should it strengthen the existing institutions of the classical higher learning in India?

(ii) What should be the medium of instruction, English or classical languages such as Sanskrit and Persian or the vernacular languages?

(iii) What should be the agencies of education?

(iv) Whether the government should get involved in mass education or set up colleges for the elite

---

20 B.B. Misra, The Indian Middle Class, London, Oxford University Press, 1961, pp.147-219 & 281-306

21 R.P. Singh, The Indian Public School, New Delhi, Sterling Publishers, 1972.

who on the basis of downward filtration theory[22] would spread education among the masses. Prior to 1833, the orientalist view seemed to prevail both amongst the Englishmen and prominent Indians although there were forceful personalities like Raja Ram Mohan Roy who advocated a synthesis of eastern and western cultures. However, opinions on this front remained divided. The debate was clinched by Macaulay who presented his famous minute on February 2nd, 1835. The prime objective of this kind of education imparted to the Indians, was merely to create a class of educated Indian who would suit the needs of the British Government and serve as trained personnel for the public administration of the country. This was done primarily to help the Britishers in consolidating their power in India. Their objective was soon realised as it gave rise to a particular class of Indians who became nothing but a mere mouth-piece of the British. The ladder that Macaulay presented was completely by the Woods Despatch in 1854. Hitherto, the structure of education presented a picture of the body without

---

22 (i) U.N. Dixit, Impact of Educational Policy of Britain on Indian Education, Ph.D. Thesis, Udaipur University, 1976, in M.B. Buch (ed.), Second Survey .... op.cit., p.47.

(ii) Nurullah and Naik, A History of Education in India (During the British period), Bombay, Macmillan and Co., 1951, pp.111-13.

"head or tail". The great despatch of 1854 completed the picture of furnishing it with a head and a tail in the form of elementary education and university education respectively. It suggested the prominent stages of an educational ladder, viz., (a) primary, (b) middle, (c) secondary, and (d) university. By 1857 there were 27 colleges. The Government of India passed the Acts of Incorporations of the Universities of Calcutta, Madras and Bombay in 1857. These three places had a geographical significance as it served as centres of trade from where Indian goods could be easily exported to Britain. Education developed along the peripheral areas of the country, but it did not filter to the core areas of the country. Generally speaking, the coastal areas developed faster, leaving the rest in the backwaters of educational development. These three universities were modelled after the university of London as it existed in 1857. The Punjab University was established in 1882, Allahabad in 1887, and Canning college, Lucknow in 1864. Mohammedan Anglo Oriental College, established at Aligarh in 1875 by Syed Admad Khan, later developed into Aligarh Muslim University. Appendix 'C' gives a list of the universities in the period between 1857-1947. In 1901-1902 there were five universities and 145 colleges with 17,651 students and 46

professional colleges with an enrolment of 5,358.[23]

2.4.4 Between 1857 and 1902, social and cultural movements led by Indians educated in these universities and a liberal leadership was beginning to demand more and better form of education. "The universities, however, continued to be examining bodies and affiliating agencies, the colleges maintained the study flow of their graduates and purveyed a series of courses which fitted their students well for subordinate posts in governments, business and commerce". English continued to be the medium of instruction; and higher education became completely divorced from the mainstream of India's spiritual, cultural and community life. "The universities and colleges did not participate as institutions in the social, religious, intellectual and political ferment that was brewing outside their portals.[24]

2.4.5 Not only this, such an education divorced people from their land. Anil Seal[25] writes that "the educated elite was either divorced from landholding or more frequently was receiving an alimony by virtue of its growing separation from it".

2.4.6 The Calcutta University Commission (1917-1919) removed the function of that university and extended its

---

23 Anil Bordia, op.cit., p.9.

24 ibid., pp.9-10.

25 Anil Seal, The Emergence of Indian Nationalisation; Competition and Collaboration in the Later Nineteenth Century, London, Cambridge University Press, 1968, p.115.

conclusions. It pleaded for a University which served as an instrument to 'higher learning and further advancement and diffusion of knowledge'. The Commission designed model legislation for the establishment of universities and teaching and residential universities. Examples of this kind were Aligarh and Lucknow Universities. Several other Universities which have come into being between 1920 and 1930 also drew on this model.

2.4.7 During this period there were notable developments in professional education as well. Of all the professions, medicine had perhaps the sturdiest indigeneous tradition. Its modern history dates from the opening of the Calcutta Medical College in 1835, the Grant Medical College at Bombay and the school in Madras in 1852. Once the universities began to award degrees in medicine, the most rapid development was in Calcutta and the slowest in Madras. The number of medical colleges increased from 4 with 1,466 students in 1901-1902 to 11 with 41,936 students in 1936-1937. In the latter years, there were 2,199 students in eight engineering colleges in British India against 865 students in four such colleges in 1901-1902. Veterniary colleges were five in total. All government institutions catered exclusively to government and military requirements. Forestry and art education continued to receive government support. By 1936-37, eight universities had established commerce facilities. The six agricultural and two advanced agricultural institutes helped create better standards in this field.

2.4.8 Professional education in general was costly and confined to the upper classes; the real and pressing needs of rural India remained beyond its reach. Moreover, the weaker sections of the society (Harijans) and female population were totally deprived of such facilities. The latter suffered because of the social taboo laid by the Hindu and Muslim law. However, this new system of education had its impact on the Hindu society. Great reformers like Raja Ram Mohan Roy, Bal Gangadhar Tilak, Swami Vivekanand etc propagated the idea of the upliftment of the Hindu society. Within the Hindu community, therefore, we find movements for the liquidation of the caste system, for the acceptance of widow remarriage and divorce among the higher castes, for raising the age of marriage, abolition of untouchability, and for the amelioration of the economic conditions of the Harijan.

2.4.9 All education facilities were mainly concentrated in the urban areas and the rural development was arrested because of the political motives of the British who were not interested in mass education. Indian national opinion saw clearly the dangers inherent in a policy which cultivated in the minds of the educated a complex of inferiority. To counter such threats to our education pattern and to bring a measure of relevance to higher learning in India, a number of new institutions were set up in the country. Spread of such educational facilities were mainly in places, such as Agra, Shikokabad (A.K. College), Aligarh, Mathura (Kishore

Raman College in 1936), Allahabad, Waltair (Ershine College of Natural Sciences and Technology, 1931), Guntur (Andhra Christian College, 1885), Vishhapatnam (Andhra Medical College 1923), Rajamundhry (1894), Machilipatnam (1928), Vizianagram (1879), Kakinada, Eluru 1945, Tenali, Parklakhemdi in Orissa, Jeypore (1947), Bhopal 1946, Pullikkal (Kerala), Dehradun (DAV College), Silchar, Gauhati, Nowgong (1944), Dharamsala in Simla (1926), Simla St. Bede's in 1904, Gwalior 1938, 1939, Jabalpur 1947, Ujjain 1926, Indore 1935, Mandsaur 1940, Narsinghgarh 1946, Kanpur, Bagalkot in Karnataka, 1944, and many other such places. This geographical spread of educational facilities resulted in creation of isolated pockets of development, totally alienated from the needs of the population of the surrounding hinter land. Such a process of development highlighted regional imbalances and lopsided structure of education in India. In the wake of the national liberation movement, which gained momentum towards the end of the 19th century and the beginning of the 20th century, certain measures were adopted to counter the western system of education in India. The growth of Indian nationalism was a consequence of the social, economic and political forces generated within the Indian society due to the nature of the imperialist rule. It was in this context that national universities like Gurukul Kangri at Hardwar (i.e., which started as a school in 1902, but started functioning as a degree granting college in 1924), Gujarat Vidyapeeth founded by Mahatma Gandhi in 1920, Kashi Vidyapeeth in 1921, Visva Bharathi, founded by Rabindranath Tagore in May 1922, Bihar Vidyapeeth and Tilak Maharashtra Vidhapeeth were established

in order to revitalize Indian learning and also to create a truly Indian alternative to the western form of higher education. Jamia Millia Islamia was established in 1920 in Delhi, which came up as a result of the non-co-operation movement.

2.4.10 The decade 1937-1947 saw the setting up of five more universities and doubling of enrolment at the university level from 1,26,288 in 1937* to 2,14,794 in 1946-47.

2.4.11 A macro aggregative picture of sectarian and caste/community oriented educational institutions would reflect the varied and complex social structure and history of India's regional cultures. The distribution of management among colleges affiliated with the Universities of Punjab, Agra (Uttar Pradesh) and Kerala suggests this complexity and variety. Of 139 colleges in Punjab University, 43 are identifiable as being associated with organised caste or sectarian communities. Of these, 10 were notably associated with castes, mainly peasant communities such as Jats and Ahirs, and 33 were associated with sectarian groups, including Sikhs (13 colleges), Arya Samaj (11 colleges), and Sanathan Dharma (4 colleges). Of the 127 colleges in Agra University, 36 could be associated with a caste or a sect of the Hindus. Thirteen were founded by caste communities mostly by Jats in the case of Punjab.

---

* This figure includes enrolment in colleges and universities now in Pakistan.

2.4.12 When the British finally left India in 1947, they left behind not a national system of education but an infrastructure on which India could build a national system.

(b) 2.5 INDEPENDENT ERA

2.5.1 Immediately after independence in 1947, the need was felt for a complete and comprehensive enquiry into all aspects of university education and research in India, as the first step towards the reorganisation of university education to meet the needs of national development. Because primary responsibility for education in the federal system lies with the states and because Indian states differ with respect to language, historical legacies and economic development, their educational system also varies in a number of important ways. British rule in the 19th and 20th centuries, particularly in its differential effects on the coastal areas as against the interior, accentuated existing differences and introduced new ones that were highly important for education. The introduction of English education was especially important in sharpening regional differences.[26]

2.5.2 In view of the felt need various commissions were appointed to look into the question of reconstruction of the university education, only to make it more relevant to the societal needs. An attempt to transform the elite system of education to a large and popular one gained momentum after Independence. Earlier such attempts were made by the

---

26 Anil Seal, op.cit., Chaps. 2 & 3.

University Education Commission, headed by Dr.S.Radhakrishnan in 1948. The Commission made several important recommendations on the objectives of higher education, equalisation of educational opportunities, administrative and organisational changes, improvement of the quality and status of teachers, establishment of a system of rural higher education and systematic financial support to universities. Till now education remained confined to the urban areas but after Independence great emphasis was laid on development of educational infrastructure in rural areas. The attempts of the Ministry of Education to plan for higher education in the rural areas culminated in the formation of the National Council for Rural Higher Education in 1956. Its function was to advise the Government of India on all matters pertaining to rural higher education. Languages of the masses was given due importance, though English language still was treated as supreme in most institutions of higher education.

2.5.3 In general, the period since Independence witnessed the expansion of educational facilities on a scale unknown to us before. But again this expansion has been in areas that had the influence of the British system of education. This resulted in wide disparities in terms of educational development. In fact the two areal aggregates, coastal and the interior, are differentiated by the degree of their exposure to external cultural, political and economic influences and by their responses to such influences. Appendix 'D' identifies the state of the areal aggregates.

2.5.4 The coastal states include the three former presidencies where the British impact was most marked : Bombay, Tamil Nadu (previously called Madras) and West Bengal. Bengal and Bombay experienced higher rates of economic development in the 19th century than Madras (with its lower level of industrial investments and commercial modernisation).

2.5.5 Kerala's high literacy (46.85% in 1961)[27] cannot be attributed to the effect of British educational policy since this state, unlike others in the coastal areas, is made up primarily of the former princely states of Travancore and Cochin, (including Malabar in the north, an area formerly under the Madras Presidency). High literacy rate in Kerala dates back to an earlier period. Punjab lies inland, but it is on the "rim" between India and the north-west invasions. Foreign invasions in Punjab have been penetrated by cultural and commercial as well as by military forces. The need of writers and clerks in Delhi, the imperial capital, not only of the Moghuls but also of the British, helps account for the Punjab's high literacy rates.

2.5.6 The interior coincides with Hindi belt where a large proportion of the population speaks Hindi. These areas were less penetrated than the coastal presidencies by the British. Their educational situation remained considerably inferior to that of the coastal rimland.

---

27 Source : Census of India, 1961, Kerala, General Report, vol.vii, part 1A(i), p.359.

2.5.7 Not all states fit into the coastal-interior differentiation argument. A noteable exception is the state of Mysore, a progressive former princely state which lies inland, but fits otherwise with the rimland states. Assam is in between the two. Orissa, on the other hand, lies on the rim geographically, but characterised inland features because of its historical isolation and low level of exposure to external influences. So do Jammu and Kashmir and (to a lesser extent) Andhra Pradesh. High literacy group incorporates the states of Maharashtra, West Bengal, Gujarat, Punjab and Tamil Nadu with higher per capita income in constrast to the low-literacy interiors states of Bihar, Madhya Pradesh and Uttar Pradesh. This kind of geographical differentiation in the level of education in various parts of the country proves that education in India has historical constraints and its characteristics are a legacy of the past. In areas possessing a weaker English educational heritage, both the cultural predispositions and the structure of invested interests is different. In Uttar Pradesh and Bihar, by contrast, historical legacies have produced a different structure. English education came to these states relatively late and with lower intensity than to the presidencies. At Independence, the role of English was much less important in the interior than in the rest of the country.

2.5.8 An urgent need was felt to remove such imbalances in our educational system. The growth and the development of education in India could be linked to the nature of its

political system.[28] The leadership of the Congress was drawn from the upper classes, mostly urban and their interests were primarily confined to the expansion of higher education of which they were themselves the product and which they considered the greatest boon of the British rule. "The educated class of Indians who emerged as a result of British educational policy yearned more for position and influence in the civil service and council than for mass education or economic development".[29]

2.5.9 With every year passing the need for economic development of the country became pressing. The new process of development entailed the progress in the field of education also. An event of the greatest consequence in the progress of university education in India was the establishment of the University Grants Commission in 1956 by an Act of Parliament. Its duties and functions include looking into the financial needs of the universities, allocating and disbursing funds to the central universities for the maintenance and development and advising the Union aand State governments regarding the allocation of grants to universities, the establishment of new universities or the expansion of new universities. The U.G.C. also granted affiliation of colleges to universities.

---

28 Gunnar Myrdal, Asian Drama, vol.III, London, The Penguin Press, 1963, p.1657.

29 B.B. Mishra, op.cit., p.11.

2.5.10 The next important landmark in the field of higher education in India was the appointment of the Education Commission in 1964 with D.S. Kothari as Chairman and J.P.Naik as the Member Secretary. The Report of the Education Commission has considered in great detail almost every aspect of Indian education at all levels and has made a number of recommendations for the educational development of the country. That there is general awareness of the crucial importance of educational development for the country's socio-economic progress is clear from the deliberations of these committees, as well as from the documents of the Planning Commission. For instance, the chapter on education in the Third Five Year Plan opens with the following preamble:

> Education is the most important single factor in achieving rapid economic development and technological progress and in creating a social order founded on the values of freedom, social justice and equal opportunity. Programmes of educational be at the base of the effort to forge the bonds of common citizenship to harness the energies of the people, and to develop the national and human resources of every part of the country.[30]

2.5.11 All these reports stressed the importance of raising the level of education of the people to meet the economic needs of the country and providing equal opportunities, especially to the deprived sections of the society, viz., Scheduled Castes and Tribes as well as to enhance female education. Since the upliftment of women in India and the weaker sections of the society remains the focal points of

---

30 Government of India, Planning Commission, Third Five Year Plan (1961-62-1965-66), New Delhi, p.310.

discussions and debates today, it is of importance to mention some studies related to the above. Special problems of the education of women, scheduled castes and scheduled tribeshave been discussed theoretically by Phadke,[31] Chauhan,[32] and Sachchidananda[33] respectively. Srikant[34] has dealt with the problem of education of the backward classes in two papers. But the most widely discussed topic among social anthropologists and sociologists seems to be education of tribals. The papers of Chattopadhya,[35] Madan,[36] Bapat,[37]

---

31 Sindhu Phadke, "Special Problems of the Education of Women", in Gore et.al.(ed.), op.cit., pp.173-200.

32 Brij Raj Chauhan, "Special Problems of the Education of Scheduled Castes" in Gore et.al. (ed.), ibid., pp.228-49.

33 Sachchidananda, "The Special Problems of the Education of Scheduled Tribes" in Gore et.al. (ed.), ibid., pp.201-27.

34 L.M. Srikant, "Education of the Backward Classes" in NCERT. The Indian Year Book of Education (Second year book), New Delhi, NCERT, 1964, pp.173-92 and "Education Commission and Backward Classes", Vanya Jati, 14(3), July 1966, pp.96-99 and 128-30.

35 K.P. Chattopadhya, "Education", in Adyasis, Delhi, Publications Division, 1960, pp.121-25.

36 T.N. Madan, "Education of Tribal India", in Eastern Anthropologist, 5(4), June-August, 1962, pp.179-82.

37 N.V. Bapat, "Education of the Aborigines", Educational Review, LIVII(7), July 1962, pp.161-66.

Sachchinanda,[38] Srikant,[39] Roy Burman,[40] Kalra[41] and the papers presented at the National seminar on Tribal Education in India are illustrations of this trend.

2.5.12 Besides, with increasing industrialisation and agricultural development, education in India became more and more diversified in nature. The Government of India felt the need to evolve a system more closely related to the life of the people and called for a continuous effort to expand educational opportunity in order to raise the quality of education at all stages, to develop science and technology and to cultivate moral and social values. Saran[42] and Altbach[43] have analysed the relationship between higher education and social change and modernisation in Independent

---

38 Sachchinanda, "Tribal Education in India," Vanya Jati, 12(1), January 1964, pp.3-6.

39 L.M. Srikant, "Measured Proposal for the Spread of Education amongst the Scheduled Tribes", Vanya Jati, 13(3), July 1966, pp.133-38.

40 B.K. Roy Burman, "Educational Problems of the Tribal Communities in India" in Ruhela (ed.) Social Determinants of Educability in India, Papers in the Sociological Context of Indian Education, New Delhi, Jain Brothers, 1969, pp.124-149.

41 Satish Kumar Kalra, "Literacy among Tribal People in India", Vanya Jati, 20(2), April 1972, pp.78-88.

42 A.K. Saran, "Higher Education and Social Change in Independent India", in S.C. Malik (ed.), Management and Organisation of Indian Universities, Simla, Indian Institute of Advanced Studies, 1971, pp.237-45.

43 Philip G. Altbach, "Higher Education and Modernization : The Indian Case", in Giri Raj Gupta (ed.), Main Currents in Indian Sociology, vol.I, Delhi, Vikas, 1976, pp.200-20.

India.[44] Gore[45] has examined the crisis in university education. Bhattacharya, Soni and Shukla have exposed the lopsidedness of our educational structure, and they have attempted to link it to our grossly inegalitarian socio-economic structure.

2.5.13 The inegalitarian nature of the educational structure was the result of the weak infrastructure laid by the British. These imbalances within our system got accentuated with the Partition of India. Industrially India suffered tremendously, as the linkage pattern was destroyed by Partition. Jute industry, and cotton textiles are examples of such a set-back. Agriculture which was far long neglected gained emphasis in the First Five Year Plan. It is very important to note that little attention was paid to developing education; in fact when the first draft of the First Five Year Plan was made education was completely ignored. After the addition of education, the final draft pointed out "a close integration secured between the process of education and the social and economic life of the country".[46] The Second

---

44 M.S. Gore, "Education and Modernization", pp.228-39; B.V. Shah, "Problems of Modernization of Education in India", pp.240-53; and S.C. Dube, "Modernization and Education", pp.505-10, all in A.R. Desai Essays on Modernization of Underdeveloped Societies vol.2, Bombay, Thackers Societies, 1971.

45 M.S. Gore, "The Crisis in University Education", in T.K.N. Unnithan Deva Indra, and Yogendra Singh (ed.), Towards a Sociology of Culture in India, Prentice Hall of India, 1965, pp.339-51.

46 Government of India, Planning Commission, The First Five Year Plan, New Delhi, 1954, p.525.

Plan (1956-57 to 1960-61) was more specific in its objectives. Indian Parliament had adopted a resolution in 1954 for the establishment of a socialist pattern of society. For the first time the actual conditions and the global facilities for the whole country were brought on record through an educational survey in 1956. Glaring disparities and the urgency to solve the difficulties were once again brought to the notice of the planners. During this period an impetus was given to the industrialisation in India. This resulted in the diversification of courses and great emphasis was laid on the establishment of technical institutes. These institutes were established in close proximity to the industrial centres - Kharagpur in West Bengal, Madras (1959), Kanpur (1960), Bombay (1961) and New Delhi (1963).

2.5.14 The next two plans emphasized the importance of man-power planning. Higher education continued to expand. The last, i.e., Fifth Five Year Plan draft points out four trends of educational development. They are : (1) equalisation of educational opportunity for social justice; (2) coordination between various educational levels and economic development; (3) quality improvement; and (4) cooperation of the intellegentsia including students in social and economic development.[47]

---

47 Government of India, Planning Commission, Fifth Five Year Plan Draft (1974-1979), New Delhi, pp.198-99.

2.5.15 To conclude this historical review it seems pertinent to remark that the official agencies are seized with the problem of removing regional imbalances in the development of education. The progress in the attainment of the desired objectives is, however, slow. Yet this realization in itself is a landmark in itself and would pave way for a future free from the existing distortions.

Chapter III

STRUCTURE OF HIGHER EDUCATION BY UNIVERSITY DOMAINS

3.1 INTRODUCTORY

3.1.1 Having had an idea about the nature of the work in Chapter I and the historical perspective in the previous chapter, we come to the task of explaining the spatial structure of higher education in India, as it existed in 1975-76. In order to explain this structure an attempt has been made on two planes. Firstly, we have tried to discuss the spatial structure in the context of university domains. Secondly, the imbalances in the levels of development of higher education have been analysed at the states level. The present chapter deals with the first of these two aspects.

3.1.2 The ensuing analysis tries to delineate the university domains and discerns the variations in rural/urban inequalities, in university education. This exercise is based on the enrolment data for various universities. A population/ enrolment ratio has been worked out for the purpose of determining the rural/urban inequalities a further dissaggregation of data has been done according to the settlement size of settlements both rural and urban on a uniform scale. These size-classes conform to the census classification of rural and urban centres. The analysis is divided into two parts. The first one tries to study the inequalities in the enrolment pattern with the help of percentages and graphs for each affiliating university, (unitary institutions

have been excluded from this analysis). The second part measures this degree of inequality with the help of Lorenz curves and Gini's coefficient. This part helps us in making comparisons of rural/urban inequalities in higher education over different universities.

3.1.3 In the present chapter universities have been put into 50 groups. This grouping was essential because a number of universities had overlapping domains. The data for enrolment and population for various grouped universities have been combined to avoid any obscurity in the analysis.

3.1.4 The major purpose of this chapter is to indicate the kind of spread of education over rural and urban areas. In view of the fact that education is available more readily in towns than in villages, it becomes imperative to see the disparities in their enrolment and population pattern not only between urban and rural, but also within each size-category of urban centres, and hence accordingly for rural centres. There has been a general proliferation of colleges, especially in the large sized towns (REFER APPENDIX 'H') which have been the prime beneficiary to the disadvantage of the rural areas in terms of the quality and quantity of the available facilities they receive as well as in the drain to the cities of the educated and semi-educated youths.

3.1.5 The fact that colleges are distributed unequally has recently been of interest to investigators concerned with

the equality of educational opportunity. Due to the nature of the society and uneven economic development, unevenly distributed educational facilities have created a pattern in educational development which makes the problem of educational backwardness of the country more acute. "Education is a double-edged instrument which can eliminate the effect of socio-economic inequalities but which can itself introduce a new kind of inequalities between those who have it and those who do not".[1] The present system of education in India which was raised on the foundation laid down by British imperialism failed to do away with the basic inequalities; instead of becoming an instrument of social change, it remained a class privilege.

3.1.6 There are at present glaring imbalances in educational development in different parts of the country. To quote Naik, "there are large variations in enrolment from region to region, the states of Kerala and Tamil Nadu are far ahead of the states of Bihar and Rajasthan. Even within some states, there are large variations from district to district and quite often within the same district different areas show equally large variations. The enrolment in urban areas are generally much better than those in rural areas. The enrolment of boys is much better than those of girls and the enrolment of the children of well-to-do classes are far

---

1 Government of India, Ministry of Education and Social Welfare, Report of the Committee on Status of Women in India, p.266.

better than those of poor and uneducated social group".[2]

3.1.7 The main purpose here, therefore, is to study the dimension of regional imbalances (rural and urban) in India at the university level. There has, of course, been an unprecedented growth in higher education, especially so in the urban areas. Our vast rural areas remain consistently backward. All those people in the rural areas who are in a position to get educated because they have the means to do it get absorbed in the urban milieu, accentuating the increasing urban malaise, without helping in the upliftment of the villages.

3.1.8 In the light of the above discussion, it is considered necessary to approach this problem of educational development in terms of enrolment figures first for every affiliating university. It then becomes possible to measure the extent of disparity that exists in our education system. However, the emphasis on the quantitative and statistical aspects of the development in no way implies that they are considered to be more important than qualitative and structural development aspects or that they provide a satisfactory explanation to all the problems of higher education. However, they undoubtedly constitute an essential dimension of these problems.

---

2 J.P. Naik, Equality, Quality and Quantity, The Elusive Triangle in Indian Education, p.18. New Delhi, Allied Publishers Pvt.Ltd., p.18.

3.1.9 While education statistics have always tended to use enrolment as the main indicator of measuring the progress it suffers from serious limitations. It will be interesting to mention here that the enrolment statistics collected by different agencies, i.e., Ministry of Education, the NCERT and Census of India do not tally. Hence, for all purposes of convenience and uniformity the University Grants Commission data have been utilised in this analysis.

3.1.10 In order to test the hypothesis whether higher order urban centres have larger enrolment of pupils, it is imperative to go into an in-depth analysis of every class of urban and rural centres falling within the domain of different universities. It is, of course, an accepted norm that the larger the size of urban centres the higher would be the educational development. Education like so many components of society is hierarchic in its nature of growth and development. This again is spread over the wide spectrum of various classes of urban and rural centres. It is noteworthy to mention here that there are six categories of urban and seven categories of rural classified on the basis of population size as presented in the census of India (see Appendix 'B' for further clarification). Depending upon their size and structure, the agglomerations are termed metropolis, cities, towns, villages and hamlets. It is this hierarchical and pyramidical nature of education which makes the geographer examine the problem in a spatial context.

3.1.11 Metropolitan areas and, of course, class I cities, dominate the scene in higher education. This growth in metropolitan areas is the result of socio-economic set-up of that particular place. Nearly 80 per cent of enrolment is in the urban areas. This is because the British rule in the 19th century and the 20th century particularly in its differential effects on the "coastal rimland" (Kerala, Maharashtra, Tamil Nadu and West Bengal) as against the "interior heartland" (Bihar, Madhya Pradesh, Orissa, Uttar Pradesh) accentuated the urban/rural differences. The interior heartland lagged far behind in its educational development. Moreover, the introduction of English education in the Metropolitan centres, such as, Calcutta, Madras and Bombay, further sharpened regional disparities.

3.1.12 "If, however, we take an overall view of the development of secondary and higher education, we find that the overwhelming part (almost 90%) of the enrolment is for general education".[3]

3.1.13 In higher education the failure of the system principally lies in the system of education which is of a general sort totally unrelated to the developmental needs of the society. It is this type of system that we find that enrolment in universities is disproportionately more than can be easily absorbed. Although the proportion of the age group

---

3 A.R. Kamat, Education After Independence, A Social Analysis, Lala Lajpatrai Institute, 1973-74, p.6.

which joins college in India is relatively low compared to many advanced or developing countries, they form inordinately large proportion - almost 50 per cent or more of high school leavers. The main reason is the weakness in our secondary education which makes a student fit for nothing else except entry into a college. Most of them flock to the college of arts, science and commerce which makes a student fit for acquiring a degree in general education that will qualify him for some kind of white collar job. At the outset it should be mentioned that no specific level of education has been taken into account.

3.1.14 The major weakness of our educational system is its top-heaviness. Our educational process resembles an inverted pyramid because so much of it is being done at the top and so little at the bottom. As we know, educational development is mostly in the higher order urban centres, which will be clear from a mere scrutiny of table III.1. In other words our planning started at the top, i.e., metropolitan centres of Bombay, Madras, Calcutta started to percolate downwards to so slow a pace that in the last 18 years it has come down to one more level only and has reached the state urban areas ignoring the rural areas completely from its planning programme.

3.1.15 Our education system exists for a minority in the town - a paradox indeed when our major population remains confined to the villages. We are an agricultural nation but we have largely ignored the villager in our educational schemes. A teaching system geared only to the urban dweller

has little relevance to the needs of the peasants. Our towns continue to present the picture of being islands of education in a vast ocean of illiteracy. The rural people are considered as part of the disadvantaged sections of society. The greatest disadvantage of persons living in rural areas is the system of education itself, which is urban oriented and tends to draw young people from rural areas to urban areas. Higher education has had a very limited effect on the development of rural areas. The educational backwardness of the rural areas of course stems from the low rate of literacy and lack of acceptance, by the rural people of the system of elementary education although educational facilities including those of higher education have expanded over the years in the rural areas as well. "The benefits have gone mainly to the financially stronger sections of rural society and the small farmers, landless agricultural workers continue to be out of the system".[4]

3.1.16 It will be of relevance to know that our universities vary greatly in the number of colleges which they affiliate and in the territory and distances which they enclose. The larger affiliating universities are Agra, Bihar, Calcutta, Kerala, Madras and Punjab, the fairly large are Andhra, Gujarat, Mysore, Rajasthan and Vikram.

3.1.17 During the year 1975-76, the year of the study, various programmes for restructuring higher education and

---

4 Anil Bordia, op.cit., p.52.

making it more relevant to national needs initiated by the Commission earlier began to be implemented by the various universities. The Commission has been laying great emphasis on regulation of the growth of universities and colleges bearing in mind regional requirements so that the standards could be raised by consolidating the existing institutions. During the year, the number of students on the roll grew by 25% compared to 5.9% in 1974-75 and 3.1% in 1973-74. No new university was set up during the year. However, the number of colleges increased from 85 during 1974-75 to 123 during 1975-76. Of these new colleges, 85 were arts, science, and commerce colleges and 10 were law colleges, the remaining 28 being professional colleges, including colleges of oriental learning.

3.1.18 The percentage of enrolment in the science faculty has declined marginally from 19.6% in 1974-75 to 19.1% in 1975-76. On the other hand, enrolment in commerce has increased from 16.5% in 1974-75 to 17.1% in 1975-76. The changes in the percentage of enrolment in the professional subjects are of a marginal nature. It would appear that the shifts in the students preference is closely linked to the employment opportunities available. Against 2,60,175 students in 31 universities and 912 colleges in 1954-55, there were 24,26,109 students in 102 universities, 9 institutions deemed to be universities and 4,508 colleges in 1975-76. The affiliated colleges account for 84.8% of the total enrolment in the universities and colleges. The percentage of students in affiliated colleges is as high as 89.4% at the under

graduate level. The affiliated colleges also account for 52.7% of the enrolment at the post-graduate level and 11.0% at the research level.

3.1.19 This usual character of educational statistics does not answer some significant questions regarding the progress of higher education. Hence, from a general priority we proceed on to something more specific, that being a class-wise hierarchical distribution of students in urban and rural areas. The present analysis includes an important component of rural and urban migration. Obviously, the urban centres, especially cities, exert a 'pull' on the surrounding or the periphery areas of the cities on account of the numerous factors or facilities present there. It is here that one needs to stress the importance of the class I cities which form the focal points in occupation and utilisation of the earth by man. Both a product and influence on the surrounding regions they develop in definite patterns in response to economic and social needs. Moreso, the influx of the people to the metropolitan cities creates further imbalances in the patterns of development on the surrounding areas. Gunnar Myrdal, however, has stressed the importance of the 'spread effect' of the growing centres on the surrounding or the peripheral areas. But all the same cities are paradoxes. The rapid growth of large size cities testifies to their surrounding as a technique for the exploitation of the earth, yet by their very success and consequent large size, they often provide a poor local environment.

3.1.20 One point that needs special emphasis is to examine the level of urbanisation and ruralisation with the level of educational development. This offers a wide scope to establish a functional relationship of an urban and rural area. Such a study is comprehensive and serves a great deal in sihgling out elements to see if the process as one imagines, is ideal and whether it necessarily follows a set pattern of overall development encompassing various fields. Hence it becomes indispensable to see the spatial structure of higher education.

3.1.21 The percentage of enrolment in each category of urban and rural centres to the total of the university forms the basic indicator to measure the dimension of regional imbalance in this chapter.

3.1.22 As far as educational development is concerned, the data shows a faster rate of growth in urban areas than the rural areas. This reflects the inherent weakness in our system of education which contradicts the very basis of the principle of democratisation of educational opportunity - especially in far-flung rural areas.

3.1.23 It is important to mention that sometimes empirical findings fail to explain the existing pattern of overall development of education. One cannot ignore the socio-political and economic set up and the attractive force of cities for jobs and better facilities etc., and also the general policies of the government to accelerate development. However, such an empirical analysis gives one an approximation of the complexity of the phenomena of the whole process of

education at a given period. Inter and intra-university variations or disparities in the level of development bring out the essence of the complex phenomena of the entire process of education. Such a study highlights the fact that whether the part which is highly urbanised needs to be cured of the chasing disease of the over-crowding and problem of educated unemployed.

3.1.24 An attempt has been made here to analyse the pattern of enrolment in various affiliating universities. An effort has been made to examine the intra and inter-university disparities by grouping the location of colleges into six categories of urban (Class I city to Class VI town) and seven categories of rural centres.

3.2 DISTRIBUTION OF ENROLMENT BY UNIVERSITY DOMAINS

3.2.1 India has as such recorded extremely low levels of literacy which have no doubt had a corroding effect on the progress and well being of the economy and which make India the most under-developed even among the developing countries of Asia and Africa. There have been glaring deficiencies in the pattern of whatever little education has been imparted over the past several decades. In view of this, it becomes inevitable to measure the educational development in different universities. This, however, is often debated on the issue whether more enrolement of students in educational institutions implies 'development'. It is true to say that more enrolment of students has progressive characteristics as it signifies that more people are getting educated - which in itself is a

measure of future economic development. Higher education has all the potentialities of a stock of high-level manpower. Further, it reduces the prospects of abject misery and illiteracy. This is argued that the greater the enrolment of its population, the better it is for the educational development which for the present time remains the crux of the problem. This obviously has its own limitations.

3.2.2 On a close scrutiny of the data, one is immediately enamoured by the fact that the urban areas constitute the bulk of enrolment in India as a whole. There is in fact 100% enrolment in urban areas in the six universities in the country namely Jammu, Kashmir, Bhopal, Vikram, Delhi and Bundelkhand. Utkal University has 83.12% (Table III.1) which is the maximum enrolment in the urban areas.

3.2.3 Except for Dibrugarh (74.12%) and Kerala (73.21%), all the other universities have on an average 85% enrolment in the urban areas. This obviously reflects that education in India is totally urban-biased, leaving the rural areas in the backwaters of educational development. Moreover, "higher education is mostly confined to urban and middle classes".[5]

3.2.4 The highest enrolment percentage in rural areas which is 26.79% is in Kerala University. This is because Kerala ranks highest as far as literacy is concerned (60%).

---

5 Government of India, Ministry of Education and Social Welfare, Report of the Committee on the Status of Women in India, December 1974, p.241.

UNIVERSITY	1. 1.1	2. 1.2	3. 1.3	4. 1.4	5. 1.5	6. 1.6	7. 2.1	8. 2.2	9. 2.3	10. 2.4	11. 2.5	12. 2.6	13. 2.7	U	R
1. ANDHRA PRADESH	53.99	14.93	20.05	3.43	0.92	-	1.25	1.07	4.30	0.06	-	-	-	93.32	6.68
2. OSMANIA	75.91	6.45	11.48	4.10	0.75	-	1 -	1.06	-	0.25	-	-	-	98.69	1.31
3. SRIVENKATESHWARA	33.90	46.67	11.81	1.77	-	-	-	2.29	3.56	-	-	-	-	94.15	5.85
4. DIBRUGARH	-	43.89	8.53	14.40	3.13	4.17	-	4.75	9.59	5.23	3.75	2.56	-	74.12	25.88
5. GAUHATI	35.22	15.95	12.54	11.51	11.37	1.72	1.16	1.72	3.82	4.36	0.15	0.48	-	88.31	11.69
6. BHAGALPUR, BIHAR & L.N.MISRA	37.82	12.28	28.85	8.77	5.55	-	1.10	3.70	5.04	1.82	0.82	0.25	-	87.27	12.73
7. RANCHI	67.18	6.02	13.48	7.39	0.85	0.20	0.25	-	1.04	3.21	0.38	-	-	95.12	4.88
8. GUJARAT & SARDAR PATEL	55.96	12.27	14.35	15.27	0.52	-	0.25	0.79	0.59	-	-	-	-	98.37	1.63
9. SAURASHTRA	56.26	27.56	11.41	4.26	-	-	-	0.31	0.20	-	-	-	-	99.49	0.51
10. SOUTH GUJRAT	37.00	31.99	13.42	10.70	3.04	-	-	3.85	-	-	-	-	-	96.15	3.85
11. KURUKSHETRA	10.72	58.76	17.55	5.93	1.34	1.22	-	1.41	2.38	0.69	-	-	-	95.52	4.48
12. HIMACHAL PRADESH	-	33.36	2.18	30.47	9.41	9.33	-	-	4.16	7.42	1.30	2.37	-	84.75	15.25
13. JAMMU	76.58	-	-	18.92	4.50	-	-	-	-	-	-	-	-	100	-
14. KASHMIR	70.49	-	29.51	-	-	-	-	-	-	-	-	-	-	100	-
15. BANGALORE	75.11	8.60	14.63	0.85	-	-	-	-	0.81	-	-	-	-	99.19	0.81
16. KARNATAK	53.74	10.51	13.40	17.40	0.53	-	-	2.36	1.34	0.72	-	-	-	95.58	4.42
17. MYSORE	49.96	14.68	13.96	8.96	0.29	1.64	0.60	3.34	6.44	0.13	-	-	-	89.49	10.51
18. CALICUT	14.12	25.80	17.20	16.64	2.16	2.00	9.88	2.27	5.34	3.72	0.87	-	-	77.92	22.08
19. KERALA	34.94	5.42	26.33	4.84	1.68	-	11.02	6.63	6.82	0.93	1.39	-	-	73.21	26.79

20. A.P.SINGH	-	47.04	31.12	3.55	4.06	-	-	2.99	5.95	-	2.43	2.86	-	85.77	14.23
21. BHOPAL	78.17	-	19.45	-	2.38	-	-	-	-	-	-	-	-	100	-
22. JABALPUR	94.31	-	-	2.19	-	-	-	3.50	-	-	-	-	-	96.50	3.50
23. JIWAJI	52.75	5.68	25.40	5.92	1.54	-	1.55	0.53	4.11	0.51	2.00	-	-	91.29	8.70
24. SAUGAR	25.86	23.87	34.76	8.55	0.57	0.44	-	0.48	1.16	2.79	0.99	0.53	-	94.05	5.95
25. VIKRAM	37.41	12.48	29.60	19.92	0.59	-	-	-	-	-	-	-	-	100	-
26. RAVI SHANKAR & INDIRA KALA SANGIT	70.74	4.93	14.65	4.33	3.72	-	0.26	0.57	0.16	-	0.36	0.28	-	98.37	1.64
27. BOMBAY	87.12	3.95	3.07	2.86	0.12	-	2.18	0.63	0.07	-	-	-	-	97.12	2.88
28. MARATHWADA	43.09	13.07	23.98	13.50	3.56	-	-	1.19	0.98	-	0.63	-	-	97.20	2.80
29. NAGPUR	55.93	16.05	14.14	7.71	0.86	-	2.30	2.24	0.77	-	-	-	-	94.69	5.31
30. POONA	72.88	4.40	12.28	3.63	1.23	-	2.71	1.68	0.46	0.73	-	-	-	94.42	5.58
31. SHIVAJI	46.30	19.88	15.45	6.91	0.67	-	2.30	6.55	1.55	-	0.39	-	-	89.21	10.79
32. NORTH EASTERN HILL	61.06	-	17.17.82	12.15	4.52	-	-	0.43	0.92	0.56	2.54	-	-	95.55	4.45
33. BEHRAMPUR	47.38	-	21.20	27.11	2.27	-	2.04	-	-	-	-	-	-	97.96	2.04
34. SAMBALPUR	55.05	-	23.35	8.00	9.52	-	-	-	2.34	1.74	-	-	-	95.92	4.08
35. UTKAL	38.05	5.56	13.86	14.02	11.63	-	-	3.42	8.38	3.09	1.99	-	-	83.12	16.88
36. GURU NANAK	56.07	15.66	7.34	12.35	0.87	-	-	1.93	2.69	2.01	1.08	-	-	92.29	7.71
37. PUNJAB & PUNJABI	47.05	16.92	17.81	7.85	3.96	0.65	0.52	0.27	1.81	2.76	0.40	-	-	94.24	5.76

	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	2.5	2.6	2.7	U	R
38. RAJASTHAN & UDAIPUR	60.50	14.30	12.49	10.35	0.47	-	0.11	0.12	0.81	0.71	0.01	0.13	-	98.11	1.89
39. MADRAS	72.72	9.33	8.42	4.36	0.22	0.31	0.23	1.12	2.35	-	0.94	-	-	95.36	4.64
40. MADURAI	57.29	16.77	6.91	4.67	1.15	1.31	3.45	2.69	2.24	3.52	-	-	-	88.10	11.90
41. AGRA	64.70	15.42	13.04	2.60	2.56	-	-	0.80	-	0.88	-	-	-	98.32	1.68
42. BUNDELKHAND	34.70	14.20	35.70	15.40	-	-	-	-	-	-	-	-	-	100	-
43. GARHWAL	69.57	-	- -	12.01	18.04	-	-	-	-	-	0.38	-	-	99.62	0.38
44. GORAKHPUR, AUADH, KANPUR	47.32	7.94	27.26	3.02	3.94	-	0.34	3.15	3.45	2.97	0.62	-	-	89.48	10.52
45. KUMAON	-	12.06	63.34	23.52	-	0.45	-	-	-	-	0.63	-	-	99.37	0.63
46. MEERUT	59.76	14.60	16.78	2.44	-	0.30	0.72	1.82	3.16	0.42	-	-	-	93.88	6.12
47. ROHILKHAND	69.89	10.80	16.91	0.66	-	-	-	1.10	0.64	-	-	-	-	98.26	1.74
48. N.BENGAL	-	67.42	15.36	7.05	1.51	1.46	2.17	-	1.89	3.14	-	-	-	92.80	7.20
49. CALCUTTA & BURDWAN & JADHAVPUR	63.00	10.11	10.16	2.49	1.94	-	3.13	0.33	4.37	4.22	0.25	-	-	87.70	12.30
50. DELHI	100	-	-	-	-	-	-	-	-	-	-	-	-	100	-

This is in line with the policies of the Left Front Government to encourage education in the remotest corners of the State. In fact for a country like India, with a gigantic population, one of the policies of the Government should be to develop a strategy of more institutions to avoid over-crowding in some recognized or renowned institutions. The minimum percentage of enrolment in rural areas is that of Garhwal University, which accounts for a minimum of 0.38%. This reflects the general backwardness of the state. The reason for such wide disparities in rural and urban enrolment points up to the lack of development of the country. This great unevenness of spread of facilities of higher education violates considerations of equality of opportunity in colleges which we seek to promote as well as efficiency.

3.3 Spatial Disparities in Enrolment in Urban Areas

3.3.1 After we have derived a general picture of knowing rural/urban distribution of enrolment, it becomes necessary to proceed on to something more specific, i.e., a classwise distribution of enrolment of rural and urban areas separately of various affiliating universities.

3.3.2 A glance of Table III.1 makes it evident that class I cities form the bulk of enrolment in all universities. It ranges from a maximum enrolment of 94.31% in Jabalpur University to a minimum enrolment of 10.72% in Kurukshetra University. Some universities, like Himachal Pradesh, A.P. Singh (M.P.)

Dibrugarh, Kumaon and North Bengal, have no enrolment in this category. Most of the universities record more than 50% enrolment in this category. Examples are Andhra Pradesh, Osmania, Ranchi, Gujarat and Sardar Patel, Saurashtra, Jammu and Kashmir, Bangalore, Karnataka, Bhopal, Jabalpur, Ravi Shankar, Bombay, Nagpur, Poona, North Eastern Hills, Sambalpur, Guru Nanak Dev, Rajasthan, Udaipur, Madras, Madurai, Agra, Meerut, Rohilkhand, Calcutta, Burdwan and Jadavpur universities. This indicates that the metropolitan areas exert a 'pull' on the surrounding as well as far flung areas endowed with enormous facilities. In general, there exists today a large concentration of students in class I cities in practically all the universities, barring a few exceptions. There is today a paradoxical situation of both surpluses and shortages of educated manpower. The reason attributed to the large concentration of student population in class I cities is merely the impact of industrialization in these regions. Colleges in the metropolitan centres are of a far superior nature. They are surrounded by a penumbra of institutions where, although there is open door access, the standards are poor.

3.3.3 Next in order of hierarchy come the class II towns which present a somewhat different picture. Here all the universities record less than 50% of the enrolment of students unlike the class I cities, except for Kurukshetra (58.76%) and North Bengal Universities (67.42%). Important locations where colleges are situated and belonging to this

category of urban classification for Kurukshetra University are Ambala, Yamuna Nagar in Ambala District, Bhiwani and Hissar in Hissar District, Gurgaon and Faridabad in Gurgaon District, Panipat and Karnal in Karnal District and Sonepat in Rohtak District. The following are the location of colleges for North Bengal University : Cooch Behar, Siliguri, Jalapaiguri, Alipurdawa Balurghat in Cooch, Behar, Darjeeling, and West Dinajar Districts.

3.3.4 Next in order of city-size, come the class III towns which as the Table III.1 reveals account for below 35% of enrolment in all the universities with the exception of Kumaon University (63.34%). Some of the important locations belonging to this group are Almora, Kashipur and Rudrapur, which forms a bulk of student population. Bombay University accounts for only a minimal of 3% enrolment in this category. Places which fall in this category are Margaon, Panvel, Chiplun and Ratnagiri. The reason for this rather low percentage of enrolment is the high degree of concentration of student enrolment in class I cities of Bombay, Thana and Kalyan which draws students from great distances, leaving the colleges in the other areas to cater to the needs of the local population. This is a direct reflection on the spatial irregularity in the distribution of educational facilities. The lopsided development of urban growth has been responsible for having created great imbalances and variations in student enrolment. A leeway to the problem would be to prevent the growth of big cities at the expense of the small ones and try and

implement the proposal of equalisation of educational opportunity in all areas, especially rural.

3.3.5 It is of great importance to mention here that enrolment in the urban areas follows the hierarchy of city-size distributions. This is evident from the percentage of enrolment share decreasing with every decrease in the town-size. In class IV group of towns, for instance, the enrolment of students is below 25% except for Himachal Pradesh University, which has 30.47%. Kashmir and Bhopal Universities have no enrolment in this category of urban towns.

3.3.6 Share of enrolment is relatively small in class V towns. It accounts for below 10% in the majority of universities excepting Gauhati (11.37%), Utkal (11.63%) and Garhwal (18.04%). Some universities do not even reach the level of 1% enrolment. Among these are Andhra Pradesh (0.92%), Osmania (0.75%), Ranchi (0.85%), Gujarat and Sardar Patel (0.52%), Karnataka (0.53%), Mysore (0.29%), Saugar (0.57%), Vikram (0.59%), Bombay (0.12%), Nagpur (0.86%), Shivaji (0.67%), Guru Nanak Dev (0.87%), Rajasthan, Udaipur (0.47%) and Madras (0.22%).

3.3.7 A majority of university systems have no enrolment altogether in class VI towns. Universities which on an average have about 5% of enrolment in this category of towns include Dibrugarh, Gauhati, Ranchi, Kurukshetra, Mysore, Calicut Saugar, Punjab, Punjabi, Madras, Madurai, Kumaon, Meerut and North Bengal. Himachal Pradesh University forms

an exception to the rule as it has 9.33% of student enrolment, drawn from class VI towns.

3.3.8 The above analysis of enrolment disparities in urban areas clearly points to the fact and validates the hypothesis that as the city-size decreases the percentage of enrolment also goes down. Hence it is only fair to say that education like so many important variables follows closely a set pattern of development and reflects in it an hierarchy of systems - smaller ones forming part of the larger systems. In more explicit terms, the educational load seems to be the greatest in the highest order urban centres and goes on decreasing with a decrease in the city-size.

3.4 Spatial Disparities in Enrolment in Rural Areas

3.4.1 The primary task before the country relates to the removal of poverty, illiteracy, social and economic inequalities and causes of social discrimination. The policies in the period since Independence have been apparently shaped to achieve these objectives. In fact, it has been the avowed policy of the government that educational opportunities should be "open to all". Despite such attempts to reduce inequalities, our vast rural areas remain educationally backward. Our economy though predominantly agricultural has conveniently ignored the needs of rural people and primarily catered to the minority in the town. In a paper of the UNESCO on "Population Dynamics and Educational Development" states that "Educational Inequalities in Asian countries are

equally apparent in the rural-urban dimensions. Despite the fact that the vast majority of Asians live in rural areas that the economies of Asian countries will continue to be mainly agriculture-based and the development efforts must give priority to improving rural living conditions; educational systems still seem to cater mainly for urban minorities".[6]

3.4.2 The attempts at locating colleges in rural areas have been made in recent years, though there exists striking imbalances in our educational systems, especially between the rural and urban areas. Even where the facilities are existent, the standards are so poor that it becomes economically non-viable to locate colleges. A concerted effort on the part of the government is required to eradicate and alleviate the ignorance and illiteracy that inhabit the rural masses who form majority of the population. Disparity in the educational development between the rural and urban areas are somewhat magnified especially if one compares the two. Education in India undoubtedly reflects an urban bias with the consequence that the rural population remains deprived of such opportunities. Apart from this, the poverty of the masses, unables them to send their children for higher studies. This situation is slightly relieved by providing to the deprived sections of the society the financial assistance in the form of scholarships.

---

6 UNESCO Report on "Population Dynamics and Educational Development", Regional Office of Education in Asia, Bangkok, 1974, p.27.

3.4.3 Since approximately 80% of the population of India resides in villages, an urgent need is felt to accelerate the overall development that will make it more relevant to the structural changes in the society. One of the ways to uplift the rural masses is through higher education so that they do not remain divorced from the needs of the land.

3.4.4 In the light of the above discussion it becomes almost demanding to measure the extent of disparity in enrolment in each class of the rural centres within the different affiliating universities. Enrolment figures are generally low because there exists a paucity of educational facilities within the university domains. Like the urban areas the rural areas too are organized in a hierarchy - from large sized villages to medium and thence to small. There are, as mentioned before, seven categories of villages based on the population-size (Appendix 'B'). Consequently, an hierarchy of settlement systems of various sizes is formed, consisting of different hierarchic orders interlinked by a set of relationships within each hierarchic order and has a definite relationship with the socio-economic condition of the region that illustrates the reciprocal and dynamic nature of relationship of education of a particular place.

3.4.5 To promote a better understanding of the rural education a class-wise analysis of the rural areas has been examined. It would not be out of place to mention here that even if education becomes readily available to the villager,

a problem that often crops up is that hardly any educated villager is willing to go back to the rural surroundings. Instead he adds to the already acute pressure of urban unemployment by moving out to the towns. This polarisation of education in India in a few urban areas has created a suctioning 'backwash effect' on the innumerable small places especially in the rural areas. The analysis of the hierarchical distribution of enrolment of various universities will highlight glaring imbalances in our education system not only between the urban and rural areas but also within the rural areas themselves. A low level of educational development necessitates the fact that rural areas in general are economically and socially backward. Racial and social inequality has produced disparities in education that will continue to perpetuate and exacerbate existing inequalities. Though considerations of economy would dictate the setting up of optimum size colleges consideration of equity will call forth the need for setting up colleges in far flung areas which also have an enrolment inducing effect.

3.4.6 Out of the fifty affiliating universities, twenty-six are without any enrolment in the first group of large sized villages (having a population of 10,000 and above). The highest enrolment percentage is in Kerala University (11.02%), followed by the Calicut University (9.88%). The lowest percentage is in Rajasthan University (0.11%). The reason attributed to the highest enrolment rate in Kerala is the high literacy rate in all areas of the state. Moreover,

the progress of urbanisation in Kerala is not as rapid as compared to the other states. One of the principles that the Kerala Government works for is "that the village should be the centre and base of operations for all beneficient activities that make for enrichment and uplift of the people. It should not be isolated and unrelated institution regarded by placid in difference by the people but must be an integral part of the life of the village".[7]

3.4.7 Other universities in this category of rural areas form not more than 5% of the total enrolment. It hardly exceeds more than 1.5-2.00% in some other universities (see Table III.1).

3.4.8 Next in order of hierarchy come the villages with 5,000-9,999 population where the situation in the spread of students population is somewhat different. Some universities which did not have any enrolment in the first category of villages recorded enrolment in this category. Examples of this kind are universities of Osmania (1.06%), Srivenkateswara (2.29%), Dibrugarh (4.75), Saurashtra (0.31), South Gujarat (3.85%), Kurukshetra (1.41), Karnataka (2.36%), A.P.Singh (2.99%), Saugar (0.48%), Marathwada (1.19%), North Eastern Hills (0.43%), Utkal (3.42%), Guru Nanak Dev (1.93%), Agra (0.80%) and Rohilkhand (1.10%). Universities which show the

---

7 J.C. Kavoori and Baijnath Singh, History of Rural Development in Modern India, vol.1, New Delhi, Navchetan Press, 1967, p.33.

highest percentage of enrolment in this category are that of Shivaji (6.55%) and Kerala (6.63%).

3.4.9 Table III.1 reveals that villages holding third position in hierarchy have a greater share of enrolment when compared to the other groups. This points to the fact that there is a large number of rural settlements falling under this group. The educational load is the greatest in Dibrugarh University (9.59%) followed by Utkal University (8.39%) etc. It follows that larger number of institutions for higher education are prevalent in the group of villages. Other universities which average about 5-6% of enrolment are Bhagalpur, Bihar and L.N. Muthila, Mysore, Calicut, Kerala and A.P. Singh.

3.4.10 The other set of village groups follows more or less the same pattern of educational development. It forms a minimal percentage of students enrolment. The last group of villages with less than 200 population is too small to support any educational facility. Hence, we find no enrolment in that category.

3.4.11 It is clear from the above analysis that large variations of enrolment exists at all levels of urban and rural areas of different universities. There is a paucity of facilities of higher education in certain categories of urban and rural centres. It further shows the large differences in their level of development of education, especially in those universities where development has been arrested by a number

of socio-economic and political factors. An analysis of existing disparities in enrolment is important before any vigorous planning can be done. Such an approach using some broad characteristics of education should help not only in enhancing our understanding of the situation but also in ultimately discerning what is common between them. The large percentage of enrolment in urban areas is explained by the fact that most people in rural areas find living conditions too hard and hence a large section of this population migrates to urban areas where conditions for more lucrative employment and better facilities are within easy reach. The other side of the picture is that this economically productive population become a part of the urban population, resulting in over-crowding in urban areas and starve the rural areas of a large proportion of their potential human capital investment which would have raised their economy considerably. Expansion in enrolment has to go hand in hand with the expansion of human and material resources that help to provide education of a desired standard. In a developing country like India the need is all the more to plan the expansion of facilities in higher education broadly on the basis of general trends regarding manpower needs and employment opportunities.

3.5 ENROLMENT AND POPULATION

3.5.1 The previous section dealing with the enrolment pattern in different universities reveals an urban bias in

higher education. This particular feature comes out in a more clear fashion if we try to look at the enrolment figures in relation to population. Looking at the total urban and rural population served by different universities one finds that except for a few university domains, the rural population is above 70%, and the urban population is less than 30%. The universities that cater to urban population of 30% and above are Saurashtra (30.71%), Bangalore (35.2%), Bhopal (41.12%), Jabalpur (40.54%), Bombay (50.16%), Madras (31.87%) and Delhi (89.70%). In the rest of the university domains the urban population varies from 7.10% in Himachal Pradesh to 29.48% in Madurai. This clearly shows that most of the Indian population is rural which itself is a truism as India basically is an agricultural country with nearly 80% of the population dependent upon agriculture as the main source of income. If we compare these figures with the enrolment figures, we find a total reversal of the position. As already pointed out in the previous section, enrolment in higher education in urban areas constitutes above 74% of the total enrolment in all the university domains. This contradicting picture points out to the fact stated in the beginning of this section, i.e., there is a high degree of urban bias in higher education. This may be the result of the fact that most of the higher education institutions tend to crop up in urban areas rather than the rural areas except when there is a 'conscious' policy effort on the part of the various state governments to locate colleges in rural areas. This, incidentally, points out the fact that the policy of

the Indian Government to disperse educational institution in the remotest areas has remained a policy on paper only. The factual data does not reveal any trend in such a direction.

3.5.2 The above discussion was only at the aggregative level. In order to get a clear picture of the intra-university inequalities in higher education, a break-down of the total urban and rural population into various categories becomes essential. This is because student population is unevenly distributed in the country. Uneven distribution is visible not only within the universities, but also among different universities of the country. Furthermore, there are many rural centres which do not have facilities for higher education, while, on the other hand, there is a number of educational institutions located at a single point in urban centres. This disparity of population served by educational institutions in the region is the result of a number of factors operating simultaneously such as economic, social, geographical and political, etc.

3.5.3 On a close scrutiny of Tables III.1 and III.2 and Figs. III.1 to Fig. III.13, it is apparent that there exists a gap between population and enrolment, especially in the group of class I cities for all universities. In some universities like Osmania, Jammu, Kashmir and Rohilkhand, the gap between the two variables is of a high degree. Graphs Nos. III.1 for Osmania, Fig. III.4 for Jammu and

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1.2	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	2.5	2.6	2.7	U	R
1. ANDHRA PRADESH	9.24	2.09	4.78	2.47	0.83	0.03	3.44	15.68	33.06	16.43	7.14	3.07	1.74	19.44	80.56
2. OSMANIA	11.14	0.97	2.50	2.27	0.52	0.05	0.70	4.80	24.86	20.98	26.94	3.61	0.66	17.45	82.55
3. SRIVENKATESHWAR	2.83	5.86	4.35	2.59	0.71	-	2.29	9.52	37.68	22.95	8.19	2.62	0.41	16.34	83.66
4. DIBRUGARH	-	5.20	1.20	2.50	1.11	0.29	-	0.86	13.84	22.87	29.29	18.70	4.14	10.30	89.71
5. GAUHATI	2.49	0.90	1.83	2.08	1.09	0.15	0.09	1.46	14.11	28.67	27.37	15.04	4.72	8.54	91.46
6. BHAGALPUR,BIHAR, L.N.MISRA,MAGADH	0.37	2.88	2.17	1.10	1.28	2.44	9.44	26.09	23.89	17.71	9.97	0.01	2.65	10.24	89.76
7. RANCHI	11.35	1.12	3.29	2.06	0.93	0.21	0.12	1.54	8.43	19.08	25.13	20.96	5.78	18.96	81.04
8. GUJARAT & SARDAR PATEL	15.67	2.10	4.52	3.26	2.09	0.06	1.16	7.41	22.58	21.23	13.13	5.79	1.00	27.70	72.30
9. SAURASHTRA	11.26	5.82	5.31	5.35	2.92	0.05	0.36	3.22	21.00	24.78	14.94	4.37	0.62	30.71	69.29
10. SOUTH GUJARAT	11.13	5.31	3.19	2.88	1.44	0.20	0.24	5.88	21.35	23.93	15.89	7.38	1.18	24.15	75.85
11. KURUKSHETRA	2.26	7.02	4.61	2.22	1.38	0.17	0.99	9.46	28.93	23.52	13.82	4.94	0.67	17.66	82.34
12. HIMACHAL PRADESH	-	1.63	0.62	1.93	1.39	1.53	-	0.32	3.67	10.32	16.40	32.78	29.41	7.10	92.90
13. JAMMU	8.84	-	-	1.59	2.71	1.84	-	1.59	13.26	22.43	23.92	18.10	5.72	14.98	85.02
14. KASHMIR	17.38	-	3.35	-	2.01	-	0.40	1.37	14.12	22.66	21.95	13.70	3.06	22.74	77.26
15. BANGALORE	25.87	1.10	3.78	3.16	1.12	0.17	-	0.54	8.61	15.30	21.28	15.92	3.15	35.20	64.80
16. KARNATAK	7.69	2.72	4.54	5.54	0.50	0.04	0.60	9.79	23.95	23.62	14.66	5.50	0.85	21.03	78.97

17. MYSORE	8.68	1.68	2.74	3.57	1.96	0.68	0.21	3.75	21.93	22.84	17.66	12.12	2.18	19.31	80.69
28. CALICUT	3.28	3.43	5.61	1.63	0.57	0.05	59.84	20.98	4.40	0.17	0.03	0.01	0.002	14.57	85.43
29. KERALA	10.12	1.02	4.73	1.65	0.23	0.04	78.77	2.92	0.39	0.10	0.02	0.01	-	17.79	82.21
30. A.P.SINGH	-	2.43	2.70	0.90	1.94	0.05	-	1.16	10.54	21.58	29.79	22.15	6.76	8.02	91.98
21. BHOPAL	31.99	2.16	4.13	0.93	1.91	-	-	1.32	3.95	9.13	17.70	20.80	5.98	41.12	58.88
22. JABALPUR	31.72	5.13	-	2.67	1.02	-	-	1.02	5.06	12.04	19.08	17.68	4.58	40.54	59.46
23. JIWAJI	9.33	1.17	4.41	2.44	1.68	-	-	2.35	12.06	20.12	22.75	18.93	4.76	19.03	80.97
24. SAUGAR	3.30	2.52	4.52	3.58	1.22	0.05	-	1.68	8.69	18.16	27.72	23.23	5.33	15.19	84.81
25. VIKRAM	5.63	1.78	1.97	2.87	1.70	0.06	-	1.71	9.71	19.82	28.44	21.67	4.64	14.01	85.99
26. RAVI SHANKAR & INDIRA KALA SANGIT	4.98	0.48	2.26	1.39	1.18	0.07	0.98	0.88	7.12	22.21	29.04	23.13	6.28	10.36	89.64
27. BOMBAY	45.05	0.95	1.66	1.39	0.93	0.18	0.51	3.15	8.78	10.13	7.67	19.34	0.26	50.16	49.84
28. MARATHWADA	3.88	2.96	3.21	4.06	1.88	0.08	-	5.73	21.23	31.18	24.00	0.83	0.96	16.07	83.93
29. NAGPUR	11.07	3.49	5.88	2.61	0.80	0.02	0.69	4.94	14.50	21.52	20.77	11.14	2.57	23.87	76.13
30. POONA	18.06	0.94	4.53	2.12	0.52	0.11	4.34	8.76	20.97	20.34	13.62	4.93	0.76	26.28	73.72
31. SHIVASI	11.46	3.57	2.18	2.77	0.56	0.22	4.44	12.34	29.09	21.43	9.16	2.45	0.33	20.76	79.24
32. NORTH EASTERN HILL	6.60	-	2.86	1.60	1.64	-	-	1.33	12.21	15.61	16.00	24.30	17.85	12.70	87.30
33. BEHRAMPUR	2.57	-	2.89	2.02	1.73	0.18	0.51	0.67	11.47	20.80	24.73	22.95	9.54	9.33	90.67
34. SAMBALPUR	5.23	-	3.55	1.01	1.61	-	-	0.35	8.31	21.34	29.79	22.44	6.38	11.40	88.60

35. UTKAL	2.66	0.62	1.83	1.17	0.50	-	-	0.74	10.78	22.72	29.21	23.41	6.36	6.78	93.22
36. GURU NANAKDEV	15.24	4.24	2.53	2.89	1.57	0.23	0.22	3.67	17.24	23.27	18.95	8.45	1.50	26.70	73.30
37. PUNJAB & PUNJABI	6.23	3.32	6.77	3.38	1.82	0.30	0.26	4.60	20.05	24.51	18.62	8.55	1.59	21.82	78.18
38. RAJASTHAN & UDAIPUR	7.38	1.89	3.62	3.49	1.20	0.06	0.45	4.18	17.04	21.32	21.43	14.31	3.63	17.64	82.36
39. MADRAS	20.19	3.89	4.04	2.88	0.78	0.09	2.18	11.35	27.37	17.55	7.32	2.06	0.31	31.87	68.13
40. MADURAI	12.74	5.57	6.45	3.46	1.12	0.14	13.25	14.12	24.64	12.99	4.15	1.19	0.18	29.48	70.52
41. AGRA	13.26	0.85	2.35	1.89	1.19	-	0.61	6.08	23.42	25.23	17.80	6.66	0.66	19.54	80.46
42. BUNDELKHAND	4.98	1.27	5.16	3.14	1.16	0.11	0.25	3.50	17.23	26.60	23.29	11.28	2.02	15.82	84.18
43. GARHWAL	10.34	-	-	3.00	3.21	0.49	0.83	1.83	3.57	3.72	12.11	34.60	26.30	17.04	82.96
44. GORAKHPUR, AUADH & KANPUR	6.05	0.98	1.63	1.07	0.43	0.01	0.61	3.45	16.15	26.25	24.92	15.42	3.03	10.17	89.83
45. KUMAON	-	3.14	6.30	3.40	0.36	0.39	-	0.88	5.12	9.19	22.03	37.26	11.93	13.59	86.41
46. MEERUT	9.00	3.47	4.04	2.18	0.91	0.05	1.42	8.75	28.57	25.01	12.67	3.42	0.51	19.65	80.35
47. ROHILKHAND	8.79	3.53	3.73	1.55	0.60	-	1.36	3.17	11.30	22.72	26.36	14.51	2.37	18.20	81.80
48. N.BENGAL	-	5.46	1.76	1.38	0.55	0.11	4.32	8.52	24.98	25.45	15.52	9.79	2.16	9.26	90.74
49. CALCUTTA, JADAVPUR & BURDWAN	20.65	2.33	2.41	1.21	0.59	0.01	1.06	5.30	20.66	20.16	14.66	8.53	2.43	27.20	72.80
50. DELHI															

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

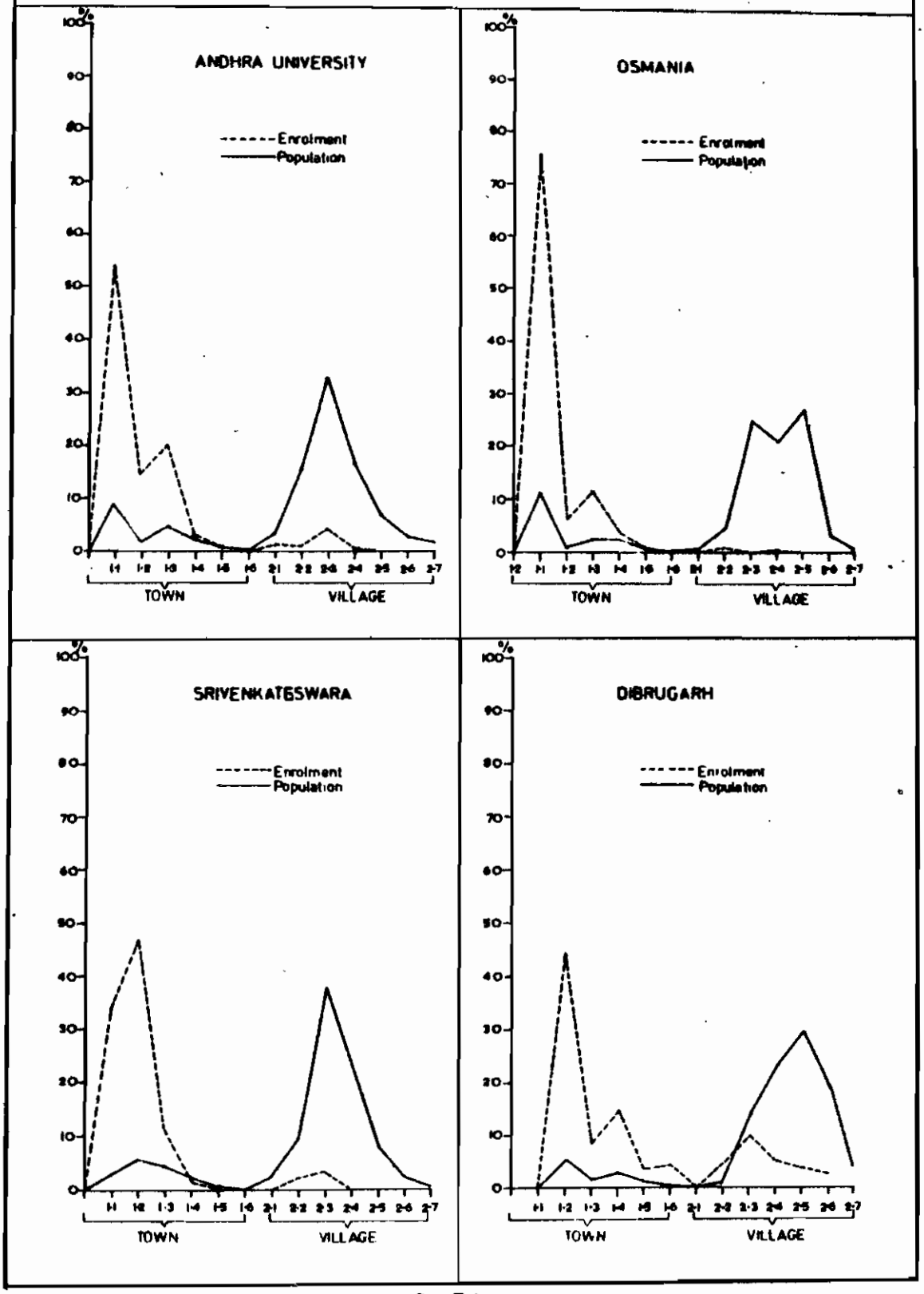
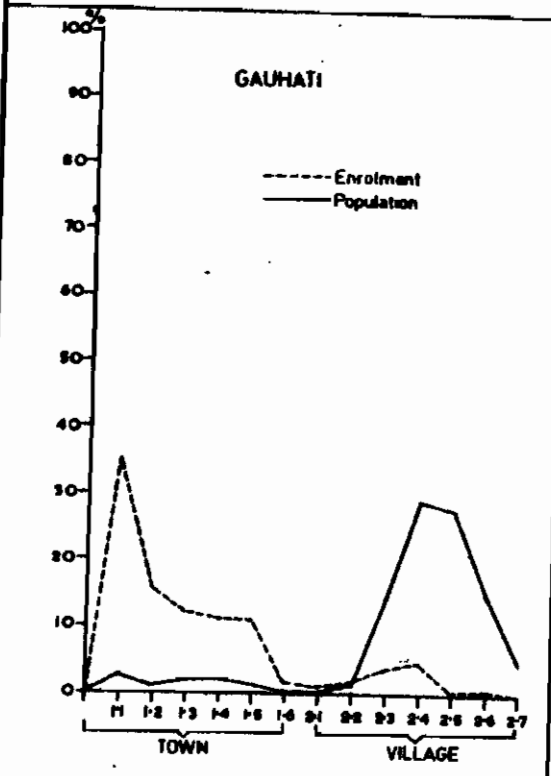
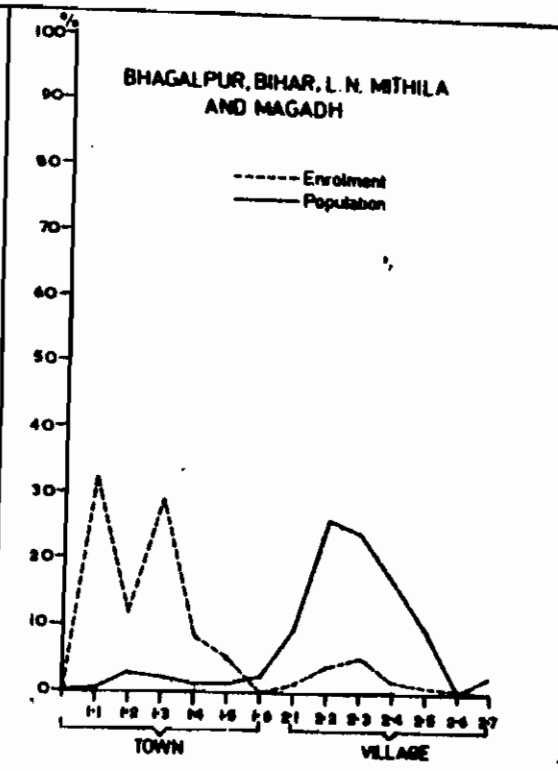
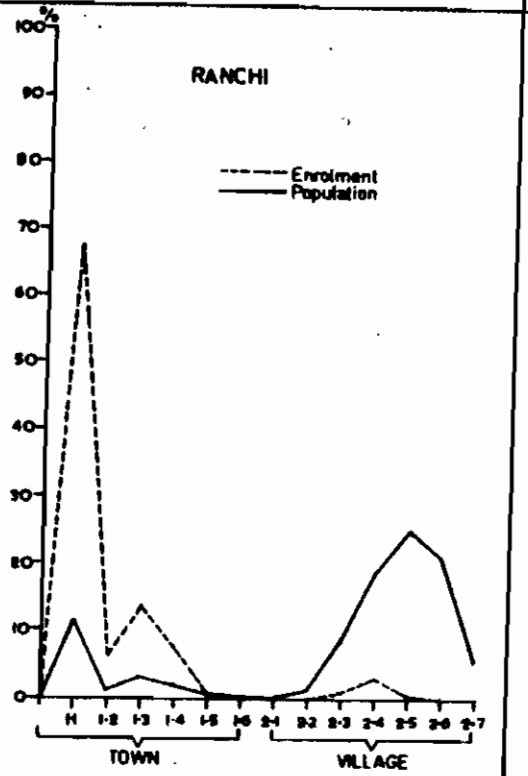


Fig III 1

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY







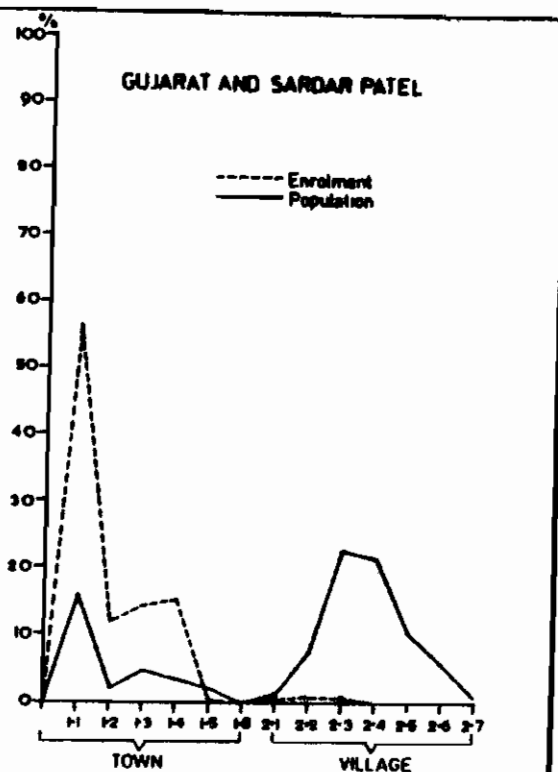


Fig III 2

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

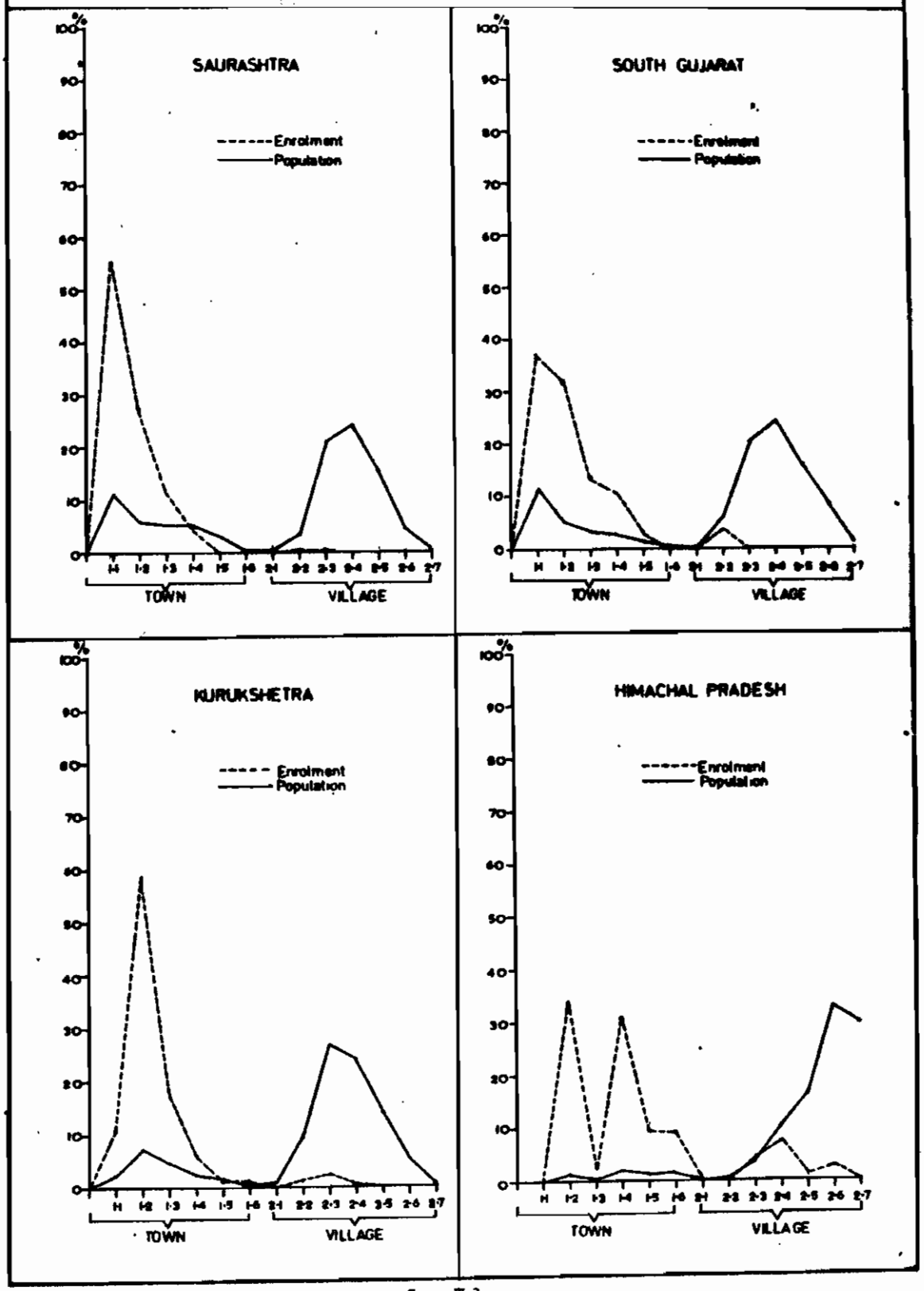


Fig III 3

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

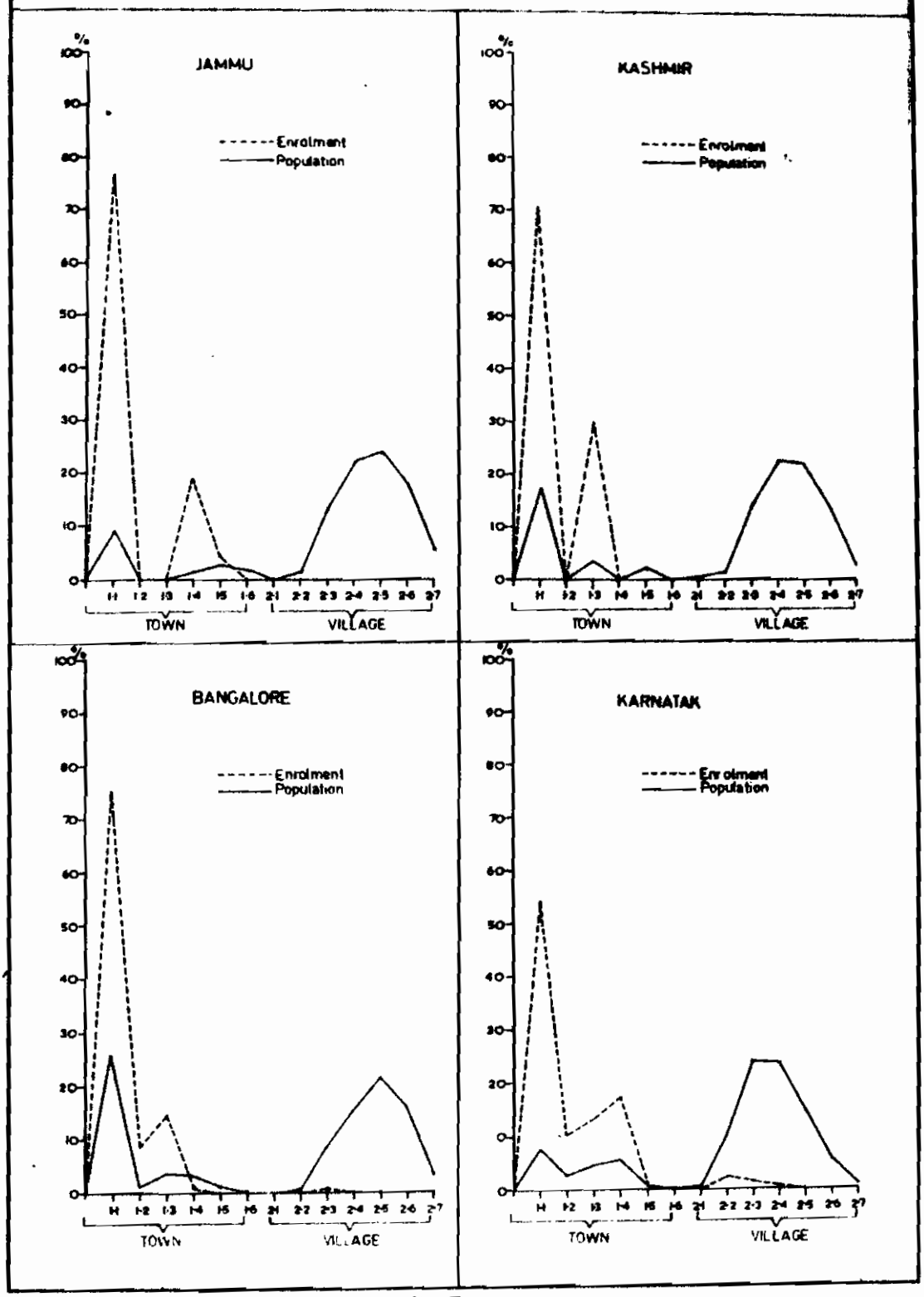


Fig III 4

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

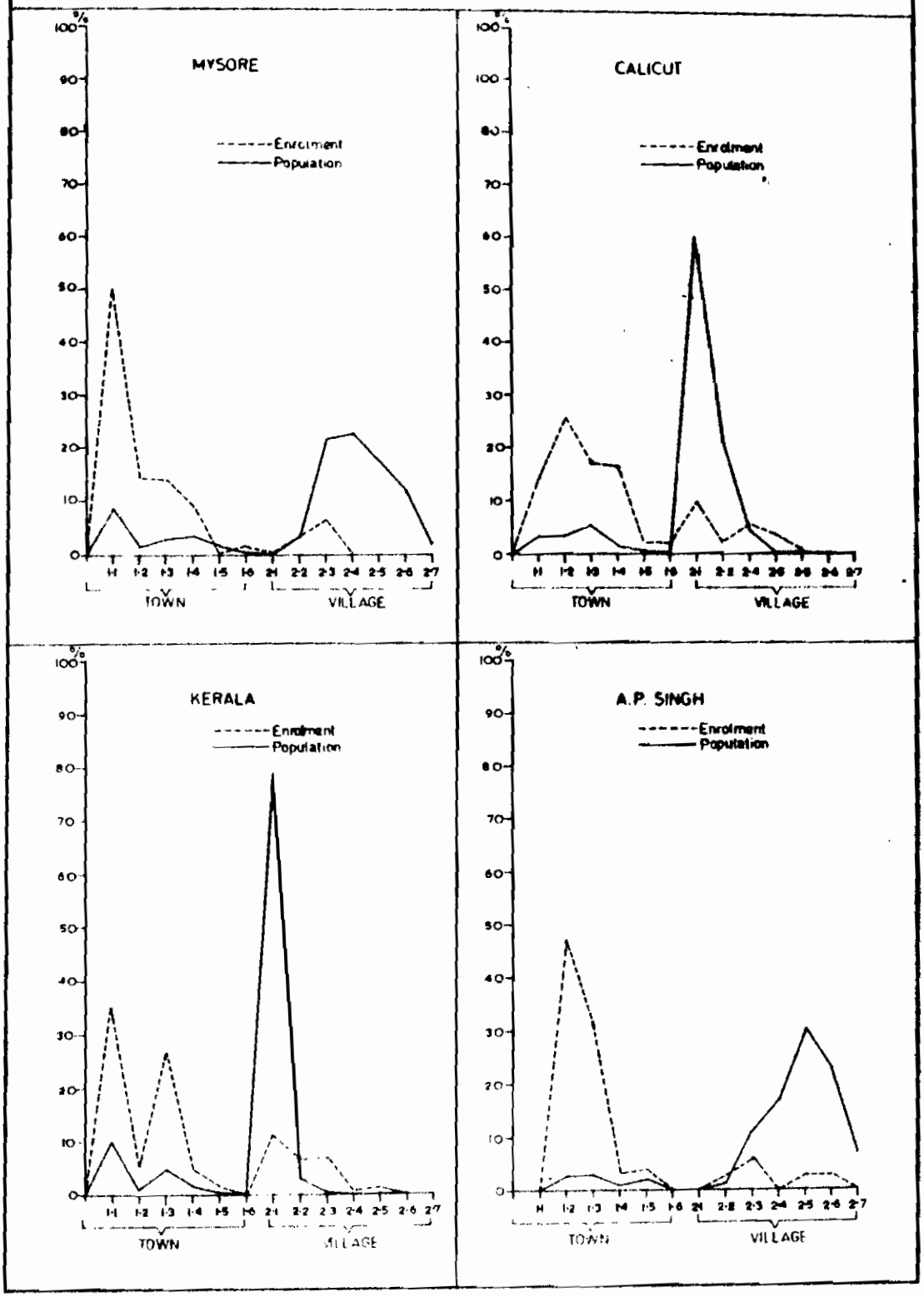


Fig III 5

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

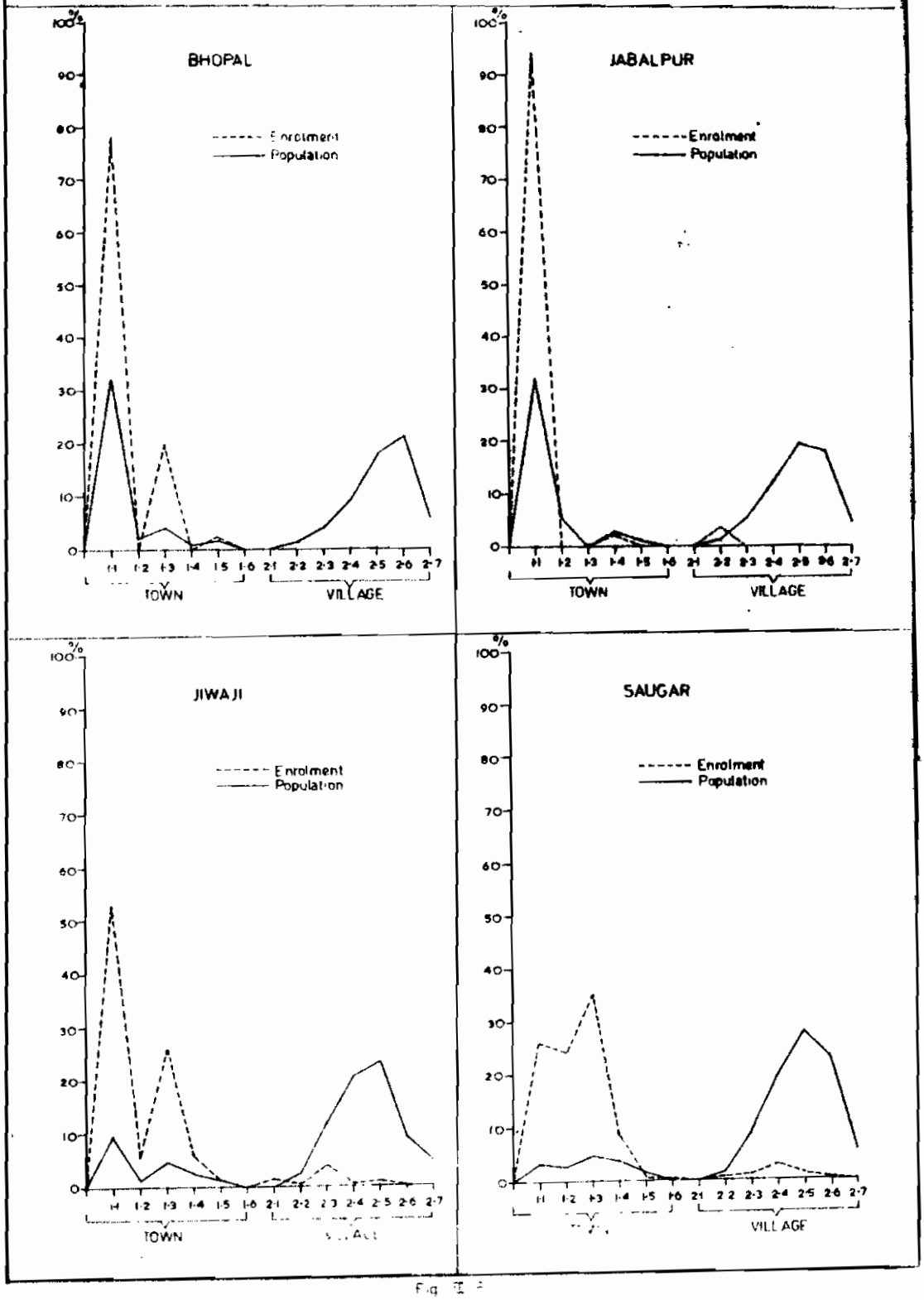


Fig. II.2

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

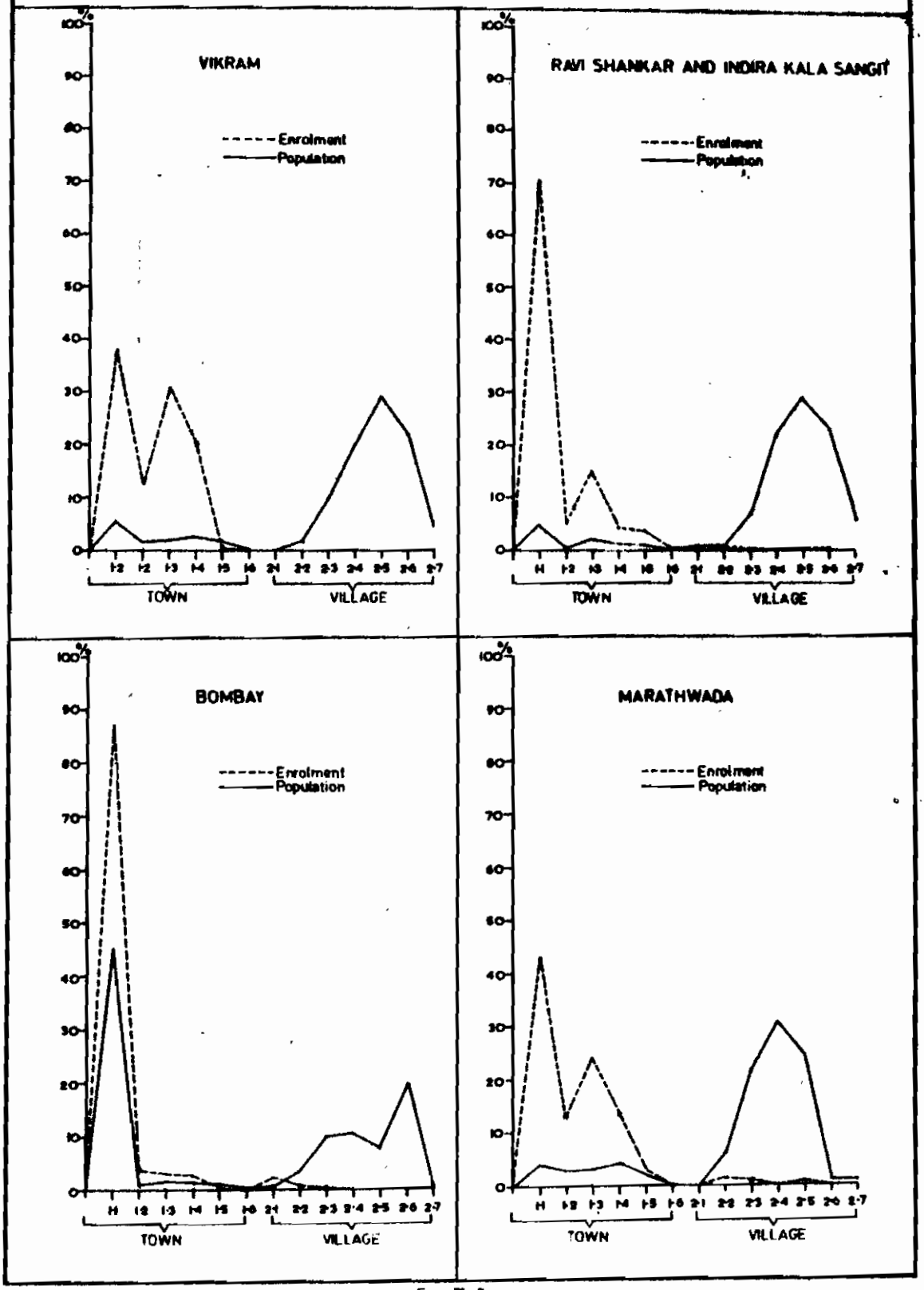
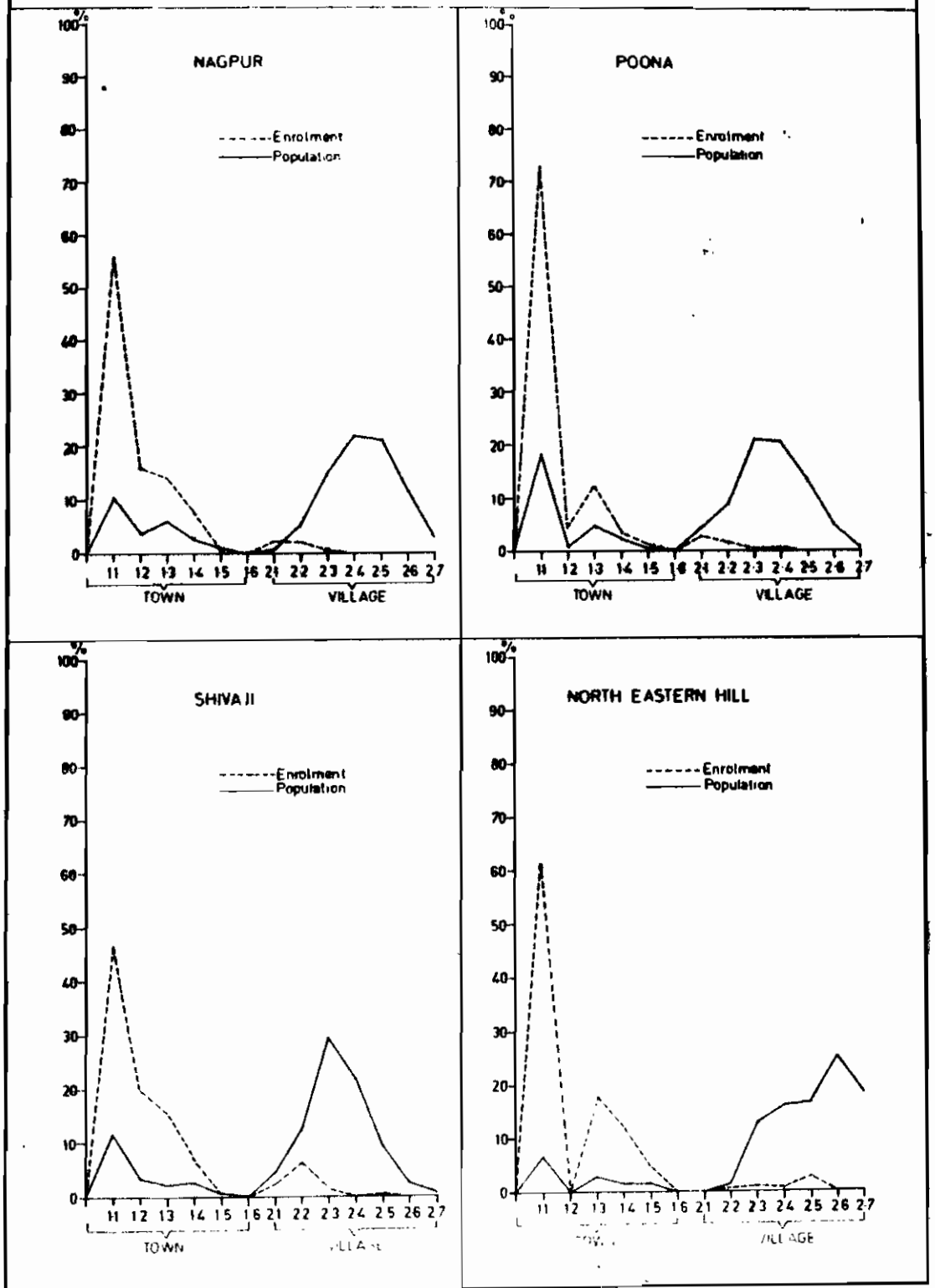


Fig III 7

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY



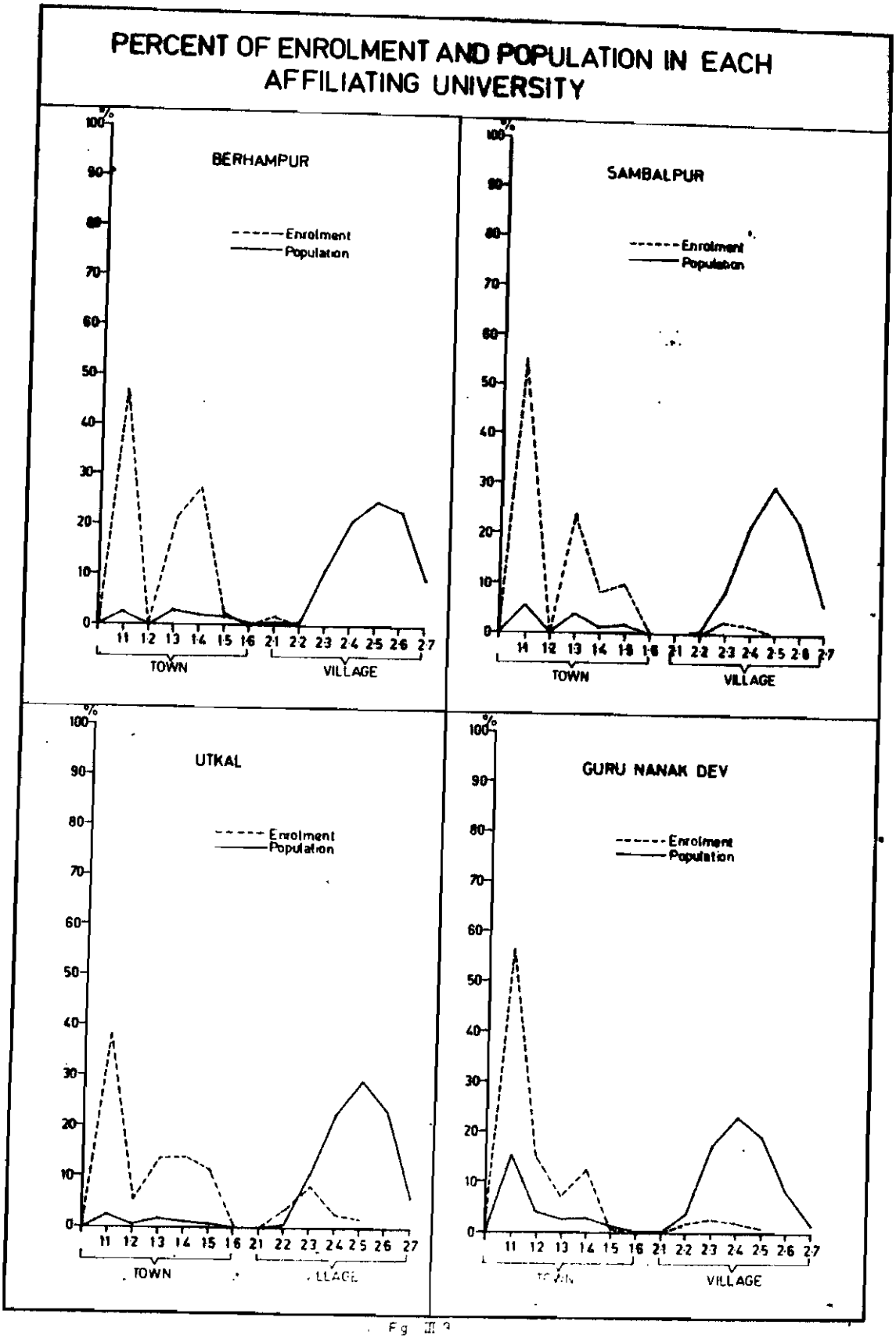

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY
BERHAMPUR
Enrolment
Population
%
100
90
80
70
60
50
40
30
20
10
0
11 12 13 14 15 16 21 22 23 24 25 26 27
TOWN
VILLAGE
SAMBALPUR
Enrolment
Population
TOWN
VILLAGE
UTKAL
Enrolment
Population
TOWN
VILLAGE
GURU NANAK DEV
Enrolment
Population
VILLAGE

Fig III 9

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

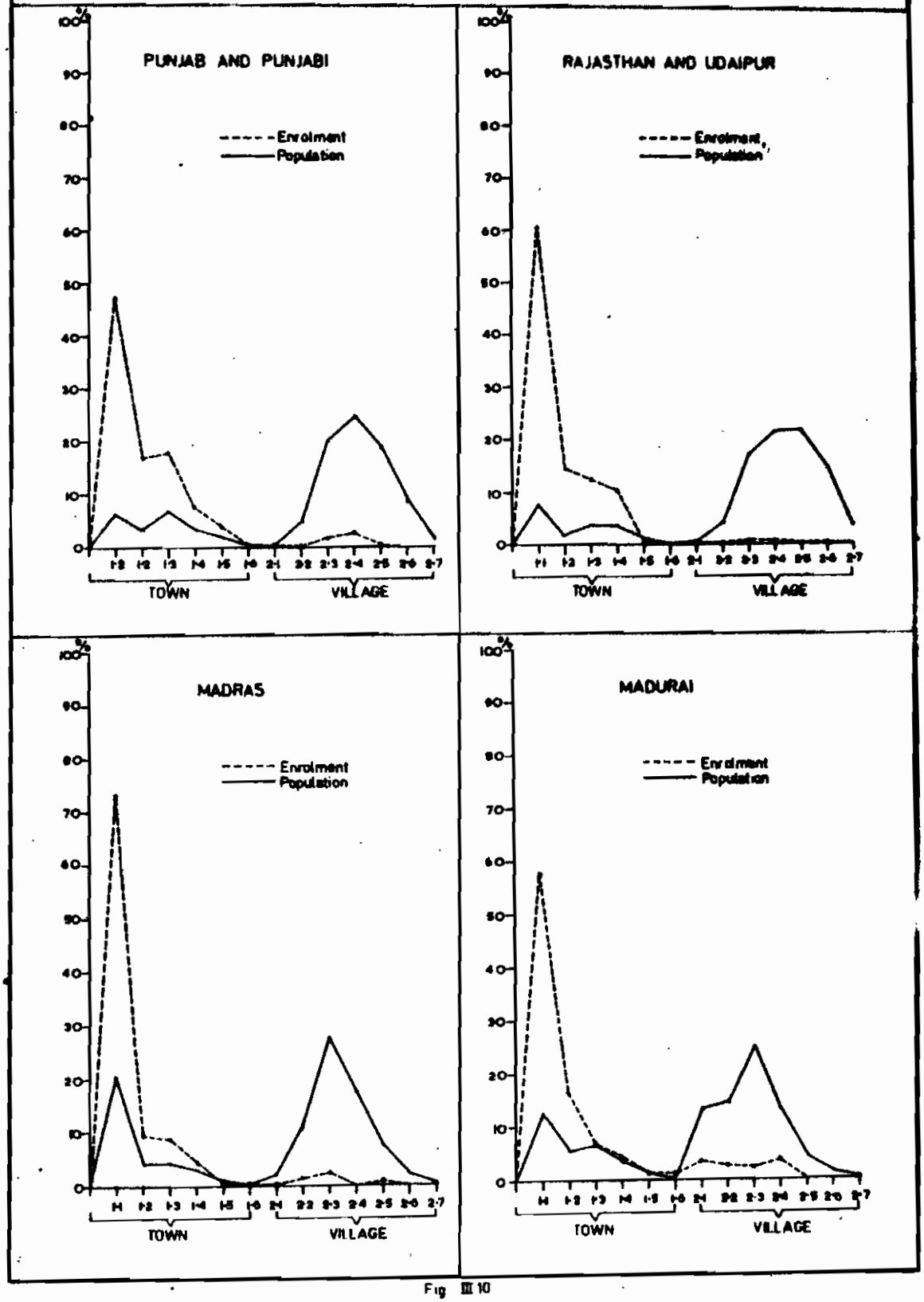


Fig III 10

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

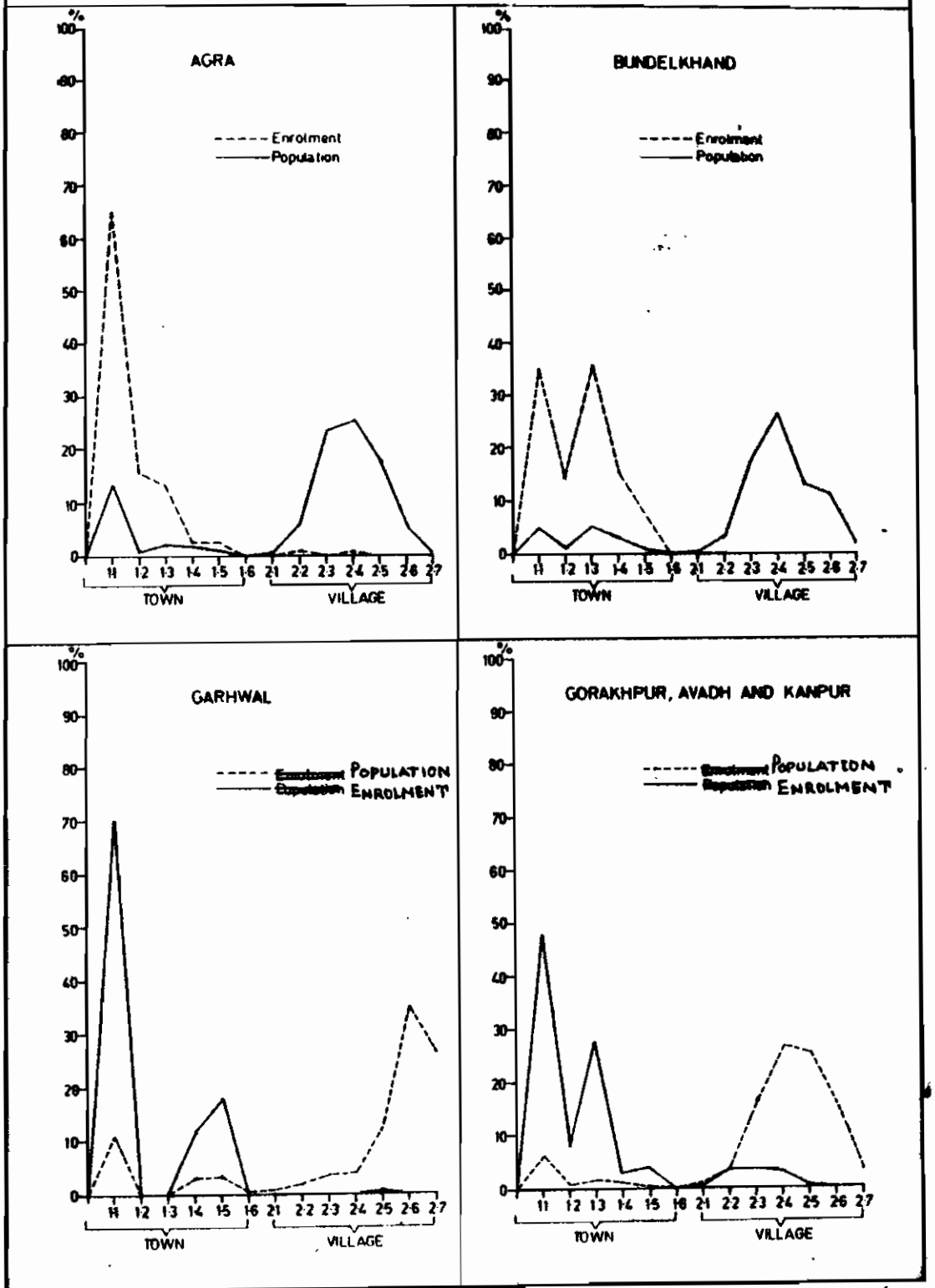


Fig III 11

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

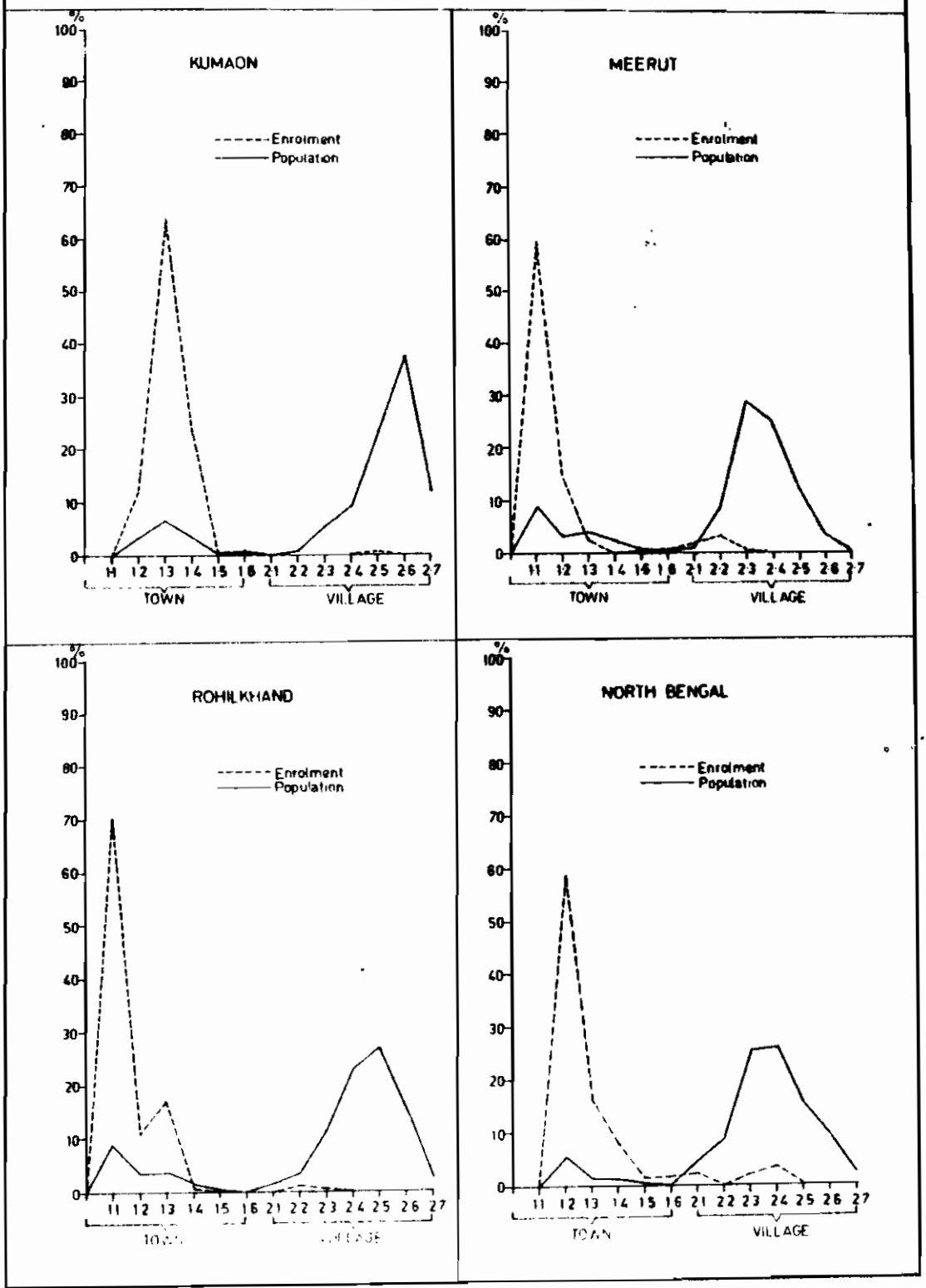


Fig III 12

PERCENT OF ENROLMENT AND POPULATION IN EACH AFFILIATING UNIVERSITY

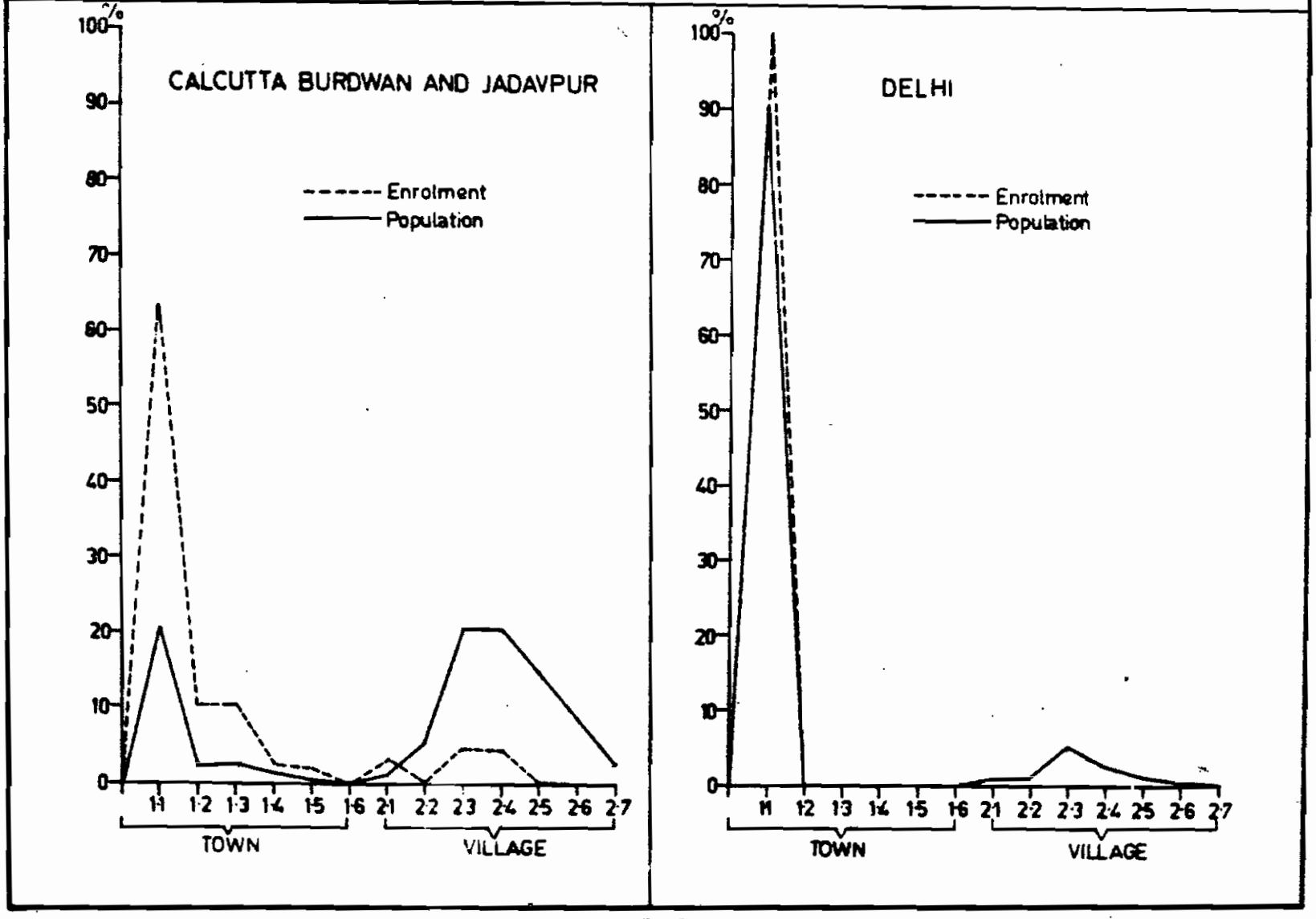


Fig. III 13

Kashmir, Fig. III.12 for Rohilkhand Ravi Shankar and Indira Kala University represent this fact. It is also apparent from Table No.III.1 and III.2 the extent of the gap between the two above mentioned variables. Where enrolment accounted for more than 70% in all the universities, the corresponding population was less than 11% for all the above mentioned universities, except Kashmir which reached the population figure of 17.38% in this class group of the urban areas, (i.e., the Class I cities). However, one must not overlook the fact that the Class I cities constitute the bulk of the percentage of urban population in different university domains, especially in case of Bhopal and Jabalpur, Bangalore, Bombay, Poona and Calcutta, Jadavpur and Burdwan and Delhi universities where the difference between the total urban population and the population in class I cities in various university domains is approximately 10% (See Table III.2). This shows that student population is not available in the same degree in the various parts of the university domains. Concommittantly, certain differences in the processes of urbanization for different university domains explains the inequalities in higher education.

3.5.4 One important point that gets highlighted in the course of such analysis is the fact that as the city size decreases, the gap between the enrolment and population becomes less pronounced, unlike that of the class I cities, where the difference between the two variables is rather large in all the 50 university domains considered in this

chapter. However, Kurukshetra and North Bengal universities (See Figs.III.3 and III.12) forms an exception to this rule, as the degree of difference between enrolment and population in class II towns is quite large when compared to the rest of the universities. The former accounts for 58.76% and the latter accounts for a meagre of only 7.02%, giving a difference of 51.74% for Kurukshetra University. North Bengal University too, follows closely the same pattern; the enrolment is 67.42% and population is 5.46% with a difference of 61.96%. Himachal Pradesh and A.P. Singh are the other universities where there is a relatively large gap between population and enrolment in the class II towns (See Fig. III.3, III.5).

3.5.5 It is clear from the above analysis that higher education in India reflects an urban bias especially towards the higher order centres. These centres exert a 'pull' on their neighbouring hinterland by virtue of their possessing better educational facilities and opportunities. These cities instead of acting as catalyst to development of all region have arrested growth of the neighbouring areas by drawing the students from these areas. Hence, rather than serving these areas, it further empoverishes them and in turn creates its own problem of overcrowding in certain institutions of higher education.

3.5.6 An attempt must, therefore, be made to cure the problem of overcrowding in a limited number of institutions in the large sized urban centres. This can be accomplished by injecting within the rural areas, an element of educational

input required for the educational development. It is especially in the rural area that the gap between population and enrolment is accentuated; the situation is somewhat opposite to that of what existed in urban areas - here the population percentage exceeds largely the enrolment figures. No single university accounts for more than 27 per cent enrolment in the rural centres. More than twenty universities account for less than 10 per cent enrolment in all the categories of the rural taken together. Examples of this kind are Osmania, Ranchi, South Gujarat, Kurukshetra, Saurashtra, Gujarat and Sardar Patel, Bangalore, Karanataka, Bhopal, Ravi Shankar and Indira Kala Sangit, Bombay, Marathwada, N.E.H.U., Berhampur, Sambalpur, Madras, Agra, Bundelkhand, Kumaon, and Rohilkhand. The corresponding population, however, is eight times its enrolment for these universities, the average being 75 per cent population except for Bombay (49.84%), Bhopal (58.88%), Saurashtra (69.29%) universities.

3.5.7 As depicted clearly in the Fig. III·1 to III·13, the village size distribution of enrolment and population follow a different pattern altogether. Here the population percentage is far greater than the enrolment. In fact, most of the class groups of these rural areas are devoid of higher education facilities. There is, in other words, a paucity of such facilities in some of the large sized and small sized villages. The reason attributed to the lack of such facilities lies in the fact that most of the small sized villages are too small to support any educational institution.

Villages with small population (below 500) have a meagre size or no student population in institutions, whatever the case, a cursory glance of Table III.1 and III.2 reflect the imbalances between the two variables in their distribution between different size classes of rural areas also. In Kerala University, for instance, the distance between population and enrolment is rather large as is apparent if one looks at Fig.III.5. Here the population far exceeds the enrolment in the largest sized villages (78.77% population with a corresponding enrolment of 11.02%, the difference being 67.75%), Calicut University also is another example having this disparity between population and enrolment in the villages above 10,000 population. Bundelkhand is the only university, out of the fifty universities considered, which does not account for any enrolment in the rural areas. It is concentrated in the various size classes of the areas of this particular university. In general, most of the universities average 3-5 per cent of the total enrolment in all the universities, except for a few where the enrolment figures reaches 9.88% as in the case of Calicut University, (i.e., in the category of 2,000-4,999 of population) and also in the case of Utkal University which records 8.38 per cent of enrolment within the same category. The population distribution of Andhra Pradesh and Srivenkateswara universities into various categories of the rural areas takes shape of a pyramid (Fig.III.1), further accentuating the tremendous gap between population and enrolment, especially in the village group of 2,000-4,999 of population. It is, however, important

to note that villages with less than 200 of population have no enrolment.

3.5.8 This trend of inequality in higher education towards urban areas negates the very relevance and essence of equality of educational opportunities to far flung areas.

3.5.9 So long as equality of education signifies easy access to education for all, a proper dispersal of educational facilities to the remotest parts of the country is what is required. In fact, a developing country like ours can make progress only if people and villagers in general acquire new ideas and new skills in agriculture. This can be achieved only if conscious and sustained efforts are made on the part of the government aimed at raising the economic standard of the villagers so that they can avail of higher educational facilities within their reach and without difficulty.

3.6 INEQUALITIES IN HIGHER EDUCATION

3.6.1 Despite the tremendous effort of both democratic and communist countries towards ensuring equality of educational opportunity, inequalities still prevail and their total magnitude has increased rather than decreased in the world. This phenomenon is more acute as there is today a great degree of inequality in our educational system. In view of this argument we have tried to work out the degree of inequality in education as between the rural and urban areas, served by

particular universities. For this purpose we have basically utilised the Gini's coefficient which measures the distribution of education with help of enrolment figures. The two variables that have been taken into consideration are enrolment in higher education institutions according to the size-class of cities and villages and the corresponding population. In order to make the exercise worthwhile we had to club some universities together because these universities served an overlapping region. This resulted in the reduction of the number of Gini's coefficient to forty-nine. (SEE TABLE III·3)

3.6.2 As has been discussed earlier higher education in India has tended to concentrate in urban areas, especially in the higher order urban centres. It would not be surprising to find a very high degree of inequality in higher education within the areas served by particular university, especially in those which have a large number of rural settlements within their ambit. This is but expected since higher education is concentrated in larger cities whereas rural areas lie in the back waters of educational development. However, whenever the number of rural settlements is less, the degree of inequality as, measured by percentage of enrolment with respect to percentage of population according to the size of the settlements, would be less. Secondly, where the rural settlements are very close to metropolises and higher order urban centres, the percentage of enrolment can be expected to be high even among the lower order settlements, thereby reducing the inequality (see Fig.III.19).

TABLE III.3

INEQUALITIES IN HIGHER EDUCATION

S.NO.	Name of University	Value of the Gini's Coefficient
1	2	3
1.	Andhra Pradesh	0.80
2.	Osmania	0.85
3.	Srivenkateswara	0.87
4.	Dibrugarh	0.76
5.	Gauhati	0.88
6.	Bihar, Bhagalpur, L.N. Mithila and Magadh	0.85
7.	Ranchi	0.84
8.	Gujarat and Sardar Patel	0.76
9.	Saurashtra	0.78
10.	South Gujarat	0.78
11.	Kurukshetra	0.79
12.	Himachal Pradesh	0.88
13.	Jammu	0.96
14.	Kashmir	0.82
15.	Bangalore	0.71
16.	Karnataka	0.80
17.	Mysore	0.81
18.	Calicut	0.76
19.	Kerala	0.76
20.	Awadesh Pratap Singh	0.60

1	2	3
21.	Bhopal	0.66
22.	Ravi Shankar and Indira Kala Sangit	0.92
23.	Jiwaji	0.80
24.	Saugar	0.85
25.	Vikram	0.89
26.	Bombay	0.52
27.	Marathwada	0.86
28.	Nagpur	0.78
29.	Poona	0.80
30.	Shivaji	0.77
31.	North-Eastern Hill	0.86
32.	Berhampur	0.93
33.	Sambalpur	0.87
34.	Utkal	0.89
35.	Guru Nanak Dev	0.70
36.	Punjab and Punjabi	0.81
37.	Rajasthan and Udaipur	0.86
38.	Madras	0.69
39.	Madurai	0.68
40.	Agra	0.84
41.	Avadh, Gorakhpur and Kanpur	0.87
42.	Bundelkhand	0.87
43.	Garhwal	0.87
44.	Kumaon	0.89
45.	Meerut	0.80

1	2	3
46.	Rohilkhand	0.86
47.	Burdwan, Calcutta and Jadavpur	0.67
48.	North Bengal	0.89
49.	Delhi	0.10

INEQUALITIES IN HIGHER EDUCATION

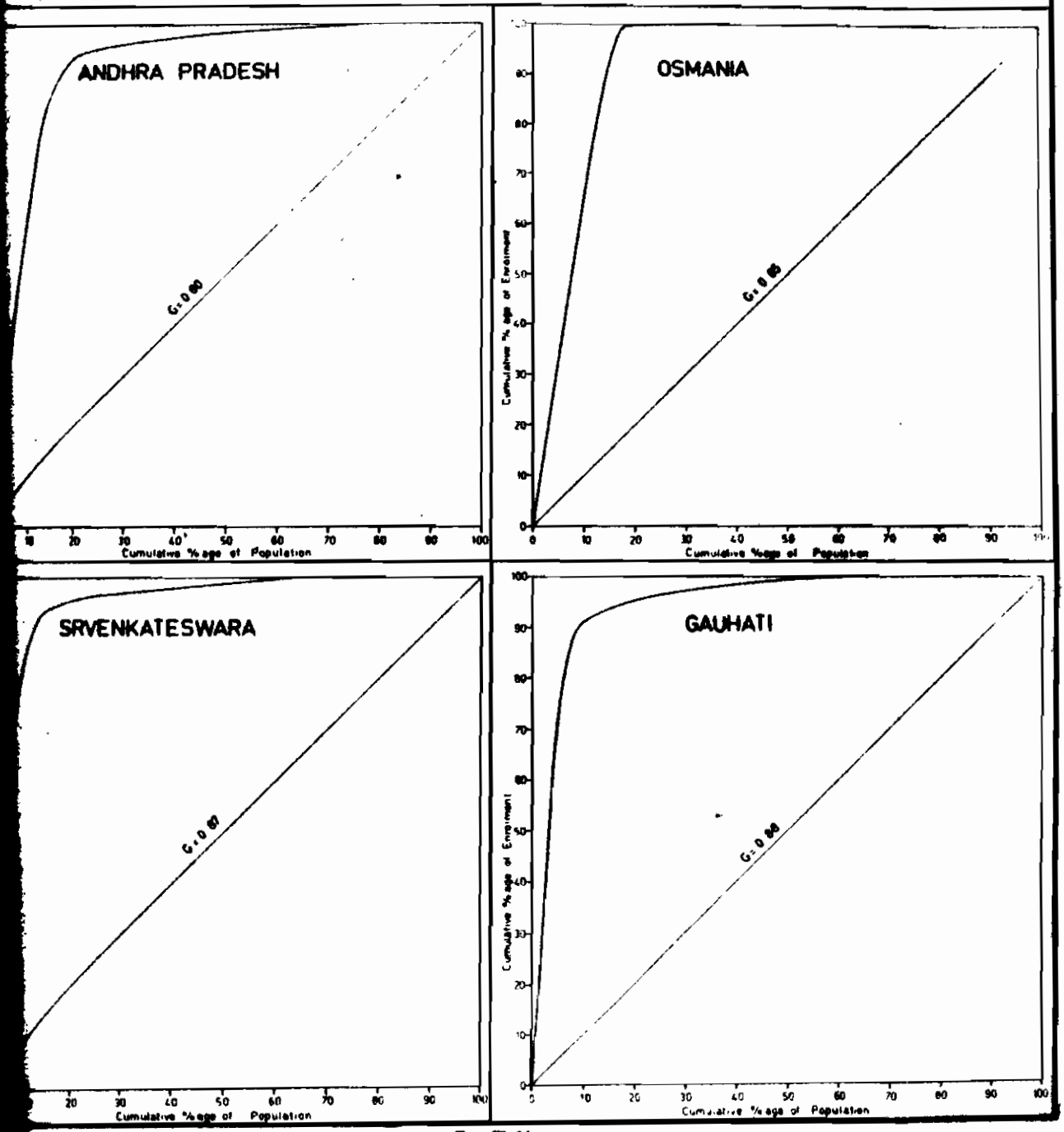


Fig III 14

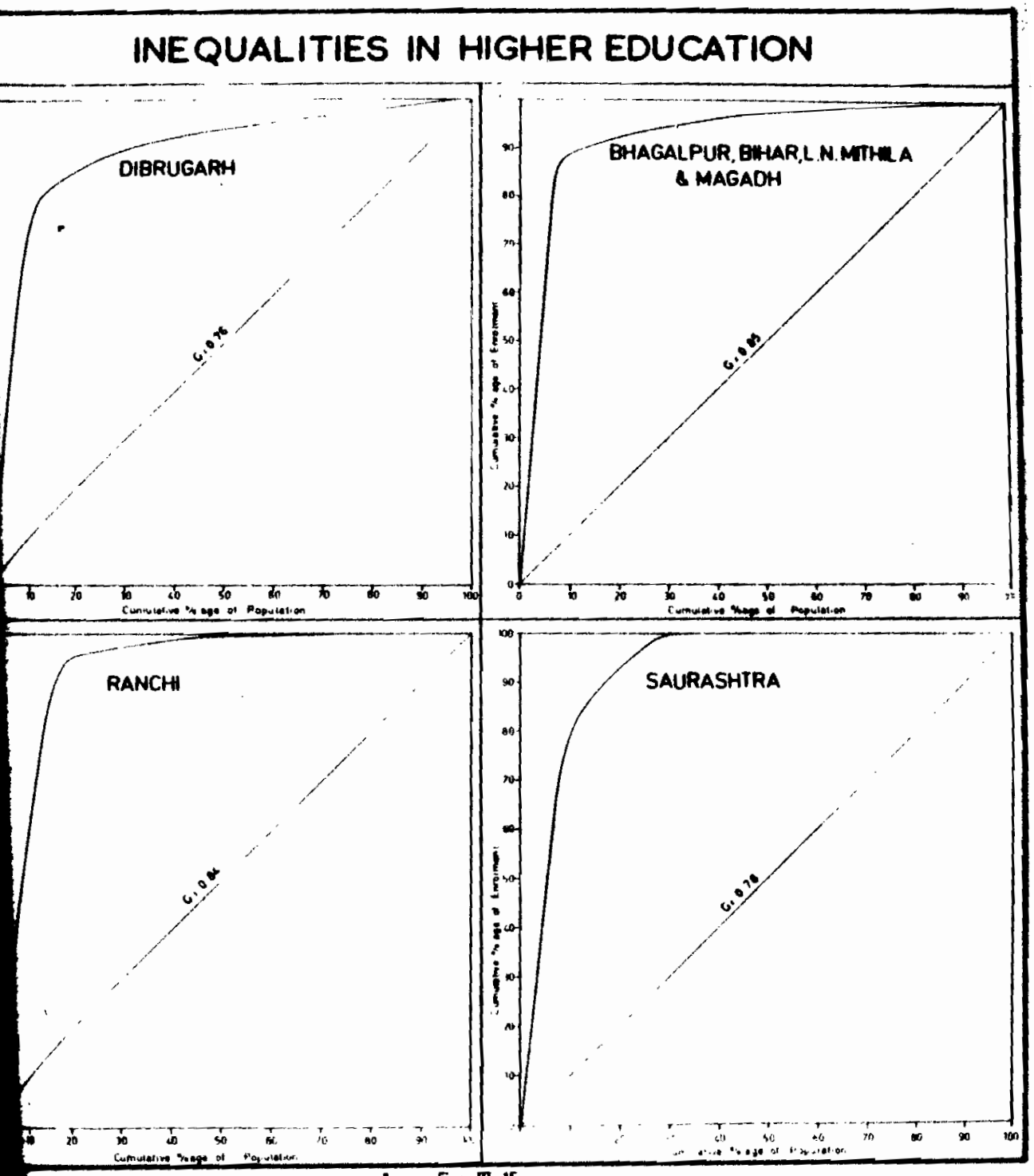

INEQUALITIES IN HIGHER EDUCATION
DIBRUGARH
G: 0.26
Cumulative % age of Population
BHAGALPUR, BIHAR, L.N. MITHILA & MAGADH
G: 0.83
Cumulative % age of Enrolment
Cumulative %age of Population
RANCHI
G: 0.84
Cumulative %age of Population
SAURASHTRA
G: 0.28
Cumulative % age of Enrolment

Fig III 15

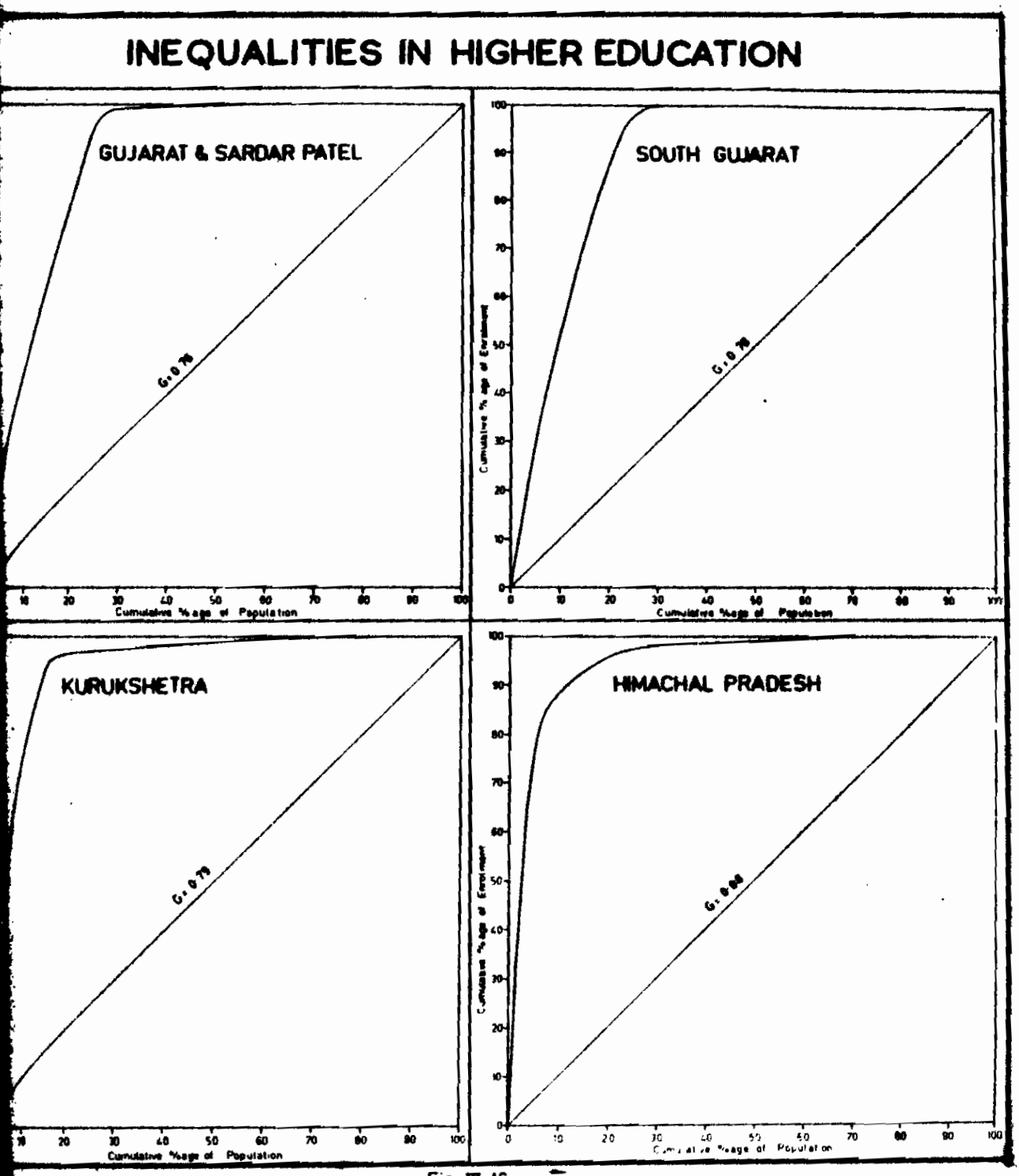

INEQUALITIES IN HIGHER EDUCATION
GUJARAT & SARDAR PATEL
G: 0.76
Cumulative %age of Population
SOUTH GUJARAT
G: 0.76
KURUKSHETRA
G: 0.79
Cumulative %age of Population
HIMACHAL PRADESH
G: 0.68
Cumulative %age of Population

Fig. III 16

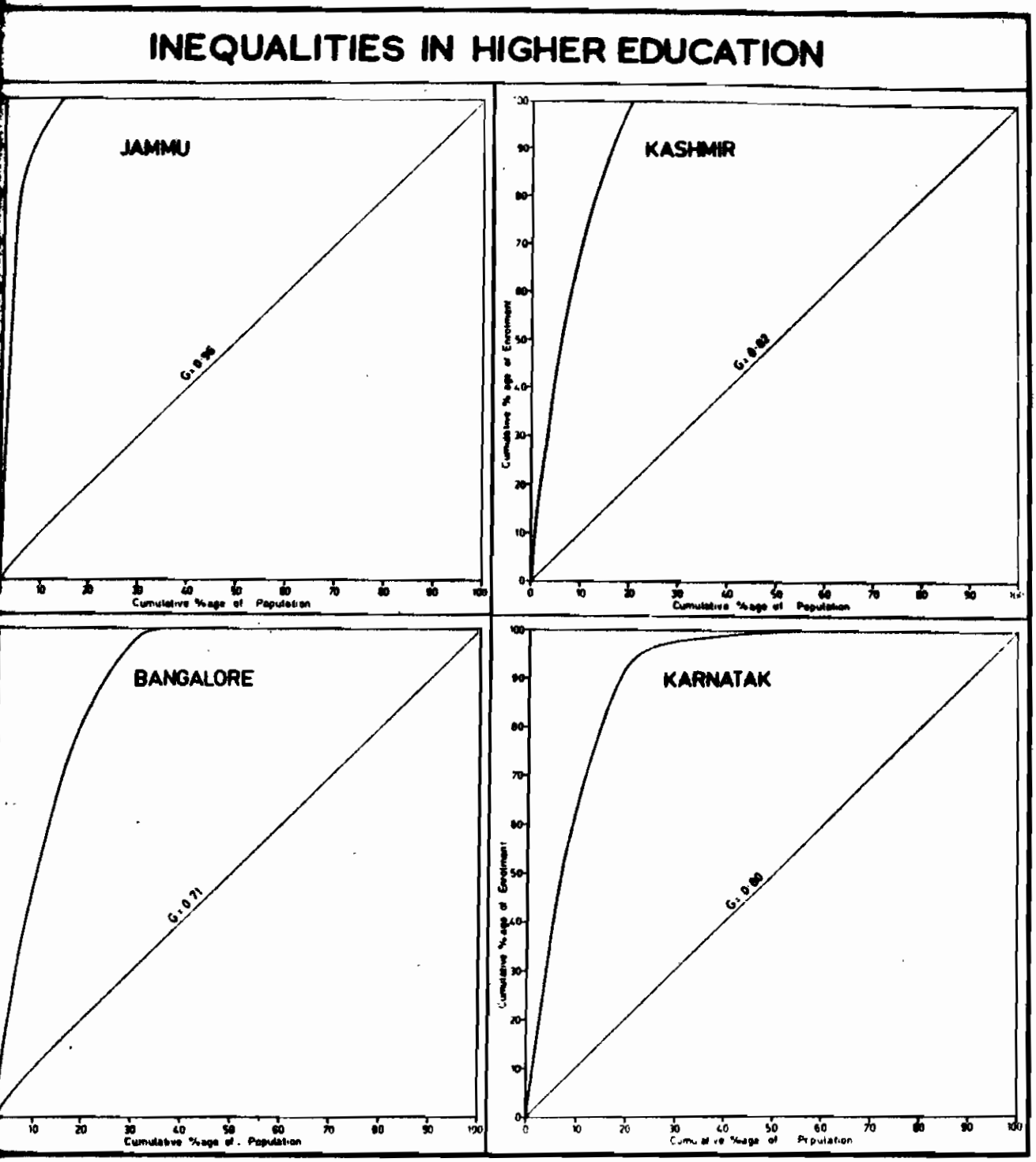

INEQUALITIES IN HIGHER EDUCATION
JAMMU
G: 0·36
Cumulative %age of Population
KASHMIR
G: 0·62
Cumulative %age of Enrolment
Cumulative %age of Population
BANGALORE
G: 0·71
Cumulative %age of Population
KARNATAK
G: 0·60
Cumulative %age of Enrolment
Cumulative %age of Population

Fig III 17

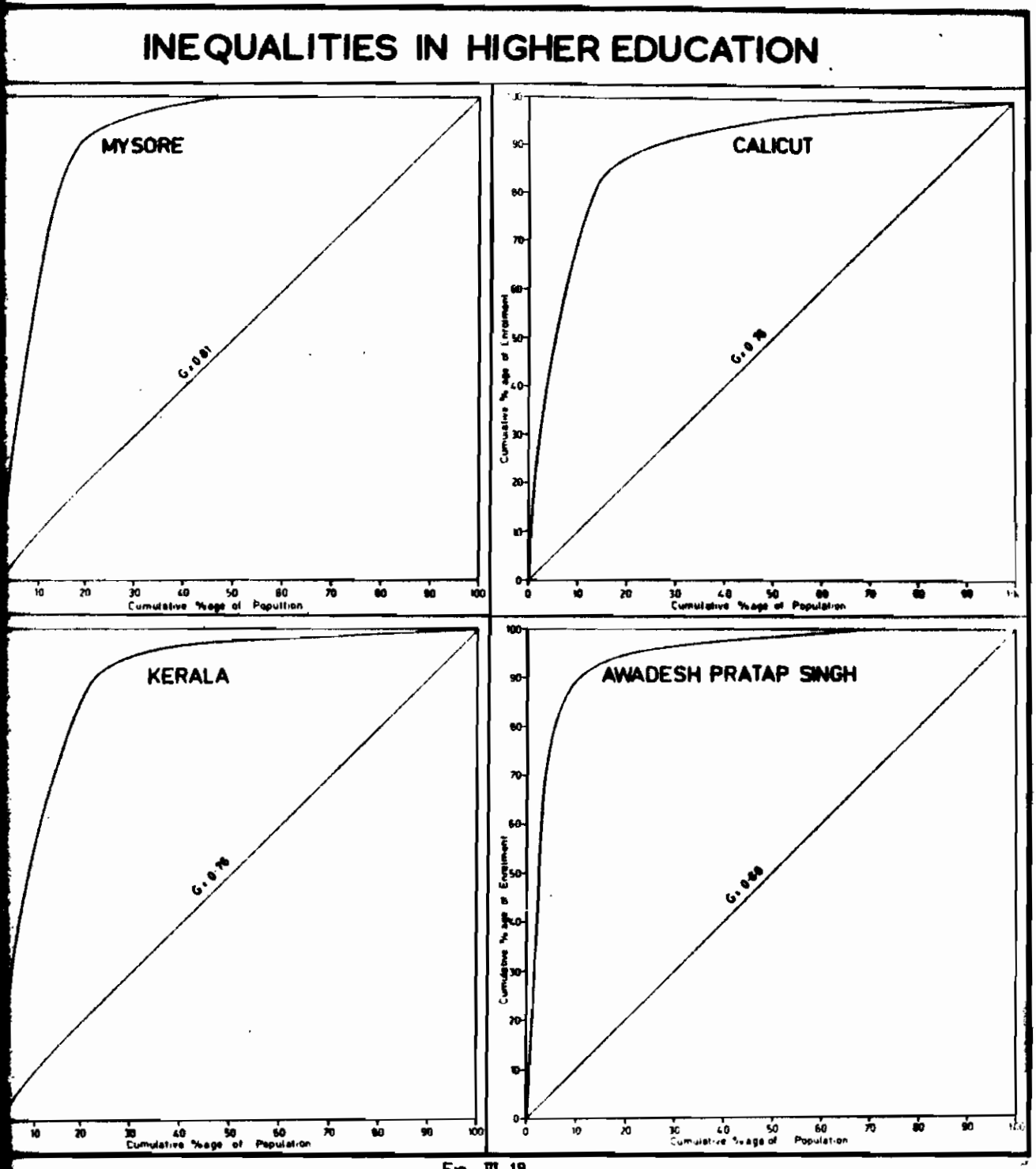

INEQUALITIES IN HIGHER EDUCATION
MYSORE
G=0.81
CALICUT
G=0.76
KERALA
G=0.76
AWADESH PRATAP SINGH
G=0.60
Cumulative %age of Population
Cumulative %age of Enrolment

Fig. III 18

INEQUALITIES IN HIGHER EDUCATION

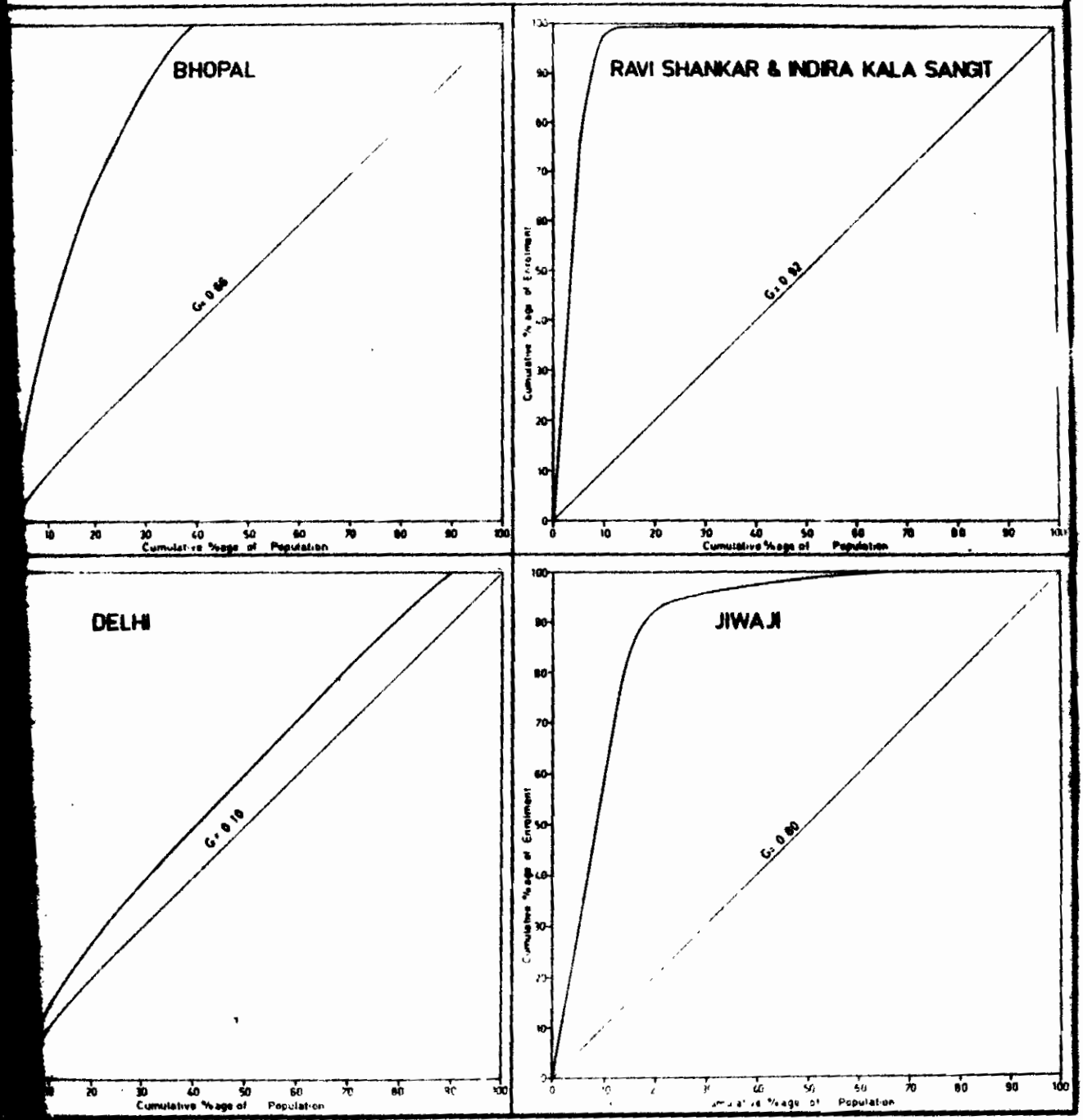


Fig III 19

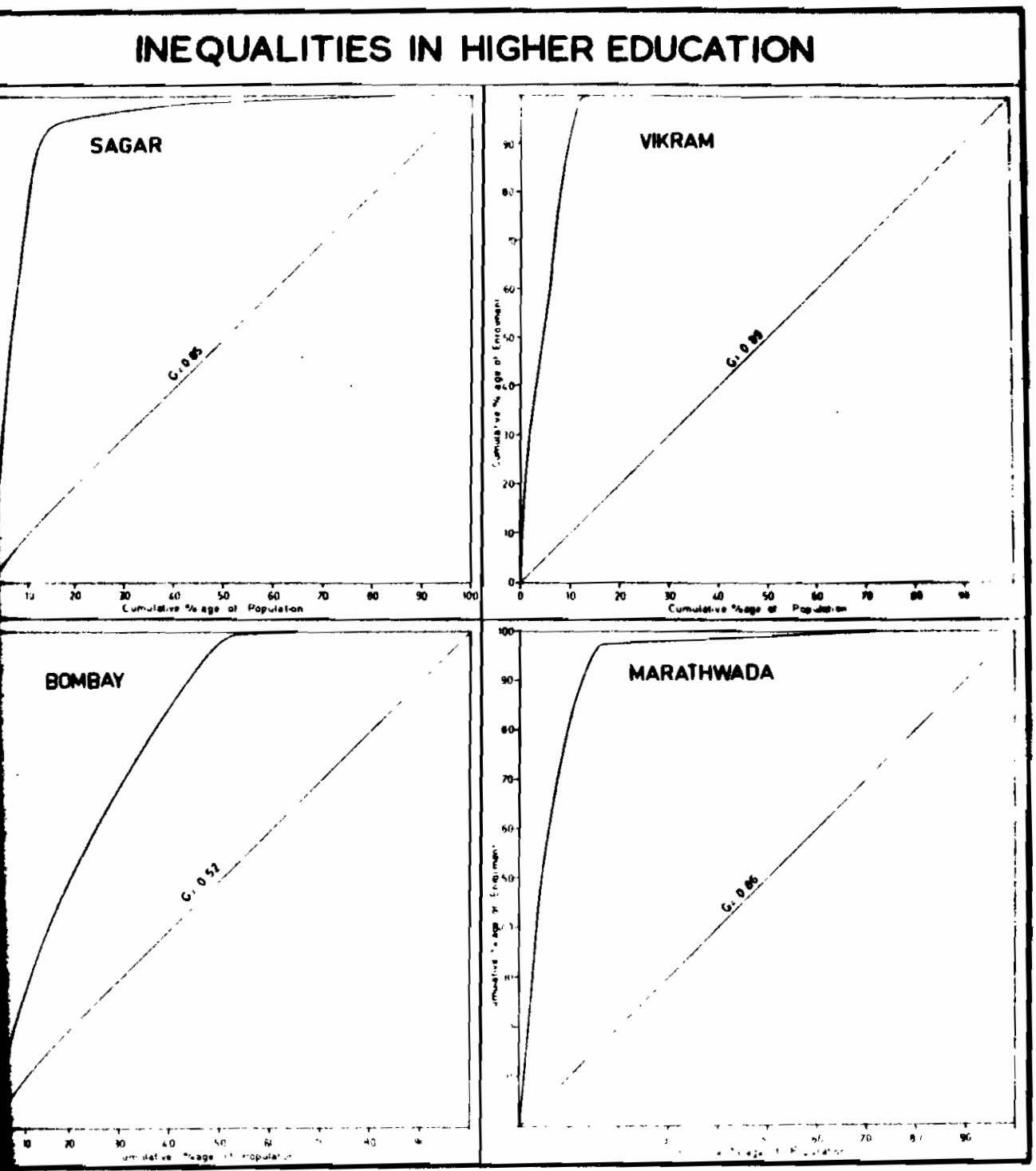

INEQUALITIES IN HIGHER EDUCATION
SAGAR
G: 0.65
Cumulative %age of Population
VIKRAM
G: 0.80
Cumulative %age of Enrolment
Cumulative %age of Population
BOMBAY
G: 0.52
MARATHWADA
G: 0.65

Fig III 20

INEQUALITIES IN HIGHER EDUCATION

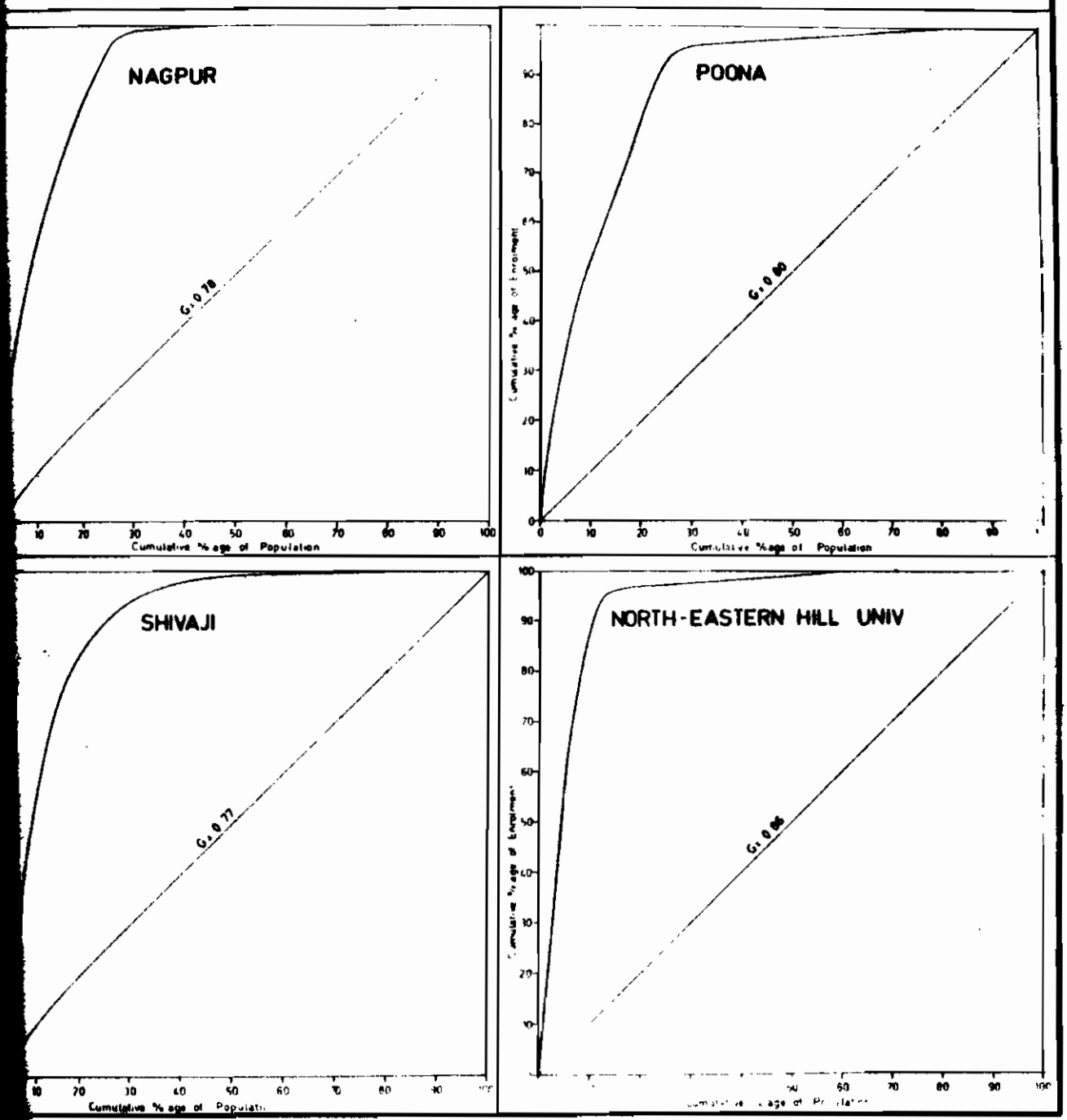


Fig III 21

INEQUALITIES IN HIGHER EDUCATION

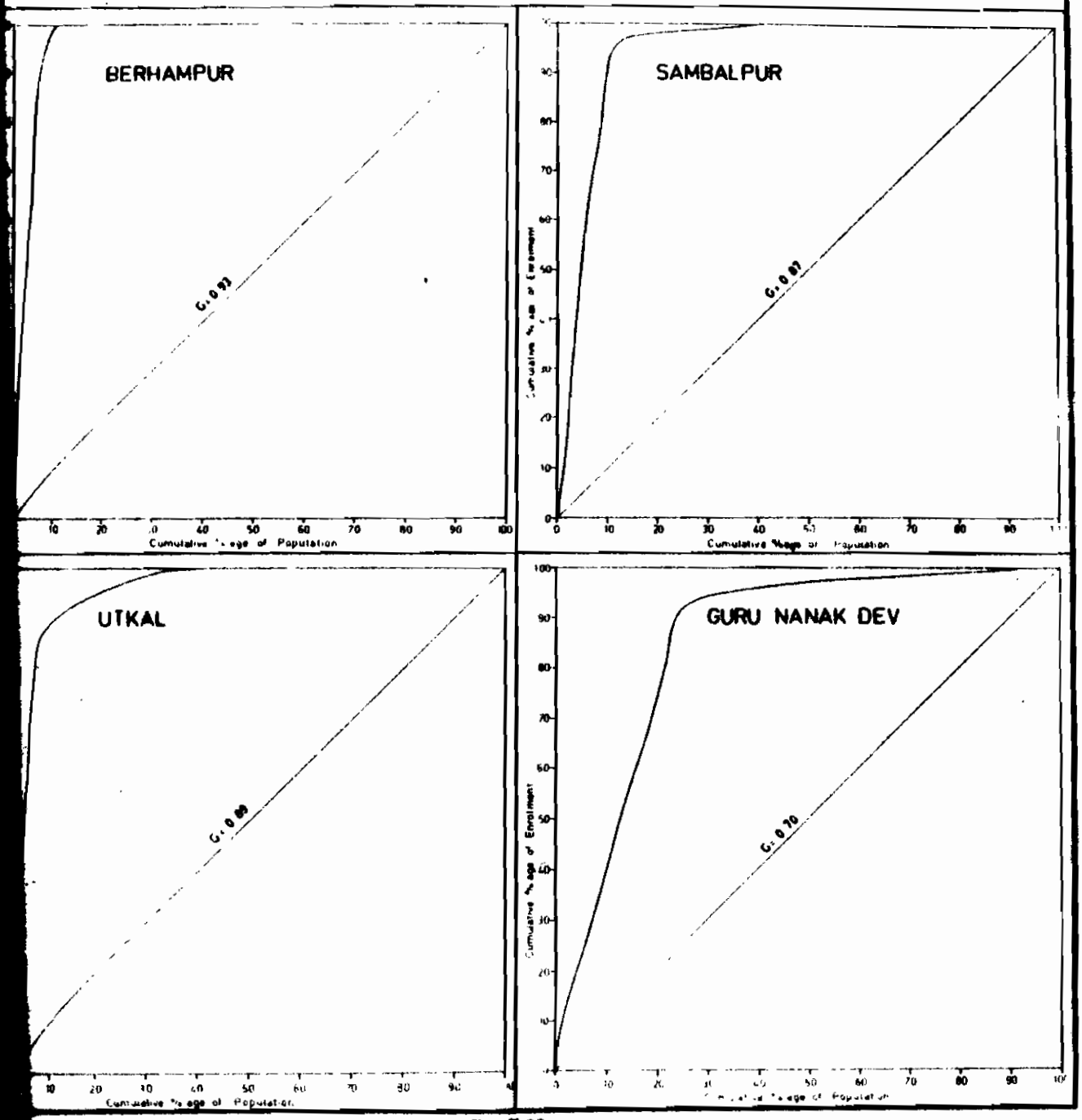


Fig 22

INEQUALITIES IN HIGHER EDUCATION

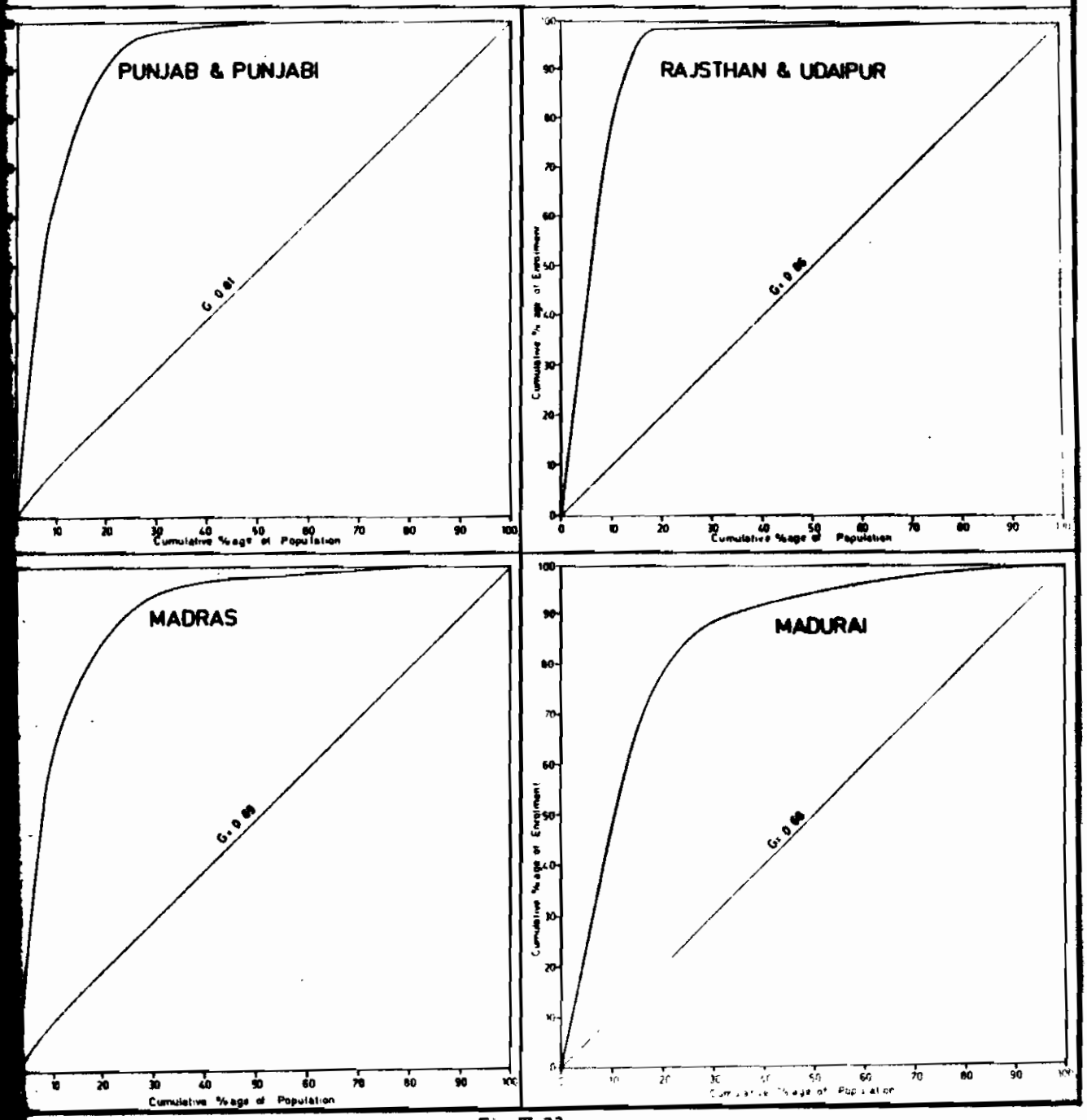


Fig III 23

INEQUALITIES IN HIGHER EDUCATION

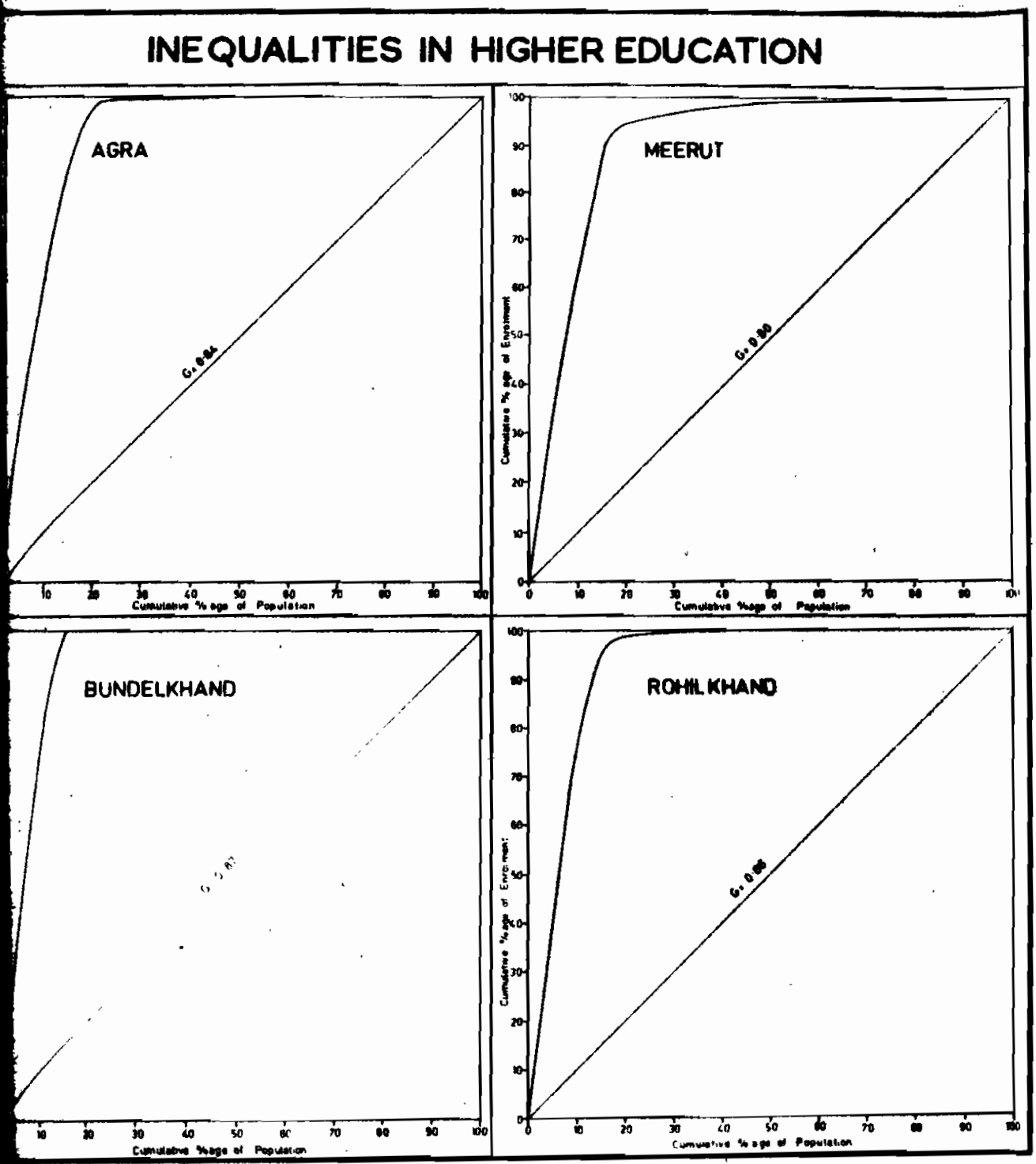


Fig. III 24

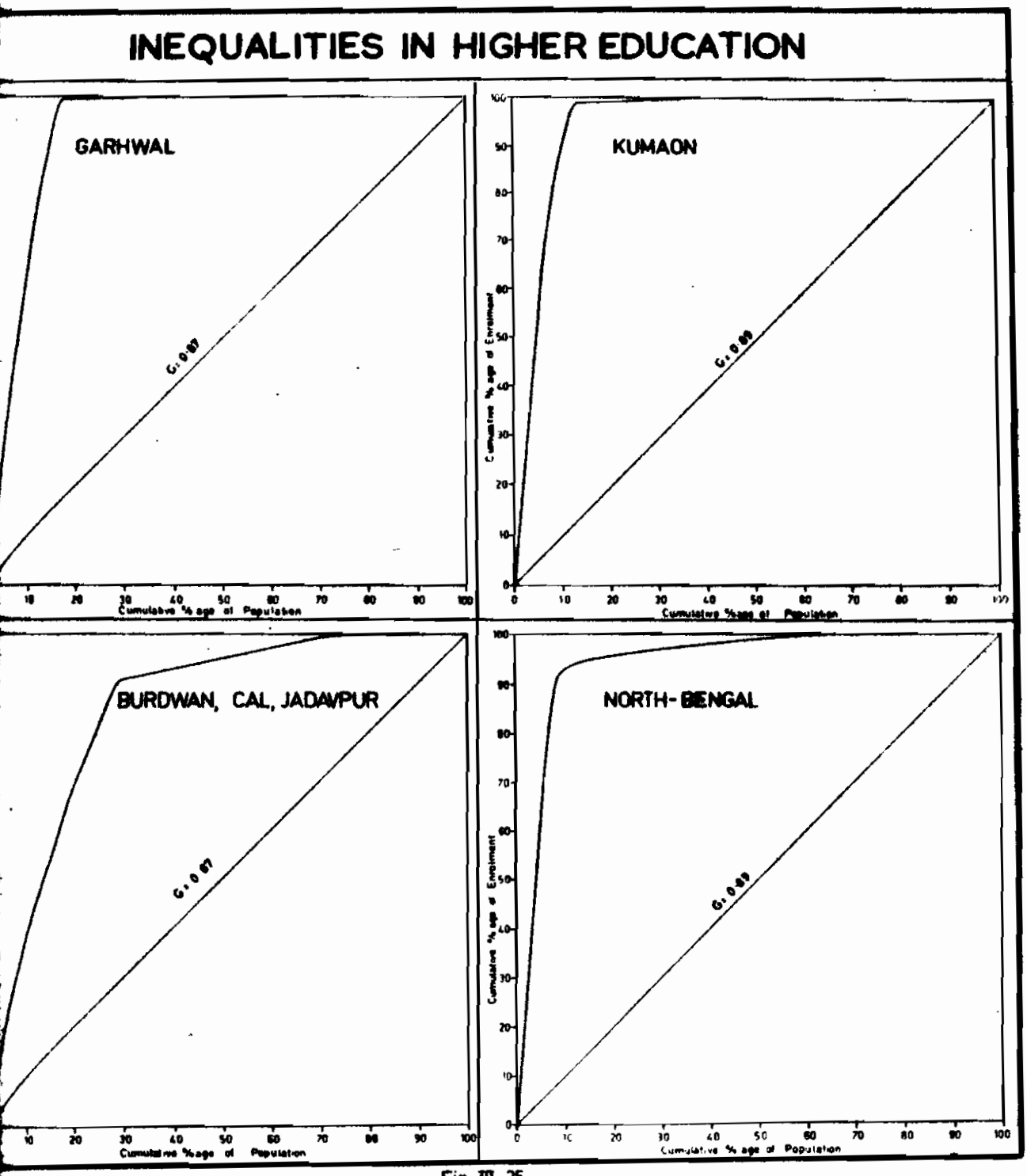

INEQUALITIES IN HIGHER EDUCATION
GARHWAL
G: 0·87
KUMAON
G: 0·89
BURDWAN, CAL, JADAVPUR
G: 0·87
NORTH-BENGAL
G: 0·89
Cumulative % age of Enrolment
Cumulative % age of Population

Fig. III 25

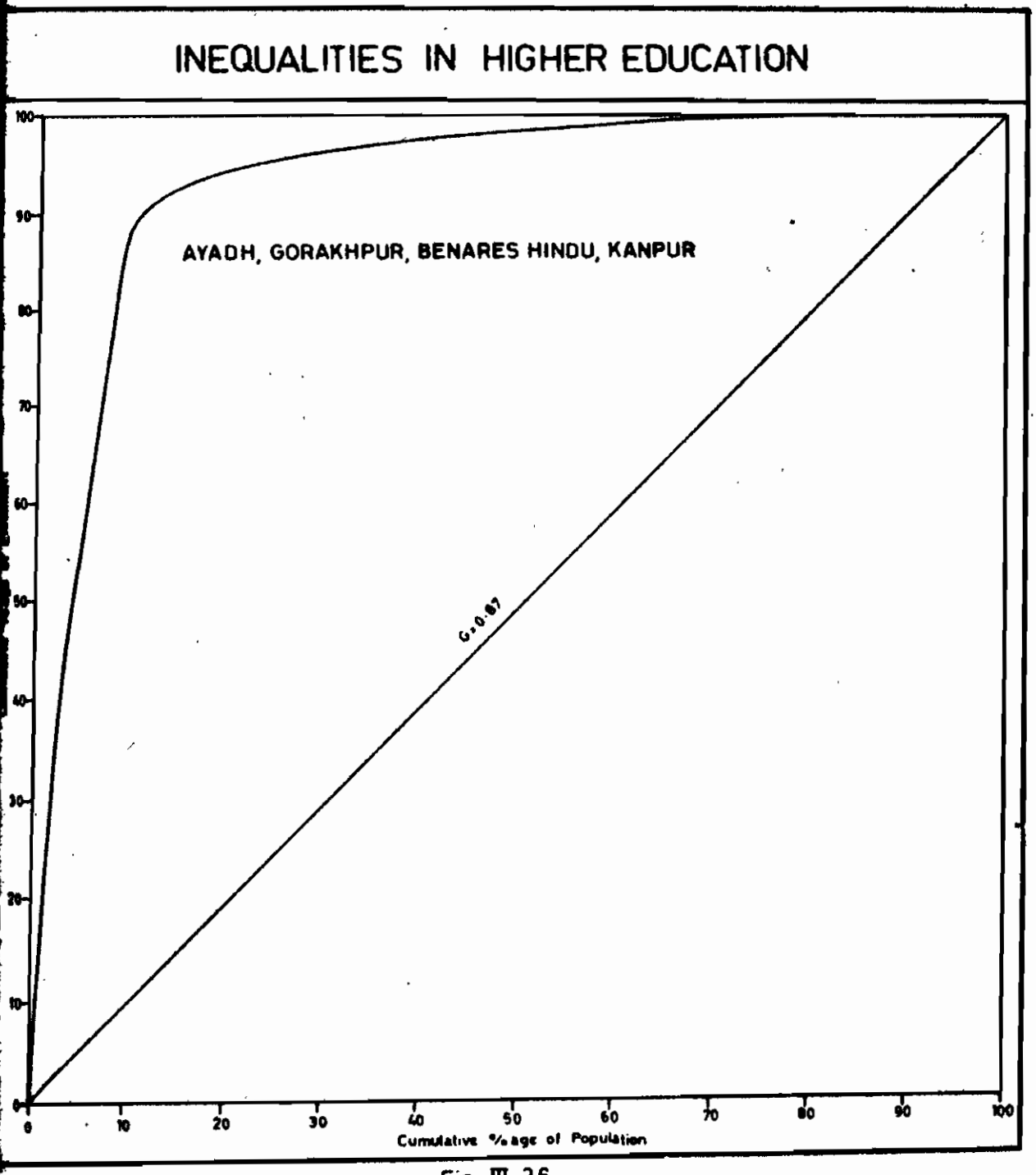

INEQUALITIES IN HIGHER EDUCATION
AYADH, GORAKHPUR, BENARES HINDU, KANPUR
G=0.87
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
70
80
90
100
Cumulative %age of Population

Fig. III 26

In general wherever the area served by a particular university is compact, the degree of inequality on the theoratical basis at least can be expected to be less as a large number of people can get themselves enrolled into the various institutions of higher order by these universities.

3.6.3 In the context of available evidence we find that none of the universities show a concentration ratio of less than 0.52. Within the range of 0.5 and 1.0 the distribution of universities is no doubt uneven. Most of the universities show a concentration ratio between 0.8 to 0.9 (27 universities of the 50 considered). Only a few universities show a concentration ratio above 0.9. To name them there are Ravi Shankar and Indira K. Sangit, Berhampur and Jammu with concentration ratios of 0.92, 0.93, 0.96 respectively. (See Fig. Nos. III.19, III.22 and III.17). Since Ravi Shankar and Indira Kala Sangit are specialised kind of institutes and hence do not cater to the popular needs of the mass of students. The enrolment can be expected to be fairly limited from those areas which are economically well of, therefore, the higher degree of concentration. In case of Jammu the higher degree of inequality can be attributed to the specific geographical limitations, which make it inaccessible to the people. Moreover, in case of Jammu University, the institution of higher order are concentrated only in urban areas. As far as Berhampur University is concerned, we would have to look at the state of Orissa (as a whole there are three universities in this state, Sambalpur, Utkal and Berhampur). Orissa being

an educationally backward state because of its socio-economic backwardness, the pattern of higher universities in the state as a whole can be expected to be high. This is shown by the Gini's coefficient of all the three universities which are 0.87, 0.89 and 0.93 respectively.

3.6.4 In the forty-nine universities the range of the Gini's coefficient works out to be 0.44 (the lowest 0.52 in case of Bombay University and highest being in case of Jammu 0.96). If we try to divide the series into four parts, we can have four quartiles from 0 with Gini's coefficient ranging from 0.52 to 0.63, 0.63 to 0.74, 0.74 to 0.85, and 0.85 to 0.96. In the first range there are only two universities, namely Bombay and A.P. Singh University (Fig. Nos. III.20 and III.18). In the second range, i.e., 0.63 to 0.74 there are six universities namely, Bhopal, Calcutta, Burdwan, Jadavpur, Madurai, Madras, Guru Nanak Dev and Bangalore universities (See Fig. Nos. III.19, III.25, III.23, III.22, III.17). The largest number of universities, that is, twentytwo in number, show a concentration ratio of 0.74 - 0.85 and the highest category, i.e., 0.85 - 0.96, eighteen universities are covered. This picture is a clear cut about the urban bias in higher education. As many as forty universities, out of a total of forty nine considered, show the Gini's coefficient of more than 0.74.

3.6.5 These values are further illustrated by the various graphs, Fig. III.14 to III.26.

Chapter IV

LEVELS OF DEVELOPMENT OF HIGHER EDUCATION IN INDIA

4.1.1 A study of the spatial structure of higher education would remain incomplete if we ignore a discussion on the unequal distribution of higher education over the different administrative regions of the country. Education, even though on the concurrent list lately, has primarily been a state subject. Hence differences in the pattern and structure of higher education can be expected to differ from state to state depending upon the varying degree of priority attached to education. It is in order to develop an understanding of such differences that we have undertaken the following analysis. In the previous chapter one dimension of the regional spread of higher education, i.e., between rural and urban centres has been discussed. This analysis was carried out at the level of the universities. The present analysis does not take into account the individual universities but all the universities taken together that lie in a particular state.

4.1.2 Most nations today are turning development-minded. The 'slogan' of this world-wide revolution is development and like other revolutionary slogans, it has various meanings for different groups. It may mean industrilization, or achievement of independence - political-economical etc. Whatever the specific meaning of development in particular context, it is a process with very wide dimensions. Modernisation of societies

which has become synonymous with industrialization and development is the most important aspect of this process. That is why the clamour for industrialization in under-developed countries. Education is but one dimension of the developmental process. So thinking of industrialization and modernisation without the spread of education specially the higher education would be nothing but an absurdity.

4.1.3 Where development remains a vital issue of discussion it is imperative to gauge the extent of human resource development. "Human resource development is the process of increasing the knowledge, the skills and the capacities of all the people in a society. In economic terms, it would be described as the accumulation of human capital and its effective investment in the development of an economy. In political terms, human resource development prepares for adult participation in political processes particularly as citizens in a democracy. From the social and cultural points of view, the development of human resources helps people to lead fuller and richer lives, less bound by traditions. In short, the process of human resource development unlocks the door to modernisation".[1]

4.1.4 Human resources are developed in many ways. The most obvious is by formal education, beginning with primary or

---

1 F. Harbison, and C.A. Myers, "Concepts of Human Resource Development" - Education, Manpower and Economic Growth, p.2.

first level education, continuing with various forms of secondary education and then higher education including the colleges, universities and higher technical institutes.

4.1.5 In a country like India, where there still exists a regional imbalance in educational development, it becomes essential to measure the extent to which a region is developed in education by selecting a set of quantitative indicators. Such a task sometimes becomes incredibly complex because of lack of disaggregative data. It is, however, important to observe that sometimes empirical analysis fails to explain the existing pattern of overall development of evaluation. Such an empirical analysis, however, gives one a rough approximation of the level of development of education of a particular state.

4.1.6 They help in further probing into the problem of education in India. Even though the inter-regional and intra-regional disparities in the levels of education are of great importance, the present study is restricted to regional differences in the levels of educational attainment.

4.1.7 The importance of such an analysis lies in bringing to light the inter-regional disparities in terms of numbers of educational institutions, student enrolment, teachers/ workers and direct expenditure. The importance of education in all states of India has been changing from time to time, depending upon the political economic and social structure.

4.1.8 The problem of education and attaining full literacy in India has come to occupy a pivotal position in our planning process. Equitable distribution of income and wealth can only come through a rigorous attempt of a planned development. In the Third Five Year Plan, it has been said that "Education is the most important single factor in achieving economic development and technological progress and in creating social order founded on the values of freedom, social justice and social opportunity. Programmes of education lie at the base of the effort to forge bonds of common citizenship to harness the energies of the people and to develop the natural and human resources of every part of the country."

4.1.8 Moreover, the problem of education is magnified to a large extent by the overwhelming number of the educated unemployed. An attempt to study such a problem, however, has not been included in the present analysis. When equalisation of educational opportunity remains a universally accepted social ideal, the debate continues about the extent of effectiveness of the different strategies suggested for its realization and many indeed are the strategies suggested, viz., free compulsory schooling for a certain period, provisions of a common curriculum for all children regardless of the background of diversification of courses to suit different needs of the students, provision of common schools for children from diverse backgrounds, government assistance etc. Despite this high talk about equalization of educational

opportunity, the regional imbalances, not to talk of personal inequalities, in education have persisted.

4.1.9 The importance of the study lies in the fact that it focusses attention on the levels of higher educational inclusive of under-graduate, post-graduate and research levels, in different states and their disparities and patterns in their overall development.

4.1.10 In view of the argument that so long as development of a country, whether economic, social or political or educational remains a vital issue of debate, an attempt has been made as to develop understanding of the regional disparities in the educational levels in terms of certain quantitative indicators. These include:

(i) Numbers of institutions per 1,000 population,

(ii) Enrolment of students in higher education per 1,000 population,

(iii) Teacher/worker ratio bringing into focus the importance of teaching occupation in the work force, and

(iv) Direct expenditure per student.

4.1.11 The last indicator gives us a rough approximation of how much a particular state is willing to spend on higher education. A better indicator could have been to measure direct expenditure per capita.

4.1.12 Finally an attempt has been made to examine the spatial distribution of the four indicators with the help of choropleth maps. The spatial picture that emerges from such an attempt gives one an idea of the general pattern of distribution in different states and Union Territories.

4.1.13 Data have been aggregated to include all higher education. No distinction between the types of education has, however, been made. The data are inclusive of all types of higher education, viz., General Education, Teacher Training Institute, Vocational/Professional Education, Special and other Education.

4.1.14 The major groups have been further classified into sub-groups of different types of education but it is of no significance in our present study. Our emphasis is on the measurement of educational development with respect to all higher education institutions in various states and Union Territories.

4.1.15 The present study merely reflects the extent to which a state is developed in respect to the four indicators. These chosen indicators tend to show the levels of development of higher education in states. It, however, does not incorporate any economic indicators to see if educational development follows closely the economic development of different states. Such a study would have been beneficial but the non-availability of data in the proper format forced us to keep such an exercise in abeyance.

4.1.16 The educational development of a country is vitally connected to all other aspects of development and the educational situation in a given period is an inseparable part of the general socio-economic situation in that period. The relationship between education and economic development is not a new discovery.

4.1.17 The study here has been confined only to the sphere of measuring the level of educational development upto the level of the colleges and above. The study highlights the fact that the level of educational development coincides largely with the economic structure of the state and the policies of the government.

4.2 DISPARITIES IN THE DEVELOPMENT OF HIGHER EDUCATION

4.2.1 Inter-state disparities in the four indicators discussed earlier are analysed below.

4.2.2 On closer examination of the data, one is immediately enamoured by the fact that the maximum number of institutions for all colleges fall into the category of general education. In order ofnumber of institutions, the professional and other education ranks second, followed by the relatively upcoming teacher training institutions for higher education in certain states.

4.3 (a) Institutions

4.3.1 The average number of institutions of higher education per 1,000 population (16-26 years taken as an approximation to coincide with the duration of completion of higher studies) for India as a whole was 1.8496 (Table IV.2). It ranged from the highest recorded by Chandigarh (.2555) to a negligible figure for Maharashtra 0.0126 to almost nil in Dadar, Nagar and Haveli and Lakshadweep Islands.

4.3.2 It is quite apparent from the data that there are obvious disparities between the numbers of institutions for higher education. Not even a single state records a minimum of one institution per thousand of population for higher education. Generally speaking, it is safe to say that number of educational institutions of higher learning are rather limited and selective in numbers all over India. This points to the lack of development of higher education in the country as a whole. For a country like India with a gigantic population, the government policy should be to develop a strategy of creating more institutions to avoid over-crowding in the few recognized or renowned institutions.

4.3.3 On the basis of the data computed this indicator has been grouped into five categories showing, very high, high, medium, low and very low level (Map. IV.1).

4.3.4 The number of college-level institutions as a percentage of population for Maharashtra ranks lowest and

	State/Union Territory	No. of Institutions	Students Enrolment	No. of Teachers	Direct Expenditure
1.	Andhra Pradesh	408	209,905	13,160	170,067,033
2.	Assa	138	66,661	4,096	48,055,635
3.	Bihar	461	246,970	11,276	134,606,737
4.	Gujarat	299	157,904	8,741	141,136,029
5.	Haryana	116	70,183	3,602	62,897,848
6.	Jammu & Kashmir	57	23,056	1,511	20,555,412
7.	Kerala	284	178,174	9,677	103,577,037
8.	Madhya Pradesh	388	172,585	9,379	120,248,926
9.	Maharashtra	617	256,087	12,827	272,743,225
10.	Mysore	405	185,921	10,654	140,262,600
11.	Nagaland	4	992	51	1,113,247
12.	Orissa	147	54,667	3,631	51,630,282
13.	Punjab	178	109,132	5,339	96,792,459
14.	Rajasthan	220	87,596	6,563	105,781,857
15.	Tamil Nadu	412	214,603	13,748	174,511,377

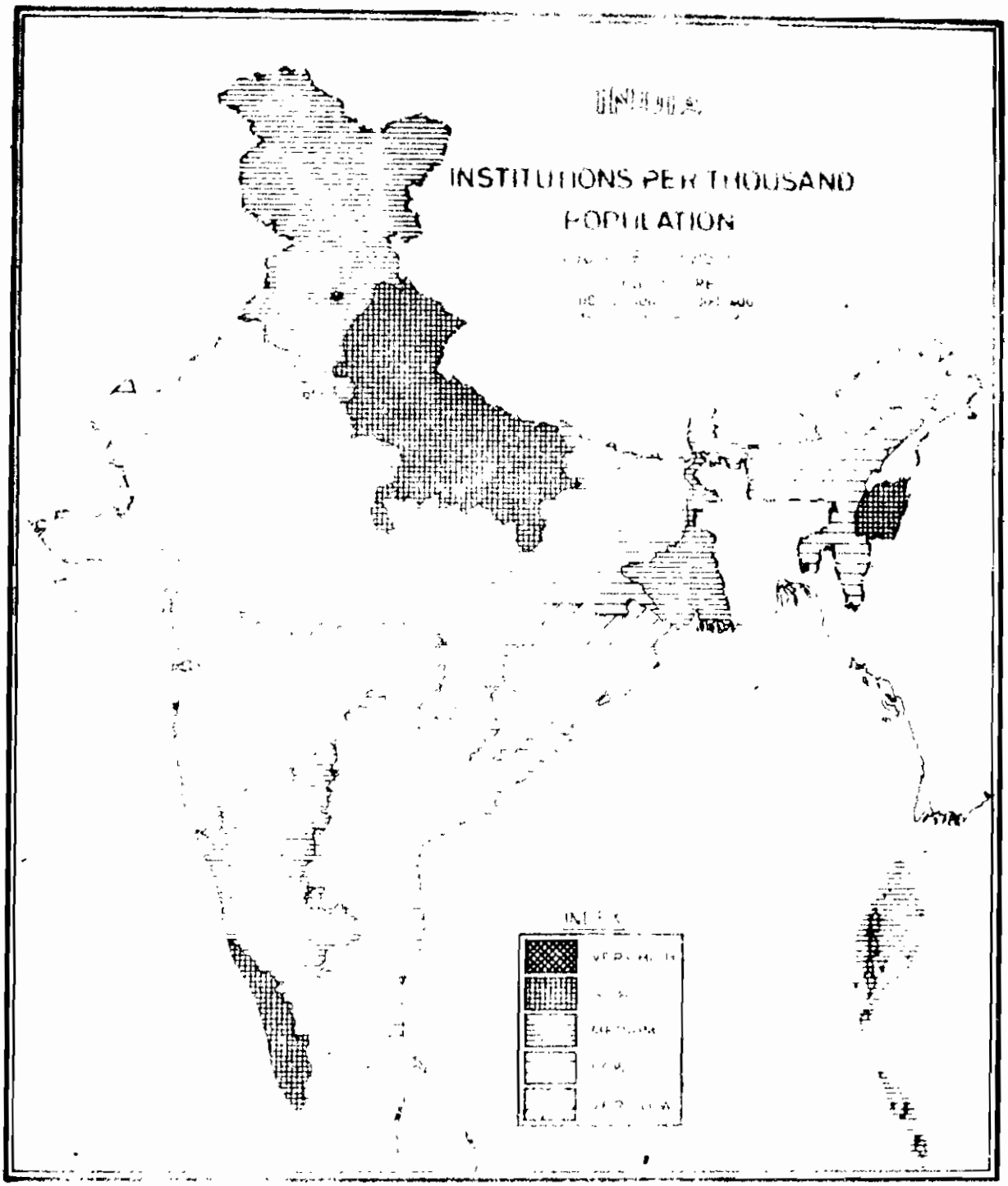
16.	Uttar Pradesh	1821	377,274	25,764	248,312,[illegible]
17.	West Bengal	509	343,584	15,940	233,700,062
18.	A...I.lands	2	181	17	183,549
19.	Chandigarh	18	20,850	1,388	48,063,315
20.	Dadar & Nagar Haveli	-	-	-	-
21.	Delhi	92	89,798	5,561	150,962,517
22.	Goa,Daman & Diu	13	5,592	439	10,223,334
23.	Himachal Pradesh	47	13,344	898	14,978,867
24.	L..[illegible] & A Islands	-	-	-	-
25.	Manipur	24	9,830	454	3,733,162
26.	M.[illegible].[illegible].	2	152	31	366,157
27.	Pondicherry	11	3,863	555	10,852,647
28.	Tripura	14	6,156	414	52,810,124
	TOTAL	5561	3,012,060	172,706	2,347,166,106

TABLE NO. IV.a

QUANTITATIVE INDICATORS FOR HIGHER EDUCATION DEVELOPMENT

	State/Union Territory	Institutions per 1000 pop. (16-26 Years)	Enrolment of students per 1000 Pop (16-26 Yrs.)	No. of Teachers per 1000 workers	Direct expenditure per student
1.	Andhara Pradesh	0.0567	24.6941	0.7308	810.2095
2.	Assam	0.0465	23.1709	0.8739	699.8971
3.	Bihar	0.0448	23.4354	0.6448	558.6037
4.	Gujarat	0.0579	30.6084	1.0411	893.8090
5.	Haryana	0.0611	36.9783	1.3572	896.1977
6.	Jammu & Kashmir	0.0650	26.2955	1.0998	891.5428
7.	Kerala	0.1048	66.1722	1.5567	568.0807
8.	Madhya Pradesh	0.0524	23.3219	0.6132	696.7518
9.	Maharashtra	0.0126	7.3061	1.0781	765.8454
10.	Mysore	0.0697	33.7405	1.0467	715.9651
11.	Nagaland	0.0369	2.1662	0.1946	114.1602
12.	Orissa	0.0386	14.3820	0.5300	944.4506
13.	Punjab	0.0645	39.5794	1.3646	886.9301
14.	Rajasthan	0.0461	10.3893	0.8154	1207.6105
15.	Tamil Nadu	0.0510	26.5837	0.9326	813.1823
16.	Uttar Pradesh	0.1013	23.5813	0.9425	636.9711
17.	West Bengal	0.0612	41.3599	1.2807	680.1831
18.	A.N. Islands	0.0716	6.4804	0.3734	1014.0828
19.	Chandigarh	0.255	295.9713	16.2064	2305.1949
20.	Dadar and Nagar Haveli	-	-	-	-

21.	Delhi	0.0976	25.3368	4.5270	1691.1345
22.	Goa, Daman & Diu	0.0731	31.4655	1.6161	1828.2070
23.	Himachal Pradesh	0.0730	20.7457	0.6944	1222.5170
24.	L.M. & A Islands	-	-	-	-
25.	Manipur	0.1138	46.6323	1.2242	379.7723
26.	M.M.I.A	0.0223	1.6988	0.1150	2408.9276
27.	Pondicherry	0.1213	42.6243	3.9355	2809.3831
28.	Tripura	0.0503	22.1510	0.9573	857.7199
	TOTAL	1.8496	1031.8702	45.7607	27197.4298


INSTITUTIONS PER THOUSAND
POPULATION

ultimately falls into the low category. In respect to higher educational institutions Goa, Daman and Diu (0.731) and Andaman and Nicobar Islands (0.0716) fall into the medium category, whereby Nagaland falls into the low level of development of institutions. Dadar and Nagar Haveli are negligible, for which data was not available at all. This, however, indicates the lowest level of development of educational institutions of higher education. Chandigarh (0.255), Kerala (0.1048); U.P. (.1013), Manipur and Pondicherry fall into the category classified as very high and high respectivel

4.3.5 Madhya Pradesh, West Bengal, Andhra Pradesh, Bihar, Tamil Nadu, Gujarat and Rajasthan fall into the medium categor Uttar Pradesh falls into the high category though the figure for it stood at .1013, rather an insignificant figure to show any form of development.

4.3.6 This quantitative indicator no doubt gives us a rough approximation of the 'expansionary' nature of the institutions and differences in their growth in each state. It does not, however, provide a good basis to show the educational development in each state. Nevertheless, the policies should entail programmes for developing for higher education to determine the general growth and development of education in different regions. Such a lack of development of college education side by side often results in regional imbalances.

4.4 (b) Enrolment

4.4.1 India, has, as such recorded extremely low level of literacy which have no doubt had a corroding effect on the progress and well being of the economy and which accounts for India being an underdeveloped country. There have been glaring deficiencies in the pattern of whatever little education that has been imparted over the past several decades. In view of this argument, it becomes inevitable to measure the educational development in different states. The indicator chosen is, of course, the enrolment of students in all colleges per 1,000 of population according to age group. This is an often debated question that whether more enrolment of students in educational institutions implies educational 'development' or not. It is, however, true to say that more enrolment of students in a state has progressive characteristics as it signifies that more people are getting educated - which in turn itself is a measure to future economic development. Enrolment of students especially in the population age-group of 16-26 years highlights significant development. It has all potentialities of a stock of high quality of manpower. Further, it reduces the prospects of abject misery and illiteracy which characterise the country. This is argued on the prospect that greater the enrolment of its population, the better the level of educational development, which for the present time remains the crux of the problem. This, of course, has its obvious limitations.

4.4.2 The number of students enrolled in colleges per 1,000 population ranged from 295.9713 in Chandigarh to 1.6988 in N.E.F.A. Chandigarh being an urban centre recorded the highest enrolment per 1,000 (16-26 years) in higher education. The great unevenness of the spread of facilities for higher education violates both considerations of equality of opportunity in colleges which we seek to promote, as well as efficiency. The inequality is reflected in the general development in different states.

4.4.3 Only 15 per cent of the total number of colleges have enrolment of 1,500 which have been laid down by the Education Commission of India as an optimum size of a college. Though considerations of economy would dictate the setting up of optimum size college considerations of equality will call for setting up of colleges in areas which will also have an enrolment inducing effect. The educational load seems to be mostly in Chandigarh (295.9713), Delhi (95.3368) and Kerala (66.1722) for higher education.

4.4.4 States like Bihar, Rajasthan, Madhya Pradesh remain educationally backward. This often reflects the generally low level of economic development.

4.4.5 Map IV.2 shows the states which fall into various categories. The enrolment of students to colleges in Maharashtra falls into the group classified 'very low' in higher education. The enrolment is only 7.3061 per 1,000 population. The variation in the educational load from one

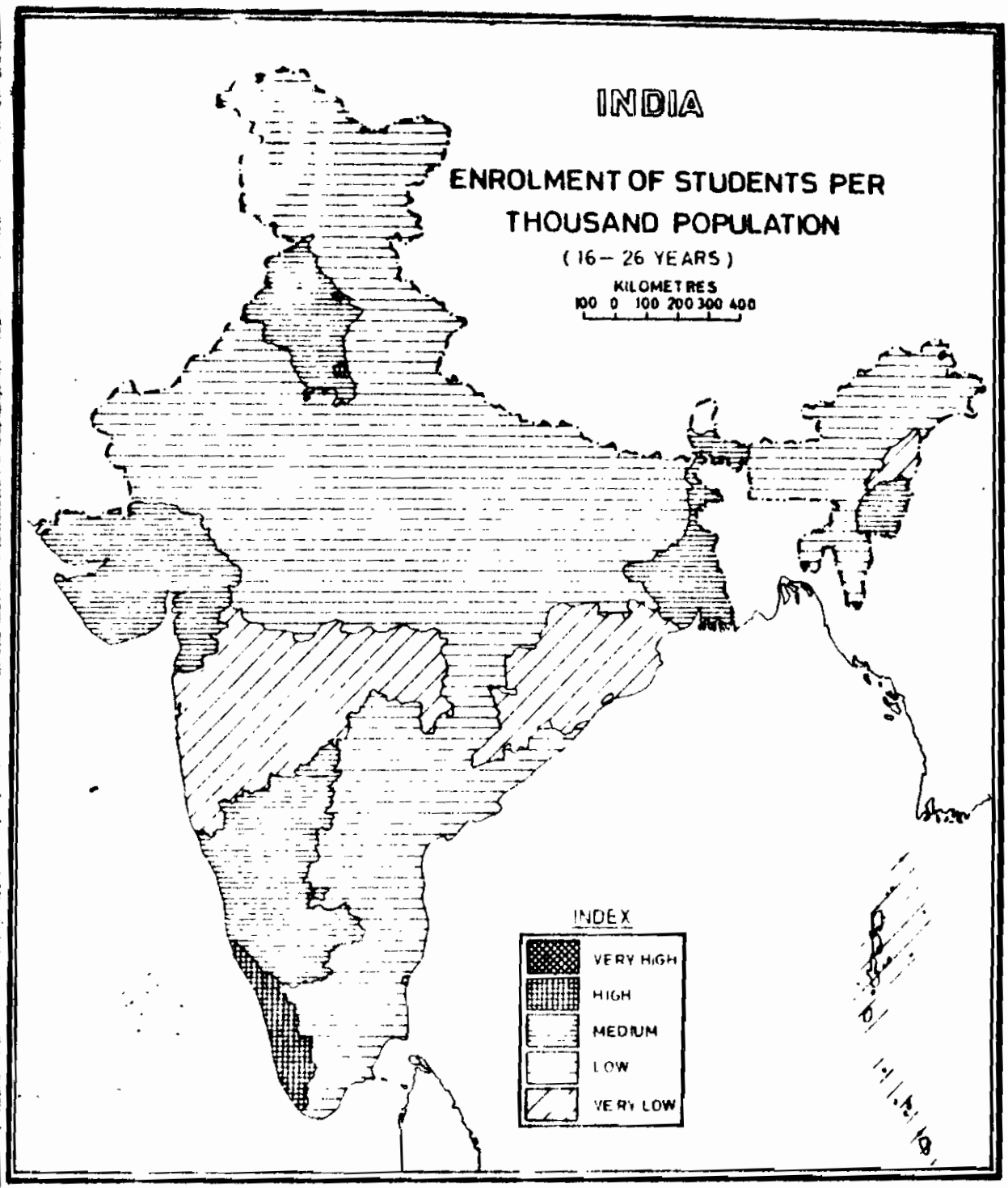

INDIA
ENROLMENT OF STUDENTS PER THOUSAND POPULATION
(16 – 26 YEARS)
KILOMETRES
100 0 100 200 300 400
INDEX
VERY HIGH
HIGH
MEDIUM
LOW
VERY LOW

Fig IV

level to another and from one state to another is evident from Table IV.2. In higher education, large imbalances between sections and regions have been evident during the last three Plans. It is apparent from the maps grouped into categories that there exists great disparities. For higher education, Chandigarh ranks highest and Tamil Nadu falls into the group classified as 'low' followed by Andaman and Nicobar Islands in the 'very low' category. Enrolment in states of Andhra Pradesh and Madhya Pradesh in general are low for higher education. On the contrary, it may also be a possibility that the educational systems of these states are sufficiently developed at the moment but that the persons migrate for reasons of employment and better educational facilities to more developed states. Whatever may be the reason, those responsible for the development of these states must sort out reasons for the general low educational levels in numbers of institutions enrolment and teachers and formulate development programmes and policies accordingly.

4.4.6 Uttar Pradesh, Gujarat, Mysore, Tripura, West Bengal, Punjab and Assam fall into the medium group (Map IV.2). Haryana falls into the medium category.

4.4.7 It is of utmost importance to evolve a planned strategy of developing first the primary education in India, higher education, of course, conforms to the change in economic development if rightly utilised. Hence a higher enrolment ratio to population in higher education may necessarily not be a suitable indicator for a measure of

development if there remains the problem of educated unemployment.

4.4.8 Although enrolment of students has progressive qualities, one should not overlook the fact of the number of dropouts or failures in each institution. In a quantitative analysis of this kind sometimes the quality of education is overshadowed.

4.5 (c) Teachers

4.5.1 The number of teachers in higher educational institutions per 1,000 workers is an equally important indicator. However, one important limitation of this indicator is that in no way it reflects the quality differences. Qualifications of teachers differ among states and because of serious shortages of teachers, the substantial percentage of unqualified or under-trained teachers are included in the totals for some states, particularly those developed less economically. Thus, in the less developed states, inclusion of all teachers in this index greatly exaggerates their stock of high level manpower.

4.5.2 An index of teacher-student ratio was not taken into consideration, because of the high degree of exaggeration in the result. For instance, in a certain state, where enrolment of students was low, the staff student ratio worked out high in comparison to a Union Territory like Delhi where the enrolment was much higher. This was rejected on the grounds of causing obscurity in the index of development.

4.5.3 Five class groups in the Map IV.3 represent number of teachers per 1,000 workers. This indicator undoubtedly gives the strength of the states in terms of teachers employed. Moreover, it shows the level of development as one has an idea as to what percentage of people go in for the teaching profession. This, of course, involves the displacements due to migration of persons to bigger cities on account of better facilities and higher pay. Here the government policy should be to evolve a system of incentive schemes in each state. Migration of teachers to metropolitan cities is mostly in case of higher education.

4.5.4 On closer scrutiny of the map, one finds that Chandigarh maintains its uniformity as the teachers per 1,000 workers in this Union Territory ranks highest. The value being 16.2064. The reason that could be attributed for a high development of most of teachers is because being an urban city, no other activity such as agriculture is of prime importance. Hence the due emphasis is laid on the development of education in general.

4.5.5 Next states in the context of teachers per 1,000 of workers are Delhi and Pondicherry. They all fall into the group classified as 'high' in the map IV.3. Despite the agricultural dominance, the literacy rate in Kerala is very high, being around 60 per cent.

4.5.6 The data reveal that there exists an imbalance in the number of teachers to total workers in college education,

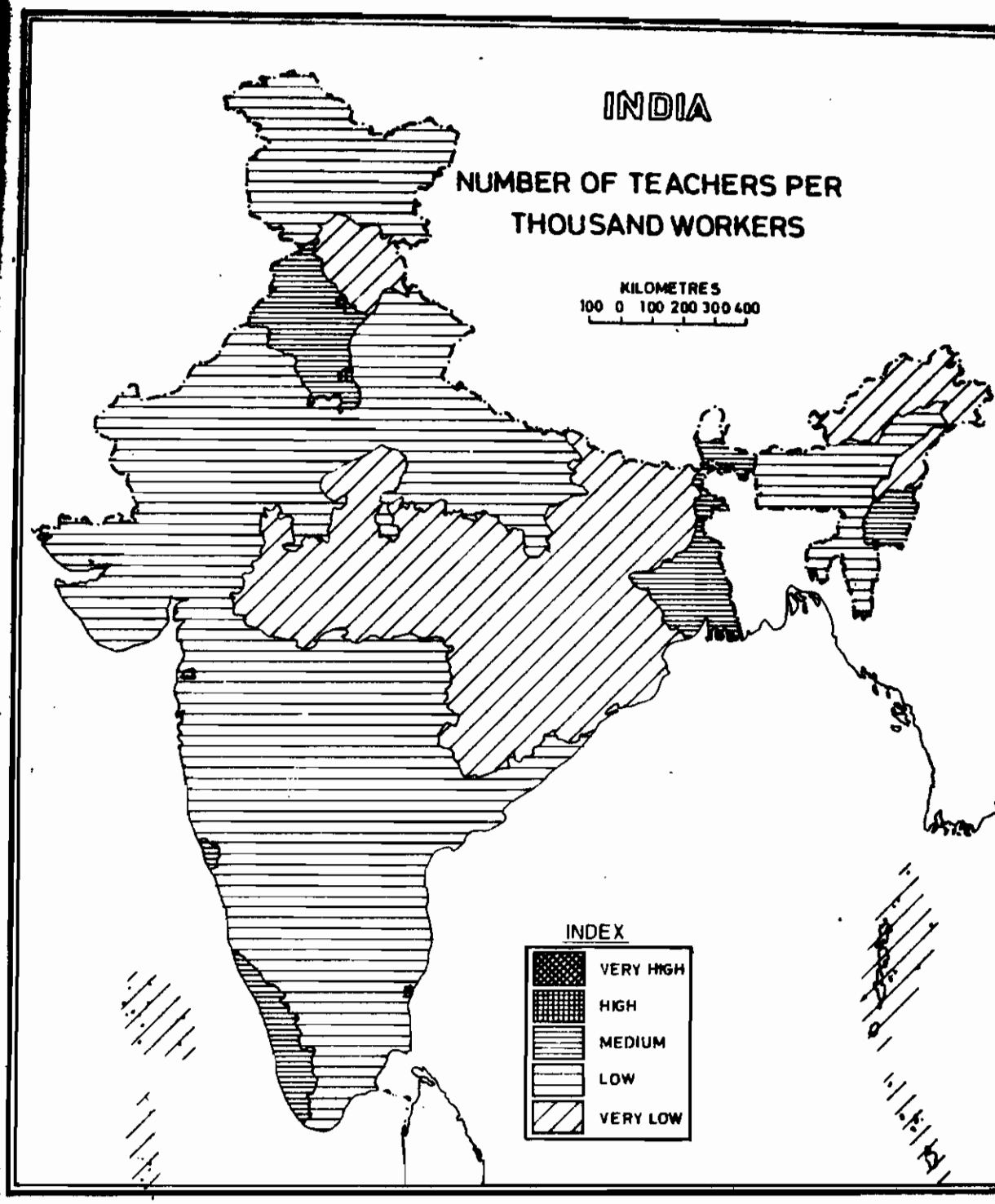

INDIA
NUMBER OF TEACHERS PER
THOUSAND WORKERS
KILOMETRES
100 0 100 200 300 400
INDEX
VERY HIGH
HIGH
MEDIUM
LOW
VERY LOW

Fig. IV 3

especially so in high levels of education. In most of the states there is not even one teacher per thousand of working population which reveals the glaringly low level of educational development. This could be easily expected if we keep in mind the number of institutions per thousand of population as well as enrolment figures. States of Jammu and Kashmir, Maharashtra, Tripura, Uttar Pradesh, Tamil Nadu and Assam fall into 'low' class group. This highlights the fact of respective dearth of teachers in higher education in the above mentioned states. It ranges from 16.2064 in Chandigarh to as low as 0.53 in case of Orissa, 0.3734 for Andaman and Nicobar, 0.1150 for N.E.F.A. (Table IV.2). The last three, of course, are closely related to the low level of economic development.

4.5.7 This index of development, however, is truly corelated with state requirements of teachers. Moreover, it depends upon whether the economy in a particular state economy has a greater demand for agricultural, industrial or other category of workers. But on general assessment of development record of other countries, it is apparent that guidance is essential for a change in technology which comes through gradually. This objective can only be realised through education and if there exists a dearth of teachers in certain states, this might create regional imbalances within that sector of development. They should follow a policy of balanced development of teacher/student ratio. In some backward areas, such as N.E.F.A., the excess teachers per 1,000 students can take the form of disguised unemployment.

4.5.8 Rajasthan, Uttar Pradesh, Mysore, Bihar, Orissa, Assam, Jammu and Kashmir and others all fall into 'low' and 'very low' class group. The issue of educational development becomes a rather debatable topic, as one has to take into consideration many factors (economic, social and political) to determine a balanced growth.

4.5.9 The Educational Commission (1964-66) set up by the Government of India has recommended that "work experience should be introduced as an integral part of all education - general or vocational in order to relate education to life and productivity".

4.5.10 The Pre-Primary Training Institutions and the Home Science colleges have played a significant part in the expansion and improvement in India.

4.5.11 *Dalav Kalvi Nilayam at Madras is one of the oldest training institution in India. It runs a nursery school for older children and an excellent training programme for nursery school teachers. The teachers trained in the Nilayam are now creditably working in all parts of Tamil Nadu. Relative importance to teacher training institutions is being given by the state (Tamil Nadu).

4.6 (d) Expenditure on Higher Education

4.6.1 The pattern of educational finance is determined by each state's policy in respect of education and what it

---

* Report of Education Commission (1964-66), Government of India, p.7.

proposes to do at different levels. Thus it differs from state to state and it may show large variation in the financing of educational institutions.

4.6.2 If one looks at the educational finance in different states one is struck by the great unevenness.

4.6.3 The University Grants Commission can also rearrange their financial allocations to discourage the expansion of institutions of higher education and research. Some of the states which are lagging behind in educational development at this level will no doubt need encouragement and financial assistance. But this should be done in a discriminating manner. The need of the country today is to accelerate and help the development of basic education at any cost, than assisting in the development of higher education where greater cost is incurred.

4.6.4 Looking at the data one is immediately struck with the heavy cost incurred per pupil in higher education. Another striking feature is that the variations in direct expenditure per pupil are tremendous among the states. The amount of expenditure incurred on higher education is overwhelming, the highest expenditure per pupil is in Pondicherry Rs.2809.3831 to lowest in Nagaland Rs.114.1602 (Table IV.2). This extra-ordinary phenomenon that exists in heavy expenditure per pupil in higher education violates the policy implications of the states to develop and encourage primary and secondary education and equalisation of opportunity.

4.6.5 Since there exists a paucity of funds in states for schemes of development and improvement of educational facilities it is argued that these should be substantially augmented by the Central Government. But the contribution of the Central Government is, however, channelised into assisting the development of higher education than developing primary or secondary education.

4.6.6 Map IV.4 highlights the direct cost per pupil in various states. The cost per pupil in higher education in the Union Territory of Delhi is high - the value stands at Rs.1681.1345. Disparities in cost incurred on higher education are evident from this map. Goa, Daman and Diu fall into the 'high category' (Rs.1928.2070). Other states which fall into this category are : Rajasthan (Rs.1207.6105), Himachal Pradesh (Rs.1122.5150) and Chandigarh (Rs.1014.0828). Orissa (Rs.944.506), Haryana, Gujarat, Jammu and Kashmir, Punjab, Tripura, Tamil Nadu and Andhra Pradesh fall in the medium category (see also Table IV.2). Dadar and Nagar Haveli and Lakshadweep islands spend negligible amounts only.

4.6.7 The differences in expenditure per pupil is of great magnitude between various states.

4.7 (e) Composite Index

4.7.1 If we take into account the interrelation between the variables discussed above, we get an interesting picture.

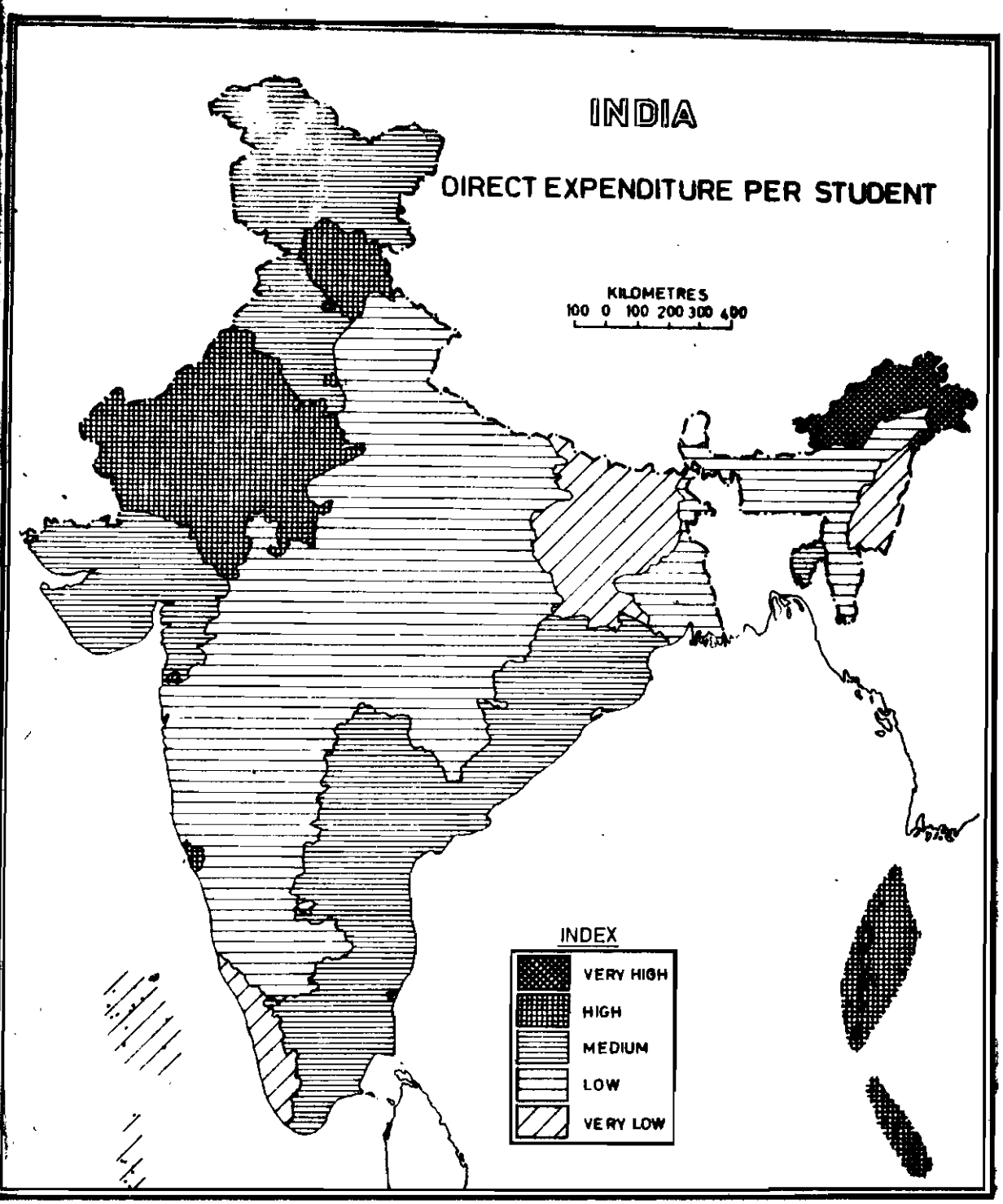

INDIA
DIRECT EXPENDITURE PER STUDENT
KILOMETRES
100 0 100 200 300 400
INDEX
VERY HIGH
HIGH
MEDIUM
LOW
VERY LOW

Fig IV·4

In this section we have tried to capture the overall picture of levels of higher education by compositing the four indicators that have been discussed earlier. Such a picture gives an accurate account of the existing pattern of education in various states. For the purpose of analysis, a composite index in respect to four variables has been computed. It shows the differences in their level of development of education, especially in those states where development has been arrested by a number of socio-economic and political factors, which are not accounted for in this analysis. An understanding of the existing disparities and diversities of education in states are important to be cognised before any rigorous planning can be done.

4.7.2 The composite index has been grouped into five classes. Chandigarh ranks highest in terms of educational development taken into consideration the index being 24.1926 (Table IV.3). This brings to light the planned nature of educational development in the Union Territory. Delhi (8.5664), Pondicherry (8.2948), Kerala (4.9237), Goa Daman and Diu (4.8423) and Manipur (4.1295) come second in order of educational development. This coincides of course, with the high level of literacy in these Union Territories. On the other hand, Maharashtra (1.8373) falls into the category of very low development. The disparities are of a high order not only between various states but also within the states.

Equalization of the Indicators ... (division by mean) and Composite Index

	State/Union Territory	Institutions per 1000 Pop. (16- 26 Yrs.)	Enrolment of students per 1000 Pop (16-26 Yrs.)	No. of Teachers per 1000 Scholars	Direct Expenditure per student	Composite Index
1.	Andhra Pradesh	0.9590	0.6700	0.4471	0.8341	2.9102
2.	Assam	0.7045	0.6287	0.5347	0.7205	2.5884
3.	Bihar	0.6737	0.6359	0.3945	0.5750	2.2841
4.	Gujarat	0.8772	0.8305	0.6370	0.9201	2.2648
5.	Haryana	0.9257	1.0034	0.8304	0.9226	3.6821
6.	Jammu & Kashmir	0.9848	0.7135	0.6729	0.9178	3.2890
7.	Kerala	1.5078	1.7955	0.9525	0.5951	4.9237
8.	Madhya Pradesh	0.7939	0.6328	0.3752	0.7173	2.5192
9.	Maharashtra	1.1909	0.1982	0.6507	0.7885	1.8373
10.	Mysore	1.0560	0.9155	0.6404	0.7370	3.3489
11.	Nagaland	0.5560	0.2487	0.1190	0.1175	1.0442
12.	Orissa	0.5948	0.3902	0.3243	0.9723	2.2716
13.	Punjab	0.9772	1.0739	0.8350	0.9131	3.7992
14.	Rajasthan	0.6984	0.4989	0.4989	1.2432	2.9394

16.	Uttar Pradesh	1.5348	0.6398	0.5767	0.6557	3.4070
17.	West Bengal	0.9272	1.1223	0.7885	0.7002	3.5382
18	A & N Islands	1.0848	0.1758	0.2284	1.0440	2.5330
19.	Chandigarh	3.9712	0.0312	0.9170	2.3732	24.1926
20.	Dadra & Nagar Haveli	-	-	-	-	-
21.	Delhi	1.4787	2.5869	2.7701	1.7307	7.5664
22.	Goa, Daman & Diu	1.1075	0.2538	0.9809	1.8821	4.8423
23.	Himachal Pradesh	1.6060	0.5629	0.4249	1.1556	3.2494
24.	L. A Islands	-	-	-	-	-
25.	Manipur	1.7242	1.2653	0.7491	0.3909	4.1295
26.	M.P.A	0.3373	0.0460	0.0703	2.4800	2.9341
27.	Pondicherry	1.0373	1.1566	2.4082	2.2922	9.2948
28.	Tripura	0.7621	0.6010	0.5057	0.8830	2.8318

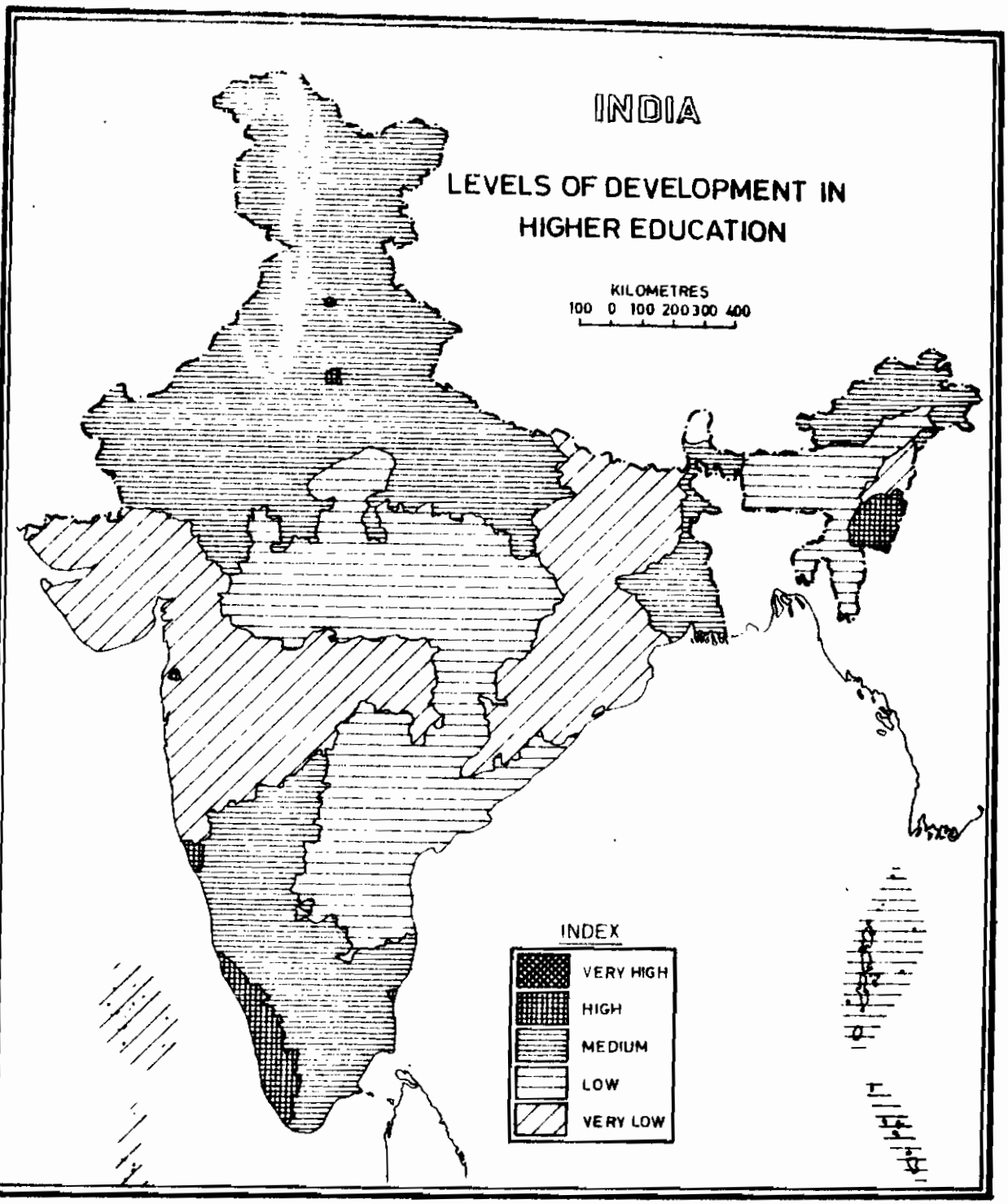

INDIA
LEVELS OF DEVELOPMENT IN
HIGHER EDUCATION
KILOMETRES
100 0 100 200 300 400
INDEX
VERY HIGH
HIGH
MEDIUM
LOW
VERY LOW

Fig.IV 5

4.7.3 The islands of Lakshadweep and the territory of Daman and Diu display a considerable backwardness in educational development. In fact, Lakshadweep is devoid of facilities of higher education. Nagaland's index is a meagre value of 1.0442, showing a 'very low' level.

4.7.4 The states falling the medium category are Punjab (3.7992), Haryana (3.6821), West Bengal (3.5382), Uttar Pradesh (3.4070), Mysore (3.33489), Jammu and Kashmir (3.5382), Rajasthan (2.9394), N.E.F.A. (2.9341) and Tamil Nadu (2.9017).

4.7.5 The states in the 'low' category include Andhra Pradesh, Tripura, Assam, Andaman and Nicobar Islands and Madhya Pradesh. Table IV.3 and map IV.5 bring out this fact. Maharashtra and Nagaland are included in the 'very low' category (Map IV.5).

4.7.6 Surveying the educational progress, one finds that there exist great imbalances in higher education. It seems that expansion of higher education in certain areas has taken place at an increasing pace. But these islands of development having affluent academies, unfold the process of 'enclavisation'. It is necessary that suitable policy changes are introduced at an early date to correct these distortions.

4.7.7 Though indicators, such as enrolment, teachers, etc., reveal an increasing trend in the year 1969-70, it has

nevertheless given rise to two problems with inevitable social and political consequences. First, under the tremendous pressure of numbers the quality of education is deteriorating and in some respect the educational system appears to be breaking down as is evidenced by the growing number of campus troubles during the last few years. Secondly, the rather slow pace of economic development, in relation to schools (especially secondary education) higher education cannot appropriately absorb the products of these institutions and is causing massive unemployment among the educated. Hence, the word 'development' of education cannot be viewed in isolation. An attempt to study the lopsided and unbalanced development of education at collegiate levels in states is necessary.

Chapter V

CONCLUSION

5.1.1 There is a growing realisation among regional scientists, location economists, geographers and planners that in developmental planning having the objective of integrated spatial function, and regional development, the structure of spatial organisation, i.e., the pattern of inter-related location of human activities interacting with one of basic elements must be taken into consideration. The need for spatial planning in particular is greatest in ex-colonial nations, whose spatial structure remain oriented to colonial system and, therefore, are not necessarily geared to rapid economic growth or nation building (Logan 1972). In view of this argument, the present research on 'Regional Structure of Higher Education' was undertaken to see how education is organised in space, and what are the processes that have generated the regional differences. Education, like so many components of society, is hierarchical in nature. This like any other element of society is organised in space, ranging from higher order to lower order urban centres, and also from large-sized villages to medium and then to small-sized villages. Since the processes of urbanisation and economic development are closely interlinked with education, it is important to see the structural changes in our educational system. Impulses of educational change are transmitted in a size 'rachet' sequence, from higher to

lower centres in the urban hierarchy. Similarly, rural areas also undergo changes with the change in our developmental process.

5.1.2 Hence, the present research work is being completed in the light of the following objectives, viz., to trace the origin of formal education institutions and their growth in different phases, to analyse their distributional pattern and spatial arrangement, to classify them into urban/rural hierarchy on the basis of their population size, to see their spatial distribution in terms of enrolment, to examine the relationship of enrolment and population and also to study the inequalities and level of development of education in various states. Finally the attempt has been made to examine the existing pattern and project a more rational approach to future educational planning. A few specific problems for future research in this direction have also been pointed out.

5.1.3 Each of the chapters is concerned with specific issues which was subjected to a thorough empirical analysis. Chapter II dealt with spatial structure of higher education and processes of development - a historical survey. The growth of education has been dealt with in two distinct phases : (i) pre-Independence era, and (ii) since Independence. From times immemorial education, especially higher education in India was the privilege of the few. In ancient times too, higher learning was restricted to the upper castes, viz., the

Brahmans. In fact, the system was primarily Brahmanical, in the sense that it was the monopoly of a learned caste whether Hindu, Buddhist or Jain. Religion formed the basis of their education. During the Muslim rule, madrassahs were established and here too, religion formed the mainspring of higher learning. Institutional elitism existed during this period too.

5.1.4 Education, however, took a real turn with the coming of the British. The origin of the present system of education can be traced to the beginning of the 19th century when Macaulay presented his famous Minute. The introduction of English system of education in India alienated the masses of the country and in turn gave rise to that section of society who became in time mere mouthpieces of the British. It did not encourage mass education but on the other hand set up colleges for the elite who on the basis of downward filtration theory would spread education among the masses. This, however, did not happen as it only accelerated the process in widening the gulf between the rich and the poor and also between the advanced and the backward region. This system of education divided the nation into two distinct regions, viz., (i) Coastal Rimland and (ii) Interior Heartland. Rimland incorporated those areas which had the impact of the British system of education and heartland region (Bihar, Uttar Pradesh and Madhya Pradesh) coincided with the low educational development. In fact, the first

three Presidency Colleges that were established in 1857 fell into the Coastal Rimland, that being Calcutta, Bombay and Madras. Another salient feature that emerged from this form of education was that the education was urban biased, catering to the needs of the British. Education remained confined to the upper classes and the real and pressing needs of the rural people remained beyond reach.

5.1.5 However, by the end of the 19th century and beginning of the 20th century, Indian national opinion saw clearly the dangers inherent in the British policy. This reaction gained the support of many and finally India emerged Independent in 1947. The Government then sought to achieve their goals in the national reconstruction of ideas, education being one. This culminated in the formation of various committees and commissions in order to ameliorate the condition of our educational system. Among the notable ones were the University Education Commission 1948, the University Grants Commission 1956, and the Education Commission, 1964. All these stressed the importance of equalising educational opportunity and improving the standards of education which was essential for the economic and cultural development of the country. Education in the rural areas was also stressed on. A number of rural institutes were established to encourage studies related to the rural life and thence to make it more relevant to the societal needs. The real phase

started when the national Plans (Five Year Plans) were taken up, and phenomenal 'expansion' of education was the result. Despite the concerted effort made on the part of the Government to alleviate the people from ignorance and illiteracy, progress in education was slow. This was due to some political reasons, and economic reasons. There exists today intra-territorial and regional inequalities.

5.1.6 The hue and cry of equality of education, irrespective of caste, creed or religion seems to have met with little success. Chapter III dealt emphatically with the regional imbalances in our educational system - between urban and rural and also within urban and rural as well. The distribution of education, both in terms of quality and quantity, is highly uneven. Moreover, as various studies have indicated, it seems to correspond directly to stratification and inequality in society.

5.1.7 The colonial structure of spatial organisation oriented towards metropolitan centres or rather high order urban centres have accentuated during the course of educational and economic growth. However, little has been done to achieve an urban/rural symbiosis in economic development.

5.1.8 There are in 1975-76, 100 affiliating and unitary universities and ten institutions deemed to be universities and nine institutions of national importance. All these are located in urban areas, but their domains spread to the

rural and urban areas. However, the educational load is greatest in the urban areas, leaving the rural areas in the backwaters of educational development. One of the most important functions the Indian city serves is as a centre of higher education. Almost all the 4,508 colleges and teaching departments that are affiliated or belong to the 100 universities in the country are located in towns or cities. Here again, they cluster mostly in the capitals of the states. Thus, while the city generally functions as a centre of higher education, the capital of each state is the focus which offers maximum facilities.

5.1.9 It would be interesting to note that the main finding of Chapter III shows that as the city size decreases, the percentage of enrolment also decreases in all the universities. Hence, it is fair to say that education like other variables follows closely a set of development and reflects a hierarchy of system. To state more explicitly it just means that the educational load seems to be greatest in the highest order urban centre and goes on decreasing with a decrease in the city size. However, the situation in rural areas is somewhat different to that of urban. Here it was found that the medium-sized villages (2,000 to 4,999 population) formed the bulk of the students enrolment. In some universities the large sized villages (10,000 and above of population) were completely devoid of any such facilities. There is in fact a paucity of facilities of higher education in certain groups of rural/urban in various universities.

5.1.10 There exists a wide gap between enrolment and population in various categories of urban and rural centres for different universities. It is found that majority of the affiliating universities accounted for less than 35 per cent population in urban areas, except for Ravi Shankar and Jabalpur universities. On the other hand, enrolment in the urban for most of the universities accounted for 80 per cent or more of the total enrolment. This indicates the lacunae in our existing educational system and creates an anomaly in our planning process which aims at equalising educational opportunities.

5.1.11 Great inequalities exist with respect to population and enrolment for all universities. However, the degree of inequality varies from one university to another, as is evident from Table III.3 which gives the value of Gini's coefficient. This inequality in our education is explained by the fact that our overall educational structure still suffers from colonial orientation of being absolutely urban-biased. Impulses of educational change instead of transmitting itself from the higher order urban areas to lower order centres, inclusive of rural areas deemed to have arrested the growth of the latter due to a number of socio-economic and political factors, which have been highlighted in the course of the analysis. This urban concentration of education suggests two questions. First, to what extent do the outlying areas utilise the facilities available in the cities? Do young people from the villages

and small towns that are not equipped with colleges come to study at the colleges in larger cities? Second, what implications does the urban clustering of universities student population have for life in the cities? Do distances affect the travel pattern of students? Pragmatically speaking, the socio-economic development and educational expansion should be viewed as interdependent processes, and hence a more rational approach is needed for future educational planning. An alternative and more comprehensive approach to the concept of educational development has to be evolved to fight the basic flows in the system. Since education is spatially biased, the need is felt to locate colleges in far flung backward areas provided the basic infrastructure for such development is existent. Decision on the location of new colleges should be based on locational principles emphasizing demand or the threshold distance among various service centres, their size and hierarchical network, so that equal educational opportunities may be provided to all irrespective of caste, creed, religion and even political bias.

5.1.12 As needs or demands differ from region to region so differs the level of development of education in various states. This level of development of education undoubtedly is a reflection of the socio-economic condition of that place. Chapter IV dealt with the finding of the levels of development of various states and Union Territories with respect to four

indicators as mentioned in the chapter. Illumination of the existing disparities and diversities in the level of educational development in different states is important to know before any vigorous planning is attempted. It is found that Chandigarh ranks highest (24.1926) in terms of educational development. This throws light on the planned development of the city. Delhi (8.5664), Pondicherry (8.2948), Kerala (4.9237), Goa, Daman and Diu (4.8423) rank second in order of educational development for higher education. All these states coincide, of course, with the high level of literacy. Moreover, it also points to the fact that some of these states in general had some influence of the English system of education and economically too are better off than most other states. Nagaland, Bihar, Andhra Pradesh, Assam, Tripura, and Madhya Pradesh show low development of higher education. The reason attributed is the relative backwardness of these states, both socially and economically. This also provides an explanation for such ineffectual planning and lack of educational development in these areas. Poverty persists in Bihar which creates imbalances in the economy and social structure, and hence hampers any prospect of educational development. Moreover, the population is large in these states (Uttar Pradesh, Bihar) and educational facilities are few in number. Even if development has taken place in these areas, it has only created artificial islands of affluent academies, isolated from their environment.

5.1.13 This study, nevertheless, has given rise to two burning problems with inevitable social and political consequences. First, under the tremendous pressure of numbers in certain institutions, the quality of education is deteriorating and in some respect the educational system appears to be in fact breaking down by a number of campus troubles during the last few years. Second, the rather slow pace of economic development in certain areas and regions in relation to higher education has created the problem of educated unemployed. Hence, the word 'development' of education cannot be viewed in isolation, but such an attempt to study the lopsided and imbalanced development of higher education in states opens ways for further investigation for such an educational situation.

5.1.14 To conclude, we can safely say that our regional structure of education, except for a minor change stands stagnant on the edifice built by the British. It is true that the country evolves an integrated plan of development to promote rapid economic and social growth. Within the broad framework, however, micro-level planning for educational development must be fitted in taking into account regional variations which are far too many. Whatever way it is viewed, education is a sine qua non for development - material, intellectual and spiritual. The unfortunate reality in this country is that the vast majority of the population still remains illiterate. The first step to be undertaken with

respect to education should be to make the education productive and relevant to the society at large. It is imperative to restructure education because it still remains inadequate in relation to the size of the population and settlement pattern. Besides, educational institutions are deficient in infrastructural facilities.

5.2 SUGGESTIONS FOR FURTHER RESEARCH

5.2.1 Research is an on-going process. Education itself is a life long process of learning and incorporating new ideas with changing times. The more we plunge into the ocean of knowledge the more vistas of knowledge open for us. No amount of research in any field can exhaust the fund of knowledge in that field or solve all the problems of that field. Greater sophistication means new problems and thus implies more research. Hence, it will not be proper on the part of any researcher to think that he has covered all the dimensions of a particular problem. The investigator also does not claim that he has touched all the dimensions of the problem which he has taken up for investigation.

5.2.2 However, the present endeavour is the spade work done at micro and macro level both in fields of education and geography and in future itwould definitely form some base for further investigations into allied problems like:

1. How has location affected the inflow of students in a given area;

2. Why movement of pupils show areal variations under the uniform nature of network of transportation; and
3. Why pupil participation in education shows greater variations where natural and economic conditions do not differ much?

SELECT BIBLIOGRAPHY

BOOKS

Abler, Adams, and Gould, Spatial Organisation : Geographer's View of World, New Jersey, Prentice Hall, 1971.

Adams, Don (ed.), Education in National Development, London, Routledge and Kegan Paul, 1971.

Ahmad, Manzoor, and Coombs, Philip H. (ed.), Education for Rural Development, Cast Studies, for Planners, New York, Praeger, 1975.

Altekar, A.S., Education in Ancient India, Varanasi, Nand Kishore and Bros., 1965.

Anderson, C. Arnold, and Bowman, Mary Jean, (ed.), "Patterns and Variability in the Distribution and Diffusion of Schooling", Education and Economic Development, Chicago, Aldine, 1966.

_____, Education and Economic Development, Chicago, Aldine, 1965.

Anderson, C. Arnold, "Access to Higher Education and Economic Development", in Halsey et.al.(ed.), Education, Economy and Society, New York, The Free Press, 1965.

Banks, Olive, The Sociology of Education, London, B.T. Balsford, 1968.

Basu, Aparna, Growth of Education and Political Development in India, 1898-1920, Delhi, Oxford University Press, 1974.

Beeby, C.E., The Quality of Education in Developing Countries, Cambridge Massachussetts, Harvard University Press, 1968.

Bhave, W.V., Development of Education in Madhya Pradesh, Doctoral Thesis, Jabalpur University, 1967.

Biswas, Arabinda, and Agrawal, Suren, (ed.), Indian Educational Documents since Independence, Committees, Conferences, New Delhi, Academic Publisher, 1971.

Blaug, Layard, M.P.R.G., and Woodhall, M., The Causes of Graduate Unemployment in India, London, Oxford University Press, 1969.

Bloom, Benjamin S., Stability and Change in Human Characteristics, New York, John Wiley and Sons, 1964.

Boudon, Raymond, Education, Opportunity and Social Inequality, Changing Prospects in Western Society, New York, John Wiley 1973.

Bowen, William G., Economic Aspects of Education, Princeton, New Jersey, Princeton University, Industrial Relations Section, 1964.

Brosan, George, Carter C. Layard, R., Venables P., Williams, G., Patterns and Policies in Higher Education, England, Penguin Books, 1971.

Buch, M.B. (ed.), A Survey of Research in Education, Baroda, Centre of Advanced Study in Education, M.S. University, 1974.

Burgess Tyrrel, Richard Layard and Pitambar Pant, Manpower and Educational Development in India, 1961-86, Edinburg, Oliver and Boyd, 1968.

Butler, Lord, Survival Depends on Higher Education, Delhi, Vikas Publishers, 1971.

Chakarabarthy, Syamal, Twenty Five Years of Education in India, New Delhi, Peoples Publishing House, 1973.

Chattopadhyay, Paresh, "Modernisation of Economic Life in Underdeveloped Countries" in Desai (ed.)

Coleman, James S. (ed.), Education and Political Development, Princeton, New Jersey, Princeton University Press, 1965.

Coombs, Philip H., World Educational Crisis, A System Analysis, New York, Oxford University Press, 1968.

Cosin, B.R. (ed.), Education : Structure and Society, London, Penguin Books, 1972.

Court, David, and Ghai Dharam, Education, Society and Development, New Perspective from Kenya, Nairobi, Oxford University Press, 1974.

Curle, Adam, Educational Strategy for Developing Societies, 2nd edition, London, Tavistock, 1970.

Dadape, E.V. (ed.), History of Education in Ancient India, Baroda, Good Companions, 1952.

Das, K.K., Evolution of the System of Elementary Education in Orissa, Doctoral Thesis, Utkal University, 1908.

Das, Santosh Kumar, The Educational System of the Ancient Hindus, Calcutta, Mitra Press, 1930.

Desai, A.R., Essays on Modernization of Underdeveloped Societies, 2 vols, Bombay, Thacker, 1971.

_____, "Need for Revolution of the Concept" in Desai (ed.), Essays on Modernization of Underdeveloped Societies, vol.1, Bombay, 1971.

Desai, M.G., A Critical Study of the Growth of Secondary Education in Kaira District, Doctoral Thesis, Sardar Patel University, 1968.

Dewey, John, Democracy and Education, New York, Macmillan, 1966.

Dixit, U.N., Impact of Educational Policy of Britain on Indian Education, Ph.D. Thesis, Udaipur University, 1976.

Dongerkery, S.R., University Education in India, Bombay, Monaktala, 1967.

Duskin, Lelah, The Non-Brahman Movement in Princely Mysore, A Dissertation in South Asia Regional Studies, Philadelphia, University of Pennsylvania, 1974.

Fleming, W.G., Education : Qutario's Preoccupation, Toronto, University of Toronto Press, 1972.

Foster, Philip, Education and Social Change in Ghana, Chicago, University of Chicago Press, 1968.

Freire, Paulo, Cultural Action for Freedom, Harmondsworth, Middlesex, 1972, Penguin Books, 1972.

Galbraith, Kenneth John, Economic Development in Perspective, Cambridge, Mass., Harvard University Press, 1962.

Gandhi, Indira, Education, Individual and Society, New Delhi, Ministry of Education and Social Welfare, 1977.

Garg, B.R., Educational Crisis in India, Ambala Cantt., Associated, 1977.

Ghosh, S.C. (ed.), Educational Strategies in Developing Countries, New Delhi, Sterling Publishers, 1976.

Ghosh, Suresh Chandra, (ed.), Development of University Education, 1916-1920, New Delhi, Selections from Educational Records of the Government of India, New Series, 2, Jawaharlal Nehru University, 1977.

Goel, B.S., Development of Education in British India, 1905-1929, Ph.D. Thesis, Delhi University, in Buch, M.B. (ed.), Survey of Research in Education, 1972-78, Baroda, Modern Printers, 1978.

Goel, S.C., Education and Economic Growth in India, Delhi, Macmillan, 1975.

Gore, M.S., "Education and Modernization", in A.R. Desai (ed.), Essays in Modernization of Underdeveloped Societies, vol.2, Bombay, Thacker, 1971.

Gore, M.S. (ed.), Papers in the Sociology of Education in India, New Delhi, NCERT, 1967.

Gore, M.S., "The Crisis in University" Education", in Unnithan Indra Deva, T.K.N., and Singh, Yogendra, (ed.), Towards a Sociology of Culture in India, New Delhi, Prentice Hall of India, 1965.

Gough, Kathleen, "Literacy in Kerala", in Jack Goody (ed.), Literacy in Traditional Societies, Cambridge, Cambridge University Press, 1968.

_____, "Implications of Literacy in Traditional China and India", in Jack Goody (ed.), Literacy in Traditional Societies, Cambridge, Cambridge University Press, 1968.

Gould, W.T.S., "Planning the Location of Schools", Case Studies 3, Ankole District, Uganda, UNESCO, IIEP, Paris, 1973.

Griffin, Willis H., and Udai, Pareek, The Process of Planned Change in Education, Bombay, Somaiya Publishers, 1970.

Hagget, Peter, Locational Analysis in Human Geography, London, Edward Arnold Publishers, 1970.

Hallack, Jacques, "Planning the Location of Schools", Case Studies 1, County, Siligo, Ireland, UNESCO IIEP, Paris, 1973.

Halsey, A.H., Jean Floud, and Anderson Arnold C., Education, Economy and Society, New York, The Free Press, 1965.

Hanson, John W., and Brembeck, Cole S. (ed.), Education and Development of Nations, New York, Holt, Reinhart Winston, 1966.

Harbison, Frederick, and Charles A. Myers, Education, Manpower and Economic Growth, Delhi, Oxford and I.B.H., 1968.

Havinghurst, Robert J., "Education and Social Mobility in Four Societies", in Halsey et.al.(ed.), Education, Economy and Society, Spring 1957, pp.85-86.

Heer (David M.), Society and Population, New Delhi, Prentice Hall, 1969.

Hennessy, Josselyn, "British Education for an Elite in India (1780-1947)", in Rupert Wilkinson (ed.), Governing Elites, New York, Oxford University Press, 1969.

Hermansen, T., "Spatial Organisation and Economic Development", in Misra, R.P.(ed.), The Institute of Development Studies and Centre for Urban and Regional Studies, Mysore.

Huq, Muhammad Shamsul, Education and Development Strategy in South and Southeast Asia, Honolulu, East-West Centre Press, 1965.

Illich, Ivan I., Deschooling Society, Penguin Books, Harmendsworth, Middlesex, 1973.

Jaffar, S.M., Education in Muslim India: Being an inquiry into the State of Education during the Muslim Period of Indian History, 1000-1800 A.C., Delhi, Idarah-I, Adaiyat-I, Delhi 1973.

Joseph A.L. & David G.S.(ed.), Education in Cities, London, Evan Bros. Ltd., 1970.

Kamat, A.R., Education After Independence - a Social Analysis, Bombay, Lala Lajpatrai Institute, 1976.

Kamat, A.R., Progress of Education in Rural Maharashtra (Post Independence Period), Poona, Gokhale Institute of Politics and Economics, 1968.

Kamat, A.R., The Educational Situation and Other Essays on Education, New Delhi, People's Publishing House, 1973.

Kaul, J.N., Higher Education in India, 1951-1971, Simla, Indian Institute of Advanced Study, 1974.

Kavoori, J.S. and Singh, Baijnath, History of Rural Development in Modern India, Vol.1, New Delhi, Navchetan Press, 1967.

Keay, F.E., A History of Education in India and Pakistan, Cal., Oxford Univ. Press, 1959.

Kevin, R. Cox, Man, Location, Behaviour : An Introduction to Human Geography, New York, John Wiley and Sons, 1972.

Kothari, D.S., Education, Science and National Development, Bombay, Asia Pub. House, 1970.

Laska, John A, Planning and Educational Development in India, Teachers' College Press, New York, 1968.

Lerner, Daniel, "Modernization Social Aspects", in David L. Sills (ed.), International Encyclopaedia of the Social Sciences, Vol.10, New York, The Macmillan Co. and The Free Press, 1968.

Levitas, Maurice, Marxist Perspectives in the Sociology of Education, London, Routledge and Kegan Paul, 1974.

Lipset, Seymour Martin, Political Man, The Social Bases of Politics, Bombay, Vakils' Feffer and Simons, 1960.

Machlup, Fritz, Education and Economic Growth, Lincoln, University of Nebraska Press, 1970.

Magal, Ramachandra, Structure of Higher Education in India, New Delhi, Mim.U.S.E.F.I., 1972.

Makhija, Locational Study of Educational Institutions of Udaipur District, Doctor of Philosophy (Ph.D.Thesis) Udaipur University.

Makota, Aso and Ikno, Amano, Education and Japan's Modernization, Japan, Ministry of Foreign Affairs, 1972.

Marshall, Alfred, Principles of Economics, London, Macmillan, 8th Edition, 1961.

Masser, Ian, Analytical Models for Urban and Regional Planning, New York, Halsted Press Division: John Wiley and Sons, Inc., 1972.

Massialas, Bryon G., Education and the Political System, Addison-Wesley, Reading, Mass, 1969.

McCully, Bruce Tiebout, English Education and Origins of Indian Nationalism, Gloucester, Peter Smith, 1966.

Menon, T.K.N. (ed.), Symposium en Post-War Education in India, Baroda, Padmaja, 1945.

Mill, J.S., The Principles of Political Economy, London, Longman, 1964.

Misra, B.B., The Indian Middle Class: Their Growth in Modern Times, Oxford University Press, London, 1961.

Musham, Helmut V.(ed.), Education and Population : Mutual Impacts, Dolhain,Ordina Editions, 1975.

Mookerji, R.D., Ancient Indian Education (Brahmanical and Buddhist), London, Macmillan and Co.Ltd., 1951.

Mukerjee, S.N., History of Education in India, Modern Period, Baroda, Acharya Book Depot, 1966.

Myers, Alonso F. and Williams, Clarence O., Education in a Democracy: An Introduction to the Study of Education, New York, Prentice Hall, 1947.

Myrdal, Gunnar, Asian Drama: An Inquiry into the Poverty of Nations (Vol.3), Penguin Books, Harmondworth, Middlesex, 1968.

Naik, J.P., Education in the Fourth Plan, Review and Perspective, Bombay, Nachiketa Publishers, 1968.

Naik, J.P. and Syed Nurrullah (ed.), A Students History of Education in India : 1800-1973, Delhi, Macmillan, 6th Rev., 1974.

Naik, J.P., Equality, Quality and Quantity, The elusive Triangle in Indian Education, Bombay, Allied Pub., 1975.

Naik, J.P., Educational Planning in India, Bombay, Allied Publishers, 1965.

_____, Policy and Performance in Indian Education, 1947-74, New Delhi, Orient Longman, 1975.

Nandwani, S.C., Education and Economic Development, New Delhi, Cosmopolitan Publishing House, 1973.

Nurul, Hassan, S., Challenges in Education, Culture and Social Welfare, Bombay, Allied Pub., 1977.

Ottaway, AICE (ed.), Education and Society: An Introduction to the Sociology of Education, London, Routledge and Kegan Paul, 1970.

Peterson, A.D.C., Hundred Years of Education, London, The English Book Society and Gerald Duckworth and Co. Ltd., 1971.

Phadke, Sindhu, "Special Problems of the Education of Women" in Gore et.al. (ed.), Papers in Sociology ....

Ponsioen, J.A., National Development - A Sociological Contribution, Mouton, The Hague, 1968.

Prakash, Shmi, Educational System of India: An Econometric Study, Delhi, Concept, 1978.

Prakasha Sri, "Education in a Democracy" in S.N.Mukherji (ed.), Education in India- Today and Tomorrow, Baroda, Acharya Book Depot, 1969.

Radhey, Mohan, (ed.), Education and National Development, New Delhi, Indiana, 1977.

Rao, V.K.R.V., Education and Human Resource Development, Bombay, Allied Publishers, 1966.

Roy Burman, B.K., "Educational Problems of the Tribal Communities in India", in Ruhela (ed.), Social Determinants ....

Rubinstein, David and Stoneman, Colin, Education for Democracy, 2nd edn. Harmondsworth, England, Penguin Books, 1972.

Rudolph, Susanne Hoeber and Lloyd I. Rudolph (ed.), Education and Politics in India, Studies in Organisation, Society and Policy, Delhi, Oxford University Press, 1972.

Sachchidananda, "The Special Problems of the Education of Scheduled Tribes", in Gore et.al. (ed.), Papers in Sociology.

Saini, S.K., The Socio-Economic and Political Factors in the Development of Education in British India during 1921-1947 A.D., Ph.d. Thesis, MSU, 1975 in Buch, M.B. (ed.), Second Survey of Research in Education, (1972-78), Baroda, Modern Printers, 1978.

Saiyidain, K.C., "Education for a Better Social Order," in Education, Culture and Social Order, Bombay, Asia Publishing House, 1958, pp.23-38.

Saiyidain, K.C., Education, Culture and Social Order, Bombay, Asia Publishing House, 1958.

Saksena, R.N., "The Traditional Systems of Education in India", in Gore et.al. (ed.) Papers in the Sociology.... New Delhi, NCERT, 1967.

Saran, A.K., "Higher Education and Social Change in Independent India", in Malik (ed.), Management and Organisation of Indian Universities, Simla, Indian Institute of Advanced Studies, 1971, pp.237-245.

Saxena, Sateshwari, Educational Planning in India: A Study in Approach and Methodology, New Delhi, Sterling Publishers Pvt.Ltd., 1979.

Schmid, Calvin F. and Miller, Vincent A., Population Trends and Education Change in the State of Washington, Seattle Washington State Census Board, 1960.

Schultz, Theordore W., The Economic Value of Education, New York, Columbia University Press, 1963.

Seal, Anil, Emergence of Indian Nationalism, Cambridge, Cambridge University Press, 1968.

Sen, Amartya, On Economic Inequality, Delhi, Oxford University Press, 1973.

Shaffar, H.G., "A Critique of the Concept of 'Human Capital'", in Blaug, M. (ed.), Economics of Education, vol.1, Harmondsworth, Penguin, 1964.

Shah, A.B. (ed.), Higher Education in India, Bombay, Salvan Publishing House, 1967.

Shah, B.V., "Problems of Modernization of Education in India", in Desai, A.R. (ed.), Essays in Modernization of Underdeveloped Societies, vol.2, Bombay, Thacker, 1971.

Sharma, A.L., Development of Professional Education in Rajasthan, Doctoral Thesis, Udaipur University, 1971.

Sharma, G.D., Enrolment in Higher Education, A Trend Analysis, 1961-75, New Delhi, Association of Indian Universities, 1976, Occasional Papers.

Sharma, S.R., American Influence on Indian Education after Independence, 1977.

Sheffield, James R. (ed.), Education Employment and Rural Development, The proceedings of a Conference (Kericho), 1966, Nairobi, East African Publishing House, 1967.

Shukla, Suresh, "History of Education - A Trend Report", in Buch (ed.), A Survey of Research in Education.

Shukla, S.C., Educational Development in British India 1854-1904, Ph.D. Thesis, Delhi University, 1958 in Buch, M.B. (ed.), A Survey of Research in Education.

Singh, Amrik, and Philip G. Altbach, The Higher Learning in India (ed.), Delhi, Vikas, 1974.

Singhi, Narendra K., Education and Social Change, Jaipur, Rawat Publishers, 1979.

Singh, R.P., The Indian Public School, New Delhi, Sterling Publishers, 1972.

Smith, Adam, The Wealth of Nations, New York, Modern Library Edition, Book II.

Smith, W.G. Lester, Education : An Introductory Survey, Harmondsworth, Penguin Books, 1957.

Sorkin, Alan L., Education, Unemployment and Economic Growth, Lexington Books, 1974.

Spencer, Herbert, Education Intellectual, Moral and Physical, London, Watts, 1949.

Srinivas, M.N., "Modernization of Few Queries", in Desai (ed.) Essays on Modernization of Underdeveloped Societies. vol.1, Bombay, Thacker, 1971.

Srivastava, B.D., The Development of Modern Indian Education, Bombay, Orient Longmans, 1963.

Streeton, Paul, "Economic Development and Education", in Desai (ed.), Essays on Modernisation of Underdeveloped Societies, vol.1, Bombay, Thacker, 1971.

Ta Nagot Chau, Demographic Aspect of Educational Planning, UNESCO, IIEP, Paris, 1969.

Taylor, Robert, Education and University Enrolment Policies in China, 1949-71, Canberra, Australian National University Press, 1973.

Treewartha, G.T., Robinson, A.H., Harvard, E.H., Elements of Geography - Physical and Cultural, New York, Mcgraw Hill Book co., 1958.

Upreti, D.C., Political Development and Growth of Education in British India, 1904-1947, Ph.D.Thesis, MSU, 1972, in Buch M.B., Survey of Research.

Vaizey, John, The Economics of Education, London, Faber and Faber, 1962.

Vaizey, John (ed.), Education in Modern World, London, Weidenfeld and Nicolson, 1975.

Venkatarayappa, K.N., "Education and Society in India", in S.P.Ruhela (ed.), Social Determinants of Educability in India, New Delhi, Jain Brothers, 1969.

Weiner, Dyron, "Political Problems of Modernizing Pre Industrial Societies," in Desai (ed.), Essays on Modernization ..., Vol.1.

Windham, Douglas M., Education, Equality and Income Redistribution : A Study of Public Higher Education, Health Lexington Books, 1970.

Woock, P.R.(ed.), Education and Urban Crisis, Penneylvannia Suanlon Intext Publisher, 1970.

ARTICLES

Ahmad, E., "Geography of Ranchi University", Geographical Review of India, Vol. XXX, March 1968, No.1.

Altbach, Philip G., "Higher Education and Modernization: The Indian Case", in Gupta, Giri Raj (ed.), Main Currents in Indian Sociology, Vol.1, Delhi, Vikas Publishers, 1976, pp.200-220.

Arakeri, H.R., "Population Education", in University News Vol.XVI, Sept. 15, No.18, 1978.

Armer, Michael and Youtz, Robert, "Formal Education and Individual Modernity in our African Society", American Journal of Sociology, 76 (4), Jan. 1971, pp.604-626.

Arnold, C.Anderson, "Education and Social Change," School Review, 80, May 1972, pp.433-58.

Bapat, N.V., "Education of the Aborigines", Educational Review, LIVII (7), Jul. 1962, pp.161-166.

Bauer, Catherine, "The Pattern of Urban and Economic Development, Social Implications", The Annals of the American Academy of Politics and Social Science, 305, May 1956.

Backmann, M., "City Heirarchies and the Distribution of City Size"in Economic Development and Cultural Change, 1958.

Bhatawdekar, M.U., "Economic Growth and Educational Development" in Economic and Political Weekly, Vol.VII, No.35, Aug. 26, 1972.

Bordia, Anil, Seminar on the Problems Involved in Setting Up New Types of Higher Education Institutions and Programmes in Developing Countries. Innovation in Higher Education, Paris 5-8, Oct. 1976.

Burman, B.K. Roy, "Educational Problems of the Tribal Communities in India", in S.P.Ruhela (ed.), Social Determinants of Educability in India (Papers in the Sociological Context of Indian Education), New Delhi, Jain Brothers, 1969, pp.124-149.

Centre for the Study of Education in Changing the Societies (Hague) (ed.). Educational Problems in Developing Countries. Papers given at the Amsterdam Symposium, 1968, Noordhoff, Groningen Wolters, 1969.

Chakrabartty, Symal, "Democratisation of Education : A Note on Perspective and Content", Journal of Education, W.B.College and University Teachers' Association, Dec. 1969.

Chattopadhyay, K.P., "Education" in the Adivasis, Delhi, Publications Division, 1960, pp.121-125.

Chitnis, Suma, "Education for Equality : Case of Scheduled Castes in Higher Education", Economic and Political Weekly, 7 (Special No.), Aug. 1972, "Urban Concentration of Higher Education", Economic and Political Weekly, 4 (Special No.) Jul. 1969.

Chitra, M.N., "Higher Education and Society in Mysore Under British Rule, "Sociological Bulletin, 21(2), Sept. 1972, pp.152-175.

Coleman, James, S., "The Concept of Equality of Educational Opportunity", Harvard Educational Review, 38 (1), Winter, 1968.

Costa, E.P.W. da, "Economics of Indian Education 1947 to A Study of Educational Growth", Special UNESCO Conference, No. 9-12, Nov. 1956.

Dasgupta, B., "Socio-Economic Classifications of Indian Districts - A Statistical Approach", Economic and Political Weekly, 14th Aug. 1971.

Dhar, Trilok, N., "Education and Employment in India. The Policy News", Calcutta Minerva, 1976.

Evetts, Julia, "Equality of Educational Opportunity : The Recent History of a Concept," British Journal of Sociology, 21 (4), Dec. 1970.

Havighurst, Robert J., "Slow Education Changes Society", Confluence : An International Forum, 6(1), Spring, 1957, pp.85-86.

Haul, Fred, L., "Location Criteria for High Schools", University of Chicago Research Papers, 150, 1973.

Heyneman, Stephen P., "Relationship between the Primary School Community and Academic Achievement in Uganda", Journal of Developing Areas, Vol.II, Jan. 1977.

Joshi, K.L., "Some Problems in Planning of University Education", Journal of University Education, 1, Sept. 1962.

Kamal, A.R., "The Educational Situation", Economic and Political Weekly, 3(40), Oct. 5, 1968.

Kalra, Satish Kumar, "Literacy Among Tribal People in India", Vanya Jati, 20(2), April 1972.

Kaul, J.N., "Development of Indian Higher Education", Economic and Political Weekly, 7 (Special No.), Aug. 1972.

Kundu, A., "Constauction of Indices for Regionalisation An Enquiry into Methods of Analysis", Geographical Review of India.

Laska, John H., "The Stages of Educational Development", Comparative Education Review, Dec. 1964.

Madan, T.N., "Education of Tribal India", in Eastern Anthropologist, 5(4), Jun-Aug. 1962, pp.179-182.

Maxfield, Donald W., "Spatial Planning of School Districts", Annals of the Association of American Geographer, Vol. 62, No.4, Dec. 1972.

Mead, Magaret, "A Redefinition of Education", NEA Journal, 48 (7), Oct. 1959.

Menon, I.C., "Some Aspects of Planning for Higher Education in India. Quantity Versus Quality", New Frontiers in Education, Vol.4, No.1, Jan-March, 1974.

Nasatir, David, "Education and Social Change : The Argentine Case", Sociology of Education, 39(2), Spring 1969, pp.167-82.

Padmanabhan, C.B., "Can Indian Education be Oriented Primarily to Economic Growth ?" Education Quarterly 19, July 1967.

Padmanabhan, C.B., "Expansion of Higher Education in India in the Context of Recent Trends in Development Strategies", New Frontiers of Education, Vol.VII, No.1, Jan-March, 1977.

Pal, M.N., "Regional Disparities in the levels of Development", Indian Journal of Regional Science, Vol.II, No.1, 1975.

Pal, M.N., "Quantitative Techniques for Regional Planning", Indian Journal of Regional Science, Vol.III, No.1, 1977.

Rao, M.R. and Raju, V.B., "Administration of University-Affiliated College System", New Frontiers in Education, Vol.V, No.1, Jan-March 1975.

Rao, V.K.R.V., Address in the Proceedings of the Conference of the Vice Chancellors, 21-23, April, 1969.

Rao, V.L.S.Prakasa, Tiwari, V.K. and Ramachandran, H., "Urban System and the Regional Economy", Paper presented at the Indo-French Seminar, J.N.U., New Delhi, 1979.

Reports and Documents, "The Reorganisation of Higher Education in Sweden", Minerva, Review of Science, Learning and Policy, Vol.XII, No.1, Jan. 1974.

Saberwal, Satish, "Education, Inequality, and Industrialisation", Journal of Higher Education, 1(2), Autumn, 1975.

Sachchidananda, "Tribal Education in India", Vanya Jati, 12(1), Jan. 1964.

Schwartzberg, Joseph, E., "Observations of the Progress of Literacy between 1951-1961, "Indian Population Bulletin, No.2, August 1961.

Sen, Tarnath, "English in Indian Universities, "Calcutta Review, 142, (Feb. 1957).

Sewell, William, H., "Inequality of Opportunity for Higher Education", American Sociological Review, 36(5), Oct. 1971.

Shah, B.V., "Inequalities of Educational Opportunities", Economic and Political Weekly, 12(34), 1960.

Shukla, Suresh, "Of Equality and Higher Learning" (Editorial), Journal of Higher Education, 1(2), Autumn, 1975.

Singh, Amrik, "The Education Commission and After", Asian Survey, 9 Oct. 1969.

Srikant, L.M., "Education Commission and Backward Classes", Vanya Jati, 14(3), Jul. 1966.

_____, "Education of the Backward Classes", Indian Year Book of Education (II Year Book), New Delhi, N.C.E.R.T., 1964.

_____, "Measures Proposed for the spread of Education Amongst Scheduled Tribes", Vanya Jati, 13(3), Jul. 1966.

Yates, Barbara, A., "Structural Problems in Education in the Congo (Leopoldville)", Comparative Education, Review 7, Oct. 1963.

REPORTS

Association of Indian Universities, Higher Education and Development, New Delhi, 1975.

Basu, P. Lahiri Kajal (Research Officers), Amilan Datta, Director of the Project, Report on "The Economics of Education in some West Bengal College, With Special Reference to Size, Techniques and Location, Calcutta, World Press Pvt.Ltd., 1974.

Census of India, 1971, All District Census Handbook, Part X A and B.

Census of India, 1971, India Part II-A(i) General Population Tables.

Census of India, 1971, India Unpublished Table IV, Social and Cultural Tables.

Census of India, 1971, India Selected Economic Tables, 7.

Government of India, Ministry of Education and Social Welfare, Report of the Committee on Status of Women in India, New Delhi.

Government of India, National Council of Educational Research and Training (1971), Education and National Development. Report on the Education Commission, 1964-66.

Government of India, Ministry of Education, Report of the Committee on Model Act for Universities, 1964.

Govt. of India, Ministry of Education and Social Welfare, Education in India - A Statistical Survey, 1969-70, Delhi.

Government of India, Ministry of Education, Education and National Development - Report of the Education Commission, 1964-66, Reprint edn., N.C.E.R.T., New Delhi, 1971.

Government of India, Ministry of Education and Social Welfare 1974, Towards Equality. Report on the Status of Women in India.

Government of India, Planning Commission, The Third Five Year Plan, 1961-1966, 1965-1966.

Government of India, Planning Commission, Draft Five Year Plan, 1978-83, Vol.I.

Government of India, Planning Commission, Draft Five Year Plan, 1978-83, Vol.II.

Mitra, Ashok, The Status of Women with Particular Reference to Literacy and Employment, I.C.S.S.R., J.N.U. Project, 1977.

Organisation for Economic Co-operation and Development, Education and Regional Development, General Report, VI, Paris, 1979.

Philips, H.M., Education as a Basic Factor in Economic and Social Development - Final Report, Addis Ababa: UNESCO, May 1961, pp.67-106.

Singh, Jagdish, Central Places and Spatial Organisation in a Backward Economy : Gorakhpur Region, Research Project I.C.S.S.R., New Delhi.

U.N.E.S.C.O. - Final Report - Conference of African Stocks on the Development of Education in Africa, Addis Ababa, 15-25 May, 1961.

U.N.E.S.C.O., Report on "Population Dynamics and Educational Development, Regional office of Education in Asia, Bangkok, 1974.

University Grants Commission, All India Educational Survey, New Delhi, V3, 1973-74.

University Grants Commission (1966), Report for the Year 1965-66, Delhi.

University Grants Commission, Report for the Year 1975-76, New Delhi.

University Grants Commission, University Development in India, basic facts and figures, New Delhi, 1972-73.

University Grants Commission, University Rounds and B4 Forms 1975-76.

APPENDIX - A

University	District	Location of Colleges	Size of Town/ Village	Location Code No.
1	2	3	4	5
Andhra Pradesh	East Godavari	Kakinada	I	1
		Rajamundry	I	2
		Razole	V	3
		Yanam	V	4
		Malikipuram	2.3	5
		Amalapuram	III	6
		Peddapuram	III	7
		Ramchandrapuram	III	8
		Kothapeta		9
		Pedagatlapalle	I	10
	Guntur	Guntur	I	11
		Bapatla	III	12
		Nidubrolu	2.3	13
		Pedanandipadu	2.3	14
		Amaravathi	2.2	15
		Pepalle	III	16
		Macherla	III	17
		Narasaroapet	III	18
		Chilakuluripet	III	19
		Tenali	I	20
		Nagaram	2.3	21

1	2	3	4	5
	Guntur	Ponnur	III	22
		Todikonda	2.1	23
	Krishna	Gudinada	II	24
		Machilipatnam	I	25
		Vijayawada	I	26
		Nuzvid	III	27
		Jaggayyapet	IV	28
		Bhudhavaram	2.3	29
		Gudlavalleru	2.2	30
		Nandigama	IV	31
		Vuyyuru	IV	32
		Chittigudur	2.4	33
		Ajiripalle	2.3	34
	Ongole	Ongole	II	35
		Giddalur	IV	36
		Markapur	III	37
	Parkasam	Kandubur	IV	38
		Chirala	II	39
		Podile	2.2	40
		Samudran	2.2	41
	Srikakulam	Srikakulam	III	42
		Tekkali	IV	43
		Bobbli	III	44
		Parwatipuram	III	45
		Garividi	III	46

1	2	3	4	5
		Palakol	III	47
		Naryanapuram	2.3	48
		Narsapur	III	49
		Eluru	I	50
		Tadepalle	2.2	51
		Gudem Pentapadu	2.1	52
		Nidadvole	III	53
	West Godavari	Bhimawaram	II	54
		Tanuku	III	55
		Gunapavaram	2.2	56
		Dumpagadapa	2.3	58
		Penugonda	IV	57
		Attili		59
		Tadepalligudem	III	60
		Jangareddigudem	2.1	61
		Pedavegi	2.2	62
		Kouvur	III	63
		Tenalur		64
		Anakapalle	I	65
		Viskhapatnam	I	66
	Vishshaka-patnam	Waltair	I	-
		Vizianagram	II	67
Osmania	Adilabad	Adilabad	III	68
		Mancherial	IV	69
		Nirmal	III	70

1	2	3	4	5
	Adilabad	Jamekunta	2.1	71
		Jagatial	III	72
		Karimnagar	III	73
	Hyderabad	Hyderabad	I	74
		Secunderabad	I	75
		Vikarabad	IV	76
		Tandur	III	77
	Mahbubnagar	Mahbubnagar	II	78
		Jadcherla	-	79
		Gadural	III	80
		Palem	2.4	81
		Wanaparthy	IV	82
	Medak	Siddipet	III	83
		Jogipet	IV	84
	Nalgonda	Kodad	V	85
		Nalgonda	III	86
		Suriapet	III	87
		Bhongir	III	88
		Nagarjunasagar	III	89
	Nizamabad	Nizamabad	I	90
		Armoor	IV	91
		Kamareddy	IV	92
		Bodhan	III	93
		Warangal	I	94

1	2	3	4	5
	Nizamabad	Janghon	IV	95
		Hanamkonda	I	96
Srivenkateswara		Anantpur	II	97
		Guntakal	II	98
		Hindupur	III	99
	Anantpur	Kadiri	III	100
		Rayadrug	III	101
		Lepakshi	2.3	102
		Madanapalle	III	103
	Chittoor	Chittoor	II	104
		Sri Kalahasti	III	105
		Tirupati	II	106
	Cuddapah	Cuddapah	II	107
		Proddaltua	II	108
	Kurnool	Kurnool	I	109
		Nellore	I	110
		Gudur	III	
		Vidaualur	2.2	115
	Nellore	Kauali	2.3	116
		Venkatgiri	IV	117
		Vakadu	2.2	111
		Mulapet	Incl. with Nellore	112
		Khammam	II	113
	Khammam	Kothagudem	II	114

1	2	3	4	5
Gauhti	Arunachal Pradesh	Pashighat	V	1
	Cachar	Silchar	II	2
		Karimganj	III	3
		Lala	V	4
		Sonaimukh	2.1	5
		Pailapool	2.3	6
		Ramkrishnagar	V	7
		Hailakandi	IV	8
		Badarpur	IV	9
	Darrang	Charali	V	10
		Gohpur	2.4	11
		Tezpur	III	12
		Chatia	2.2	13
		Dhekiajuli	IV	14
		Mangaldoi	IV	15
		Janugurihab	2.6	16
		Tangla	V	17
	Goalpara	Abhayapuri	V	18
		Dhubhri	III	19
		Bonagaigaon	III	20
		Bilasipara	IV	21
		Bijni	V	22
		Dhudhnoi	2.4	23
		Goalpara	IV	24

1	2	3	4	5
	Goalpara	Gossaigaon	2.3	25
		Kokrajhar	IV	26
		Mankachar	IV	27
		Gauripur	IV	28
		Sapatgram	V	29
	Kamrup	Gauhati	I	30
		Pathsala	V	31
		Sorbhog	V	32
		Nagarbera	2.4	33
		Nowgong	2.4	34
		Barama	2.4	35
		Sarakhetri	-	36
		Kalag	2.4	37
		Howli	V	38
		Palaskari	VI	39
		Boko	2.1	40
		Chamata	2.3	41
		Barapeta	III	42
		Marigaon	-	43
		Chengdi	2.6	44
		Nalbari	IV	45
		Kalgachia	2.4	46
		Baihatra	2.4	47
		Pandu	I	48

1	2	3	4	5
	Kamrup	Rangiya	2.2	49
		Saulkuchi	IV	50
		Tihu	2.3	51
		Sarupeta	2.4	52
		Goreshwar	2.3	53
	Manipur	Churachandpur	V	54
		Bishnupur	VI	55
		Imphal	I	56
		Kakching	V	57
		Moirang	V	58
		Talukari	2.2	59
		Thoubal	V	60
		Wang Jung	-	61
		Nambol	VI	62
	Nowgong	Nowgong	II	63
		Dhing	IV	64
		Puranigudem	2.5	65
		Hojai	III	66
		Kurvaritol	2.4	67
		Kampur	2.3	68
		Sumding	III	69
		Marigaon	IV	70
		Raha	2.3	71

1	2	3	4	5
	Mikir	Diphu	IV	72
		Haflong	V	73
Dibrugarh		Dibrugarh	II	74
		Rehabari	2.6	75
		Digboi	IV	76
		Doom	IV	77
		Duliajangaon	IV	78
		Chabua	VI	79
	Lakhimpur	Naharkatuja	IV	80
		Tinsukhia	II	81
		Dhemaji	-	82
		Dhakuakhana	-	83
		Dikrong	2.5	84
		Chilamara	2.4	85
		Lakhimpur	III	86
		Amguri	VI	87
		Bahona	2.5	88
		Teok	2.3	89
	Sibsagar	Jorhat	II	90
		Dergaon	V	91
		Golaghat	IV	92
		Nitaipukhuri	2.4	93
		Bokabhai	2.2	94
		Jhanji	2.3	95

1	2	3	4	5
		Kamalbari	2.3	96
		Mariani	IV	97
		Moranhat	VI	98
		Titabhar	2.4	99
		Charingia	2.5	100
	Sibsagar	Sarupathar	2.3	101
		Sonari	VI	102
		Sibsagar	III	103
		Simalgur	2.4	104
		Namchi	2.5	105
		Joynagar	2.2	106
Bihar	E. Champaran	Motihari	III	1
		Gorasahar	2.2	2
		Areraj	2.3	3
		Barachakiya	2.2	4
	W. Champaran	Narkatiyaganj	IV	5
		Muzaffarpur	I	6
		Motipur	2.3	7
	Muzaffarpur	Sakra	I	8
		Shahebganj	I	9
		Chapra	II	10
		Ammour	2.4	11
	Saran	Jaintpua	2.2	12
		Parsa	2.1	13

1	2	3	4	5
		(Shahpur	2.2	14
		(Sutihar		
	Saran	(		
		(Turki	2.4	15
		(Dighwara	2.3	16
		(Belsand	2.2	17
	Sitamarhi	(		
		(Sitamarhi	III	18
		(Bhorey	2.3	19
		(Mairura	V	20
		(		
	Siwan	(Goria Kothi	2.3	21
		(Maharajgang	IV	22
		(Siwan	III	23
		(Vaishali	I	24
		(		
	Vaishali	(Hajipur	III	25
		(Mahnar	IV	26
achi	Begusarai	Begusarai	III	27
		(Halthua	IV	28
	Gopalganj	(		
		(Gopalganj	IV	29
		(Maithow	IV	30
		(		
		(Bokaro	II	31
		(		
		(Bhaga	2.5	32
		(		
	Dhanbad	(Katras	III	33
		(		
		(Dhanbad	I	34
		(		
		(Gobindpur	2.3	35
		(		
		(Sindri	I	36
		(		
		(Chattra	IV	37

1	2	3	4	5
		Jhumeritelaiya	III	38
		Bermo	II	39
	Hazaribagh	Ramgarh	III	40
		Hazaribagh	II	41
		Daltonganj	III	42
		Netarhat	VI	43
	Palamau	Khunti	IV	44
		Lohardaga	IV	45
		Bansjor	2.3	46
		Doranda	I	47
		Gumla	IV	48
	Ranchi	Ranchi	I	49
		Mandar	2.4	50
		Hinoo	2.4	51
		Kokar	2.4	52
		Simdoga	IV	53
		Kolebira	2.4	54
		Ghatshilla	IV	55
		Jamshedpur	I	56
		Chaibasa	III	57
	Singhbhum	Chakradhapur	III	58
		Seraikela	V	59
		Baharagora	II	60
		Chandil	2.3	61

1	2	3	4	5
	Giridih	Giridih	III	62
Bhagalpur	Bhagalpur	Colong	IV	64
		Bhagalpur	I	65
		Banka	IV	66
		Sabour	2.3	67
		Barahiya	III	68
		Barari	2.5	69
	Monghyr	Monghyr	I	70
		Jhajha	IV	71
		Jamalpur	II	72
		Parabatta	I	73
		Gogarai	IV	74
		Lakhisarai	III	75
		Sheikhpur	III	76
		Jam	V	77
		Khagaria	III	78
	Santhal Parganas	Deoghar	III	79
		Jamatra	V	80
		Pakaua	IV	81
		Madhupur	III	82
		Dumka	III	83
		Dhankri	2.6	84
		Narayanpur	2.4	85
		Godda	V	86
		Sahebganj	III	-

1	2	3	4	5
L.N. Mithila	Begusarai	Barauni	III	87
		Begusarai	II	88
		Manjhaul	2.1	89
		Bihat	2.1	90
		Baheri	2.2	91
		Sarsaunna Tajpur	-	92
		Darbhanga	I	93
		Biroul	2.1	94
		Nehra	-	95
		Saheriasarai	-	96
	Madhubani	Khutana	2.2	97
		Goaghardia	2.3	98
		Jainagar	V	99
		Madhepur	2.1	100
		Madhubani	III	101
		Jhanjharpur	2.2	102
		Benipatti	2.2	103
		Sarisahpahi	-	104
		Bishnanpur	-	105
		Pandaul	2.3	106
		Rajnagar	2.1	107
	Katihar	Katihar	II	-
		Salmari	2.5	108
	Purnea	Araria	III	109
		Toabesganj	III	110

1	2	3	4	5
		Banmankhi	V	111
		Bahadurganj	2.4	112
	Purnea	Purnea	II	113
		Kasba	II	114
		Madhavnagar	-	115
		Supaul	III	116
		Kishanganj	I	117
		Murliganj	I	118
	Saharsa	Sonbarsa	2.2	119
		Nirmali	V	120
		Birpur	IV	121
		Sahrsa	III	-
		Madhepura	IV	-
		Shahpur Patory	2.2	122
		Samastipur	III	123
		Nurhan	2.2	124
		Tajpur	2.2	125
	Samastipur	Mohanpur	2.2	126
		Rosera	IV	127
		Dalsinghsarai	IV	128
		Mohindlinagar	2.2	129
		Pusa	2.2	130
		Barouli	2.3	131

1	2	3	4	5
Magadh	Aurangabad	Nabinagar	V	132
		Daudnagar	IV	133
		Shahpur	2.4	134
	Bhojpur	Arrah	II	135
	Biharsharif	Biharsharif	III	136
	Gaya	Gaya	I	137
		Kaler	2.5	138
		Jehanabad	III	139
		Tekani	2.5	140
		Sherghatti	IV	141
		Darheta	2.6	142
		Rambagh	-	143
		Sarsaliganj	IV	144
		Hasua	IV	145
	Patna	Patna	I	146
		Bihata	V	147
		Khagaul	III	148
		Bikram	2.3	149
		Bhatiyarpur	V	150
		Gayarbagh	I	151
		Poon-Poon	2.1	152
		Ramgarh	-	
		Barli	III	157
		Hilsa	V	158
		Naubatpur	2.3	159

1	2	3	4	5
	Rohtas	Dehri-on-Sone	III	154
		Shahmal Khera	2.5	155
		Bhabhua	IV	156
		Bikramganj	IV	160
		Sasarani	III	161
Gujarat	Ahmedabad	Ahmedabad	I	1
		Vinamgam	III	2
		Dehgam	IV	3
		Dholka	III	4
	Banaskantha	Palampur	III	5
		Deesa	III	6
	Baroda	Sankheda	V	7
		Bodeli	V	8
		Dakhoi	III	9
		Chola Udepur	IV	10
		Mujagam	2.3	11
		Savli	2.1	12
	Gandhinagar	Gandhinagar	III	13
		Bhadran	2.2	14
		Kaira	IV	15
		Dakor	IV	16
		Nadiad	I	17
		Balasinor	IV	18
		Borsad	III	19

1	2	3	4	5
		Cambay	II	20
		Petlad	III	21
	Gandhinagar	Kapadway	III	22
		Bhuj	II	23
		Mandvi	III	24
		Gandhidham	III	25
		Visnagar	III	26
		Kadi	III	27
		Mansa	IV	28
		Patan	II	29
	Mehsana	Mehsana	II	30
		Piwai	2.2	31
		Sidhpur	III	32
		Unjha	III	33
		Kalol	II	34
		Vadnagar	IV	35
		Halol	IV	36
		Lunawada	IV	37
	Panchmahals	Dohad	II	38
		Godhra	II	39
		Baria	IV	40
		Idar	IV	41
	Sabarkantha	Prantij	IV	42
		Modasa	III	43

1	2	3	4	5
	Sabarkantha	Talod	IV	44
		Himatnagar	III	45
Saurashtra	Amreli	Amreli	III	46
	Bhavnagar	Bhavnagar	I	47
		Botad	III	48
		Mahuva	III	49
		Savarkuadla	III	50
	Jamnagar	Jamjodhpur	IV	51
		Khambaliya	IV	52
		Jamnagar	IV	53
		Devanka	IV	54
	Junagarh	Khesod	IV	55
		Junagarh	II	56
		Porbandar	I	57
		Verawal	II	58
	Rajkot	Rajkot	I	59
		Teopur	III	60
		Wankaner	III	61
		Dhoraji	II	62
		Morvi	II	63
		Gondal	II	64
	Surendragarh	Limodi	III	65
		Surendragarh	III	66
		Dhrangathra	III	67
		Vadhuran	III	68
		Sanosaro	2.4	69

1	2	3	4	5
South Gujarat	Broach	Rajpipla	III	70
		Jaurbusna	III	71
		Broach	II	72
		Chikhli	V	73
	Valsad	Bilimore	III	74
		Navsani	II	75
	Daman	Daman	IV	76
		Surat	I	77
	Surat	Ramraj	-	78
		Bardoli	IV	79
Sardar Patel	Kaira	Anand	II	80
		Vidyanagar	IV	81
M.S. University of Baroda	Baroda	Baroda	I	82
South Gujarat	Valsad	Valsad	II	83
Kurushetra		Ambala	II	1
		Sadhaura	V	2
		Yamunanagar	II	3
	Ambala	Naneola	2.3	4
		Kalka	IV	5
		Jagadhari	III	6
		Shazadpur	2.3	7
		Bhiwani	II	8
	Hissar	Charki Dadar	IV	9

1	2	3	4	5
	Gurgaon	Ballabgarh	IV	10
		Sidhrawah	2.3	11
		Hodal	III	12
		Gurgaon	II	13
		Hajly Mandi	VI	14
		Nagina	2.3	15
		Faridabad	II	16
		Palwal	III	17
		Nuh	VI	18
		Sohna	V	19
	Hissar	Hissar	II	20
		Sirsa	III	21
		Johana	IV	22
		Fatehabad	III	23
		Mandi Dab-wali	III	24
		Hansi	III	25
	Jind	Jind	III	26
		Narwana	III	27
	Karnal	Panipat	II	28
		Karnal	II	29
		Samalkha	2.2	30
		Gharunda	IV	31
		Shahabad	III	32
		Pundari	V	33
		Kaithal	III	34

1	2	3	4	5
	Karnal	Kaul	2.2	35
		Bhadair	2.4	36
		Dhanaura	2.4	37
	Mohindergarh	Rewari	III	38
		Narnaul	IV	39
		Mohindergarh	IV	40
		Baural	V	41
	Rohtak	Rohtak	I	42
		Hassangarh	2.3	43
		Bahadurgarh	III	44
		Nahar	2.3	45
		Beni	IV	46
		Dubal Dhar	2.3	47
		Jhajjar	IV	48
		Kalanaur	2.2	49
		Khanpur Kalan	-	50
		Sonepat	II	51
		Gohana	IV	52
Himachal Pradesh	Bilaspur	Bilaspur	V	1
		Ghamarwin	VI	2
	Chamba	Chamba	IV	3
	Hamirpur	Hamirpur	VI	4
	Kangra	Dharamsala	IV	5
		Bayata	2.4	6

1	2	3	4	5
		Dhahara	2.4	7
		Dehri	2.6	8
	Kangra	Palampur	VI	9
		Kangra	V	10
		Dohngi		11
	Kulu	Kulu		12
	Mandi	Mandi	IV	13
		Sundernagar	III	14
	Simla	Simla	II	15
		Kiastoo	-	16
	Mahasu	Rampur	VI	17
	Sirmour	Nahan	IV	18
		Solan	IV	19
	Simla	Nalagarh	VI	20
		Daulatpur Chowk	2.6	21
	Kangra	Una	2.4	22
		Amb	2.4	23
		Bhatoli	2.4	24
Jammu	Doda	Bhadrawah	V	1
	Jammu	Jammu	I	2
	Kathua	Kathua	IV	3
	Poonch	Poonch	IV	4
	Udampur	Udampur	V	5
Kashmir	Anantnag	Anantnag	III	6

1	2	3	4	5
	Baramulla	Baramulla	III	7
		Sopore	III	8
	Srinagar	Srinagar	I	9
Karnataka	Belgaum	Bailhongal	IV	1
		Chikodi	IV	2
		Ramdrug	IV	3
		Belgaum	I	4
		Nipani	III	5
		Gokaki	III	6
		Bedkihal	2.2	7
		Sankeshwar	IV	8
		Kittur	2.3	9
		Qthni	III	10
		Raikhaj	IV	11
		Kagvad	2.2	12
		Sandur	2.2	13
		Harpanahalli	IV	14
		Hadagali	IV	15
	Bellary	Kotturu	IV	16
		Bellary	I	17
		Hospet	II	18
		Bidar	II	19
	Bidar	Bhalki	IV	20
		Basavakatyan	III	21

1	2	3	4	5
		Sindagi	IV	22
		Bijapur	I	23
		Bagalkot	II	24
		Jamakhandi	III	25
	Bijapur	Muddibihal	IV	26
		Banhatti	III	27
		Guleddzndd	III	28
				29
		Kodkal	2.4	30
		Hungund	IV	31
		Ranebennur	III	32
		Dharwar	I	33
		Gadaj	II	34
		Haveri	III	35
	Dharwar	Hubli	I	36
		Nargund	IV	37
		Lakshmeshwar	III	38
		Haunsbhavi	2.3	39
		Navalgund	IV	40
		Naregal	IV	41
		Gulbarga	I	42
	Gulbarga	Shorapur	III	43
		Shahabad	V	44
	North Kanara	Honavar	IV	45
		Sirsi	III	46

1	2	3	4	5
	North Kanara	Kumta	IV	47
		Karwar	III	48
		Ankola	2.2	49
		Sidapur	2.2	50
		Ulga	2.4	51
		Baad	2.3	52
		Bhatkal	IV	53
		Dankel	III	54
		Raichur	II	55
		Sindhanar	IV	56
		Gangawali	III	57
		Kopal	III	58
Mysore	Chickmagalur	Chickmagalur	III	59
		Sringeri	VI	60
		Birur	IV	61
	Chitradurga	Davangere	I	62
		Chitradurga	II	63
		Challakore	IV	64
		Sirigere	-	65
		Harihar	III	66
	Hassan	Hassan	II	67
		Konanur	V	68
		Arsikere	III	69
		Sravawabelagola	VI	70
	Mandya	Maddur	IV	71
		Mandya	II	72

1	2	3	4	5
	Mandya	Mallavali	IV	73
		Adichunchanagiri	-	74
	Coorg	Govikopal	VI	75
		Mercara	IV	76
	Mysore	Mysore	I	77
		Chamarajanagar	III	78
		Nanjahgnd	III	79
		Hunsur	IV	80
		Kollegal	III	81
	Shimoga	Bhadravati	I	82
		Shimoga	III	83
		Sagar	III	84
	South Kanara	Mangalore	I	85
		Surathkhal	2.2	86
		Udipi	III	87
		Kallianpur	2.2	88
		Puttur	IV	89
		Karbala	IV	90
		Coondapur	III	91
		Moodibidri	2.3	92
		Ujira	2.2	93
		Baisur	2.2	94
		Baniwal	2.1	95
		Mulki	IV	96

1	2	3	4	5
Bangalore	Bangalore	Bangalore	I	97
	Rural Bangalore	Dodballapur	III	98
		Kanakapura	III	99
		Chamapalha	II	100
		Channapata	III	101
	Kolar	Kolar	III	102
		Oorgaum	-	103
		Chintamani	III	104
		Chcikballapur	III	105
		Mulbagal	IV	106
		Sira	IV	107
	Tumkur	Tumkur	II	108
		Tiptua	III	109
Kerala	Alleppy	Thurithicad	2.3	1
		Parumala	2.2	2
		Chengannur	IV	3
		Tiruvalla	III	4
		Kayamkulam	II	5
		Sherlalli	III	6
		Pandalam	IV	7
		Nangiarkulan-gara	2.4	8
		Mavelikana	III	9
		Trikkakana	2.1	10
	Ernakulam	Cochin	I	11
		Angamally	IV	12

1	2	3	4	5
	Ernakulam	Muvathupuzha	III	13
		Thodupuzha	I	14
		Ernakulam	I	15
		Kalady	2.3	16
		Kolencherry	-	17
		Alwaye	III	18
		Kalamasony	IV	19
		Perumbavoor	III	20
		Mahamkara	2.3	21
		Tripumthara	III	22
		Kothamangalam	V	23
		Changanachery	III	24
		Arunapuram	-	25
	Kottyam	Kottyam	II	26
		Amalagiri	2.1	27
		Kuraisligad	2.2	28
		Thalayolaparawa	2.2	29
		Nariampara	2.1	30
		Nauakam	2.1	31
		Purrunai	2.2	32
		Mannanam	2.1	33
		Urhavoor	2.3	34
		Vazhoor	2.4	35
		Kanjiripally	III	36
		Ernattupetta	-	37

1	2	3	4	5
		Pathanamthitta	2.1	38
		Sasthawcoltah	2.1	39
		Quilon	I	40
		Katlarakaka	2.1	41
		Punalur	II	42
		Anchal	I	43
		Kozencherri	2.2	44
	Quilon	Ranni	2.1	45
		Pathanapuram	2.1	46
		Trivandrum	I	47
		Paeringamala	I	48
		Papanamocode	2.5	49
		Kesavadasapuram	-	50
		Sivagiri Varkala	III	51
		Chempazanthi	2.3	52
		Thumba	-	53
		Nayyattinkara	III	54
		Feroke	III	55
		Calicut	I	56
		Madapally	2.4	57
	Calicut	Quilandy	2.1	58
		Devangiri		59
		Chelannur	2.1	60
		Mallapuram	2.3	61
		Sultan Battery	2.1	62
		Perambra	2.3	63

1	2	3	4	5
	Cannanore	Dharmadon	2.3	64
		Kasaiagod	III	65
		Cannanore	II	66
		Kanhangad	III	67
		Kuthuparamba	IV	68
		Payyannur	III	69
		Tellicherry	II	70
		Mattannur	2.3	71
		Taliparamba	IV	72
	Palaghat	Palaghat	II	73
		Pattambi	IV	74
		Chittoor	II	75
		Mannarghat	IV	76
		Ottapatam	III	77
		Nemmara	IV	78
	Mallapuram	Alathur	2.1	79
		Mallapuram	III	80
		Manipad	2.1	81
		Ponam	III	82
		Manjeni	IV	83
		Tirurangadi	2.1	84
		Perinthalamama	V	85
		Valannurititur	III	86
		Kizhuparam	2.3	87
		Kondotty	2.1	88

1	2	3	4	5
	Mallapuram	Pulikkhal	2.1	89
	Trichur	Irinijalakuda	III	90
		Trichur	II	91
		Pullut	VI	92
		Gurunayur	IV	93
		Vemballore	2.3	94
		Nalika	2.1	95
		Elthuruth	2.5	96
		Vadakkancherry	V	97
		Chalakudy	III	98
		Mahe	V	99
A.P. Singh	Chattarpur	Maharajpur	IV	1
		Nourgong	IV	2
		Chattarpur	III	3
	Rewa	Hanumana	2.7	4
		Sirmisur	2.3	6
		Semariya	2.3	7
		Rewa	II	8
		Gurh	2.3	9
		Manikwar		10
		Mauganj		11
		Lalgaon	2.3	12
		Dhera	2.5	13
		Teonther	2.3	14

1	2	3	4	5
		Satna	II	15
	Satna	Maihar	IV	16
		Beohari	V	17
		Shahdol	III	18
		Kotona	V	19
	Shahdol	Burhar	III	20
		Annupur	2.3	21
		Sigrouli	2.5	22
	Sidhi	Sidhi	V	23
	Panna	Panna	III	24
		Tikamgarh	III	25
	Tikamgarh	Jatara	2.2	26
Bhopal	Bhopal	Bhopal	I	27
	Raisen	Baraily	V	28
	Sehore	Sehore	III	30
		Basoda	III	30
	Vidisha	Sironj	III	31
		Vidisha	III	32
Indira Sangeet	Durg	Khairagarh	V	33
Indore	Indore	Indore	I	34
		Mhow	II	35
		Kasturbagam	-	36
Jabalpur	Jabalpur	Jabalpur	I	37
		Sihora	IV	38

1	2	3	4	5
	Jabalpur	Katni	II	39
		Kymore	IV	40
Jiwaji	Bhind	Alampur	2.3	41
		Bhind	III	42
		Chitora	2.4	43
		Mihona	2.5	44
		Adobhar	2.5	45
		Gohad	III	46
		Datia	III	47
		Seondha	2.2	48
	Guna	Guna	III	49
		Chandevi	IV	50
		Ashoknagar	-	51
		Gwalior	I	52
		Moraw	-	53
	Morena	Bhandar	V	55
		Ambali	IV	56
		Sheopur	IV	57
		Morena		58
		Sabalgarh	IV	59
	Shivpuri	Pickhore	V	60
		Shivpuri	II	61
		Pohari	2.3	62
		Dabra	III	54

1	2	3	4	5
Ravi Shankar	Bastar	Jagdalpur	III	63
		Kanker	IV	64
		Kirandul	V	65
	Bilaspur	Bilaspur	I	66
		Janggia	V	67
		Sakti	IV	68
		Korba	III	69
		Kharkod	2.5	70
		Mungeli	IV	71
		Champa	IV	72
	Durg	Durg	I	73
		Bhilai	I	74
		Bhemalara	V	75
		Dalli Rajhara	III	76
		Rajnandgaon	II	77
		Dongangarh	IV	78
		Chauki	2.3	79
	Raigarh	Raigarh	III	80
		Kharsia	V	81
		Jaspurnagar	V	82
	Raipur	Raipur	I	83
		Arang	2.1	84
		Baloda Bazar	V	85
		Dhamki	2.1	86
		Bhatapara	III	87

1	2	3	4	5
		Bhagbahara	2.1	88
	Raipur	Mahasawund	IV	89
		Saraipali	V	90
		Rajrin	2.2	91
		Ambikapur	III	92
	Sarguja	Chirnuri	III	93
		Sarguja	-	94
Saugar	Hoshangabad	Marda	III	95
		Hoshangabad	III	96
		Riparia	IV	97
		Sohagpur	IV	98
		Sion Mahna	IV	99
		Itarsi	III	100
	Mandla	Mandla	III	101
		Dindori	V	102
		Gadarwara	IV	103
		Narsimhapur	III	104
	Narsimhapur	Kareli	IV	105
		Barman	2.5	106
		Gotegaon	2.6	107
		Khurai	IV	108
		Sagar	I	109
	Sagar	Bina	III	110
		Desai	IV	111

1	2	3	4	5
		Baihar	-	112
	Balaghat	Balaghat	III	113
		Warseoni	IV	114
	Betul	Betul	III	115
		Chaunai	2.3	116
	Chhindwara	Chhindwara	II	117
		Junnaandeo	2.5	118
		Pandhurana	III	119
	Damoh	Damoh	II	120
		Khandwa	II	121
	E. Minar	Burhanpur	I	122
		Panchmarhi		123
	Seoni	Satnadow	2.3	124
		Seoni	III	125
Vikram	Dewas	Dewas	II	127
		Sonakaich	V	128
	Dhar	Dhar	III	129
	Jhabua	Jhabua	IV	130
		Alirajpur	IV	131
	Mandsaur	Mandsaur	II	132
		Neemuch	III	133
		Rampura	IV	134
		Bhanpura	III	135
		Manasa	IV	136
		Biaora		137

1	2	3	4	5
	Rajgarh	Rajgarh	IV	138
		Narsinghgarh	IV	139
	Ratlam	Ratlam	I	140
		Jaora	III	141
	Shahjapur	Shahjapur	III	142
		Agar	IV	143
		Shujalpur	IV	143
	Ujjain	Ujjain	I	145
		Barnagar	III	146
		Mahidpur	IV	147
		Khachraud	IV	148
	W. Minar	Khargone	III	149
		Barwani	III	150
		Barwaha	III	151
		Seodhwa	IV	152
		Tarana	IV	153
Bombay	Bombay	Bombay	I	1
		Bandra		2
		Sion		3
		Goregaon		4
	Goa	Goa	II	5
		Margaon	III	6
	Kolaba	Panvel	III	7
		Mahad	IV	8
		Aubag	IV	9
		Kolaba		10

1	2	3	4	5
		Kanakavali	2.2	11
		Venguala	II	12
		Chiplua	III	13
		Devrukh	2.2	14
	Ratnagiri	Ratnagiri	III	15
		Sawantwadi	IV	16
		Mawan	IV	17
		Devgad	2.3	18
		Dapoli	V	19
		Thana	I	20
		Bhuvandi	II	21
	Thana	Kalyan	I	22
		Ulhasnagar	2.1	23
		Palghar	IV	24
Marathwada	Aurangabad	Seogaon	2.3	25
		Vaijpur	IV	26
		Pailhan	IV	27
		Sillod	2.2	28
		Kannad	IV	29
		Jalha	II	30
		Gangapur	V	31
		Ashti	V	32
	Bhir	Parli	III	33
		Bhir	III	34
		Geurai	IV	35

1	2	3	4	5
	Bhir	Majlegaon	IV	36
		Ambajogai	III	37
		Dharur	IV	38
		Degloor	III	39
		Dharmabad	IV	40
	Nanded	Anjapur	2.5	41
		Kinioat	IV	42
		Mukhed	V	43
		Nanded	I	44
		Khandhar	V	45
		Naldung	V	46
		Latur	II	47
		Kallam	IV	48
		Ahmedpur	IV	49
	Osmanabad	Udgia	III	50
		Auradshajani	2.3	51
		Omerga	IV	52
		Osmanabad	III	53
		Tujlapur	IV	54
		Ausr	IV	55
		Wasli	2.2	56
		Nilanga	IV	57
	Parbhani	Basmath	III	58
		Parbhani	II	59

1	2	3	4	5
		Sailu	IV	60
		Manwat	IV	61
	Parbhani	Gangakhed	IV	62
		Mingoli	III	63
Nagpur	Akola	Akola	I	64
		Patur	IV	65
		Telhana	V	66
		Karanja	III	67
		Washini	III	68
		Murtizapur	III	69
		Mangrulpeer	IV	70
		Dhamamgaon	IV	71
		Badnera	III	72
		Chandur Bazar	V	73
	Amravati	Amravati	I	74
		Paratwada		75
		Morshi	IV	76
		Achalpur	II	77
		Daryapur	III	78
		Warud	III	79
		Anjangaon-Surji	III	80
		Teosa	2.4	81
		Amgaon	2.3	82
	Bhandara	Tirora	IV	83
		Gondia	II	84

1	2	3	4	5
	Bhandara	Bhandara	III	85
		Sakoli	2.2	86
		Lakni	2.2	87
		Tumsung	III	88
	Buldhana	Khanegaon	II	89
		Shegaon	III	90
		Buldhana	III	91
		Malkapur	III	92
		Mehekar	IV	93
		Chikhli	IV	94
		Jalgaonjamad	IV	95
		Devgaonraja	IV	97
		Warora	III	98
		Chinua	2.2	99
		Brahmapur	2.1	100
		Nawargaon	2.2	101
		Chandiapur	II	102
		Ballarpur	III	103
		Mul	2.1	104
		Gadihirohi	2.2	105
	Nagpur	Nagpur	I	106
		Saoner	IV	107
		Katol	IV	108
		Umrea	III	109

1	2	3	4	5
		Nankher	IV	110
	Nagpur	Kanithi	I	111
		Ranitek	IV	112
		Arui	III	113
		Hinganghat	III	114
	Wardha	Pulgaon	III	115
		Sehi	2.2	116
		Sevagram	2.3	117
		Yeotmal	II	118
		Umankhed	IV	119
		Pandharkawadr	IV	120
	Yeotmal	Digars	III	121
		Ghatangi	V	122
		Ner	2.2	123
		Pusad	III	124
		Darua		125
Poona	Ahmednagar	Ahmednagar	I	126
		Shrirampur	III	127
		Pathardi	2.1	128
		Karjat	2.1	129
		Kopargaon	III	130
		Pravaranagar	2.2	131
		Sahgamner	III	132
		Newasa	2.2	133

1	2	3	4	5
	Dhulia	Dhulia	I	134
		Nandurbar	II	135
		Taloda	IV	136
		Shahada	IV	137
		Shivpur	III	138
		Dondiacha	III	139
		Sindkheda	2.1	140
		Sakri	2.2	141
		Chalisgaon	III	142
		Chopda	III	143
		Rachona	III	144
		Erandol	IV	145
	Jalgaon	Jamer	2.1	146
		Dhanamgaon	III	147
		Bhusawad	I	148
		Faizpur	IV	149
		Shendurai	2.1	150
		Jalgaon	I	151
		Amalner	II	152
		Manmad	III	153
		Chandwad	2.4	154
		Malegaon	I	155
	Nasik	Vani	V	156
		Nandgaon	III	157
		Yeola	III	158

1	2	3	4	5
		Satana	II	159
		Lasalgaon	V	160
		Punpalgaon	IV	161
	Nasik	Sinnar	III	162
		Nasik	I	163
		Niphad	2.2	164
		Poona	I	165
		Hadapsar	2.2	166
		Manchar	2.1	167
		Otur	2.1	168
		Sirur	V	169
	Poona	Lonavala	III	170
		Indapha	V	171
		Someshwarnagar		172
		Chinchwad	I	173
		Junnar	II	174
		Baramati	III	175
		Saswad	II	176
Shivaji	Kolhapur	Ichalkaranji	II	177
		Gangoti	2.2	178
		Parite	2.3	179
		Kolhapur	I	180
		Arjunnagar	2.2	181
		Kurundwad	IV	182

1	2	3	4	5
		Jaysinghpur	IV	183
	Kolhapur	Naranggai	2.2	184
		Gandhinalag	IV	185
		Jasgaon	III	186
		Ashta	IV	187
		Miraj	I	188
		Ramanandnagar		189
		Atipadi	2.1	190
	Sangli	Vita	IV	191
		Sangli	I	192
		Islampur	III	193
		Jath	2.1	194
		Shirala	2.2	195
		Yalur	2.3	196
		Wai	III	197
		Satara	II	198
		Patah	V	199
		Dahiwadi	2.5	200
	Satara	Koregaon	2.1	201
		Talmavale	2.3	202
		Karad	III	203
		Phaltan	III	204
		Khatar	2.2	205

1	2	3	4	5
		Akluj	2.1	206
		Kurudwadi	IV	207
		Madha	2.2	208
		Manglawedha	IV	209
	Sholapur	Baari	II	210
		Sholapur	I	211
		Pandharpur	II	212
		Akalkot	III	213
		Karmala	IV	214
N.E.H.U.	Garo Hills	Mendipathar	2.5	1
		Tura	IV	2
	Jaganta Hills	Jowai	V	3
	Khasi Hills	Shillong	I	4
		Barapami	2.5	5
	Mizoram	Champai	2.3	6
		Rungleh	V	7
		Aijal	III	8
		Serchip		9
	Nagaland	Dimapur	IV	10
		Kohima	III	11
		Wokha	2.4	12
		Tuesang	2.2	13
		Mokochung	IV	14
Berhampur	Ganjam	Aska	IV	1
		Bhanjanagar	IV	2

1	2	3	4	5
		Chathapur	IV	3
		Berhampur	I	4
	Ganjam	Ganjam	2.1	5
		Khallikote	V	6
		Parkakhemundi	III	7
		Hinjihcut	IV	8
		Koraput	III	9
		Nawarangapur	IV	10
	Koraput	Rayagada	III	11
		Jeypore	III	12
		Gunupur	IV	13
	Phulbani	Phulbani	IV	14
Sambalpur	Bolangir	Titilagarh	IV	15
		Pathagarh	IV	16
		Bolangir	III	17
		Sonepur	V	18
	Kalahandi	Bhawanipatna	III	19
	Sambalpur	Padampur	V	20
		Rairakhel	2.3	21
		Sambalpur	I	22
		Jharsuguda	III	23
		Bargarh	III	24
		Baipati	V	25
		Burla	I	26
		Sarambha	2.4	27
		Kuchinda	V	28

1	2	3	4	5
		Bonaigarh	2.3	29
	Sundergarh	Rajgangpur	III	30
		Sundergarh	IV	31
Utkal	Balasore	Basudenpur	2.4	32
		Bhadrak	III	33
		Balasore	III	34
		Soro	2.1	35
		Banki	V	36
		Cuttack	I	37
		Alhagarh	V	38
	Cuttack	Ramchandrapur	2.4	39
		Baramba	2.3	40
		Paradeep	V	41
		Paltamurai	2.4	42
		Salipur	2.3	43
		Jagatsinghpur	2.6	44
		Angul	V	45
	Dhenkanal	Dhankanal	IV	46
		Talcher	IV	47
		Anandpur	V	48
	Keonjhar	Keonjhar	IV	49
		Baripada	III	50
		Karanjia	2.3	51
	Mayurbhanj	Udala	2.3	52
		Rairangpur	IV	53

1	2	3	4	5
		Bhubneshwar	I	54
		Ranpur	2.1	55
		Puri	II	56
	Puri	Nirakanpur	2.6	57
		Nayagarh	V	58
		Ninapara	2.5	59
		Khurda	IV	60
Rajasthan	Ajmer	Ajmer	I	1
		Nasirabad	III	2
		Kishangarh	III	3
		Beawar	II	4
		Bijainagar	V	5
		Hatundi	2.4	6
		Pushkar	V	7
		Rajgarh	IV	8
	Alwar	Alwar	I	9
		Kotkasim	2.3	10
	Banswara	Banswara	III	11
	Barmer	Barmer	III	12
	Bharatpur	Bharatpur	II	13
		Dholpur	III	14
		Derg	III	15
		Bhilwara	II	16
	Bhilwara	Shahpura	IV	17
		Gulabpur	2.6	18

1	2	3	4	5
	Bikaner	Bikaner	I	19
		Chirawa		20
	Bundi	Bundi	III	21
	Churu	Churu	II	22
		Sujangarh	III	23
		Sardanshahr	III	24
	Chittorgarh	Chittorgarh	III	25
		Pratapgarh	IV	26
	Dungarpur	Dungarpur	IV	27
		Khadagada	2.3	28
	Jaipur	Jaipur	I	29
		Kaladara	2.2	30
		Dausa	IV	31
		Sambha	IV	32
		Kolputh	IV	33
		Manohanpur	2.1	34
		Mahapura	2.1	35
		Talabgaon	2.5	36
		Doongai	2.1	37
		Kalsot	2.1	38
	Jaiselmer	Jaiselmer	IV	39
		Jalore	IV	40
		Bhinbhal	IV	41

1	2	3	4	5
	Jhalawar	Jhalawar	III	42
		Bhawani Mandi	IV	43
	Jhunjhunu	Bagar	V	44
		Bagand		45
		Chirana	2.2	46
		Charawa	IV	47
		Adravata	2.4	48
		Pilani	III	49
		Nawalgarh	III	50
		Badagaon	2.3	51
		Jhunjhunu	III	52
		Mukandgarh	2.3	53
	Kotah	Kota	I	54
		Baran	III	55
	Nagaur	Didiwana	IV	56
		Ladnun	III	57
		Nagaur	III	58
		Fatna	2.4	59
	Pali	Pali	III	60
		Banawas	2.3	61
	Swaimadhopur	Hindavni	III	63
		Swaimadhopur	III	64
	Sirohi	Sirohi	IV	65
	Sikar	Lacchmangarh	III	66
		Sikar	II	67

1	2	3	4	5
	Sikar	Fatehpur	III	68
		Neem-ka-Thana	IV	69
		Ranigarh	IV	70
	Srigangapur	Srigangapur	II	71
		Sangaria	IV	72
		Srikaranpur	IV	73
		Hanumangarh	III	74
	Tonk	Banasthali	2.3	75
		Tonk	II	76
	Udaipur	Nathdwar	IV	77
		Kanore	2.2	78
		Udaipur	I	79
	Jodhpur	Jodhpur	I	80
Punjabi	Bhatinda	Bhatinda	II	1
		Talwandi Sabo	2.2	2
		Budhlada	IV	3
		Mansa	III	4
		Ganiana Mandi	V	5
	Faridkot	Faridkot	III	6
	Patiala	Patiala	I	7
		Nabha	III	8
		Mandi Gobindgarh	V	9
		Nial	2.4	10
		Rajpura	IV	11
		Jatehgarh Sahib		12

1	2	3	4	5
	Patiala	Samana	III	13
		Bassi	IV	14
	Ropar	Ropar	IV	15
		Anandpur Sahib	V	16
		Kharar	IV	17
		Bela	2.4	18
	Sangrur	Melarkotta	III	19
		Mastuana		20
		Sangrur	III	21
		Sanghera	2.2	22
		Ahmedgarh	IV	23
		Barnala	III	24
		Sumam	III	25
		Sandhur	2.4	26
Guru Nank Dev	Amritsar	Bir Sahib	2.5	27
		Amritsar	I	28
		Khadoor Sahib	2.2	29
		Patli	IV	30
		Sathiala	2.2	31
		Tarn Tarn	III	32
		Sarkali Kalan	2.2	33
		Ajnala	2.2	34
		Rayya	2.3	35
	Gurdaspur	Batola	II	36
		Gurdaspur	III	37

1	2	3	4	5
	Gurdaspur	Kala Afghana	2.3	38
		Pathankot	II	39
		Dina Nagar	IV	40
		Qudisi	IV	41
		Dhariwal	V	42
	Jullundur	Jullundur	I	43
		Nawashahr	IV	44
		Dheman	2.4	45
		Kanwal		46
		Dhroli Kalah	2.3	47
		Jandiala	IV	48
		Nakodar	IV	49
		Kartarpur	IV	50
		Banga	IV	51
	Kapurthala	Kapurthala	III	52
		Nadala	2.3	53
		Narua Panchal	2.3	54
		Phagwara	II	55
		Sultanpur Lodi	V	56
		Begowal	2.4	57
		Domeli	2.4	58
Punjab	Chandigarh	Chandigarh	I	59
	Faridkot	Maleout Mandi	III	60
		Moga	II	61

1	2	3	4	5
		Muktsar	III	62
		Killanwali	-	63
	Faridkot	Teg Bahadurgarh	-	64
		Dhundike	2.3	65
		Lopor	2.5	66
		Gidderbaha	IV	67
		Dharamkot	V	68
	Ferozepur	Ferozepur	II	69
		Abohar	II	70
		Zira	III	71
		Fazilka	III	72
		Garh Sankar	V	73
		Hoshiarpur	II	74
	Hoshiarpur	Hariaha	V	76
		Dasuya	IV	77
		Gardiwala	VI	78
		Bulhowal	2.5	79
		Mahilpur	2.3	80
		Mukeman	IV	81
		Khanna	III	82
		Ludhiana	I	83
	Ludhiana	Sidhsar	2.4	84
		Dakha	2.2	85
		Doraha	V	86
		Gurusar Sadhan		87

1	2	3	4	5
		Narangwal	2.4	88
		Karamsan		89
	Ludhiana	Jagraon	III	90
		Bondhi Samrata	V	91
		Sidhwan Khund	2.4	92
		Rajkot Raikot	2.4	93
	Port Blair	Port Blair	III	94
Madras	Chingleput	Patlakiran	2.2	1
		Ponnem	IV	2
		Taulbaran	I	3
		Kanchupuram	I	4
		Chingleput	III	5
		Tiru	IV	6
		Gouriuakkam	2.5	7
		Madurantakam	IV	8
		Superamkudur	V	9
		Saidpet	2.1	10
		Neelambakkam	IV	11
	Coimbatore	Erode	I	12
		Tiruppur	I	13
		Coimbatore	I	14
		Udumampetlai	III	15
		Pollachi	II	16

1	2	3	4	5
	Dharmapuri	Kaishnagiri	III	17
		Dharamagiri	III	18
	Madras	Madras	I	19
	Nilgiris	Qolacanimund	II	20
		Coonoor	II	21
	North Arcot	Cheyyar	IV	22
		Walajapet	II	23
		Melvisharam	IV	24
		Nellore	I	25
		Gudiyatham	II	26
		Vaniyambadi	II	27
		Tiruvannamalai	II	28
	Pondicherry	Kannaikal	III	29
		Pondicherry	I	30
		Atlur	III	31
	Salem	Namakkhal	III	32
		Salem	I	33
		Velur	IV	34
		Raupuram	III	35
		Komarapalayam	V	36
	South Arcot	Cuddalore	I	37
		Villupuram	II	38
		Tindivanam	III	39
		Vridhachalam	III	40
		Mailan	2.3	41

1	2	3	4	5
		Mayunam	II	42
		Poonai	2.3	43
		Nagapatlinam	II	44
		Kumbakonam	I	45
	Thanjavur	Mannargadi	III	46
		Adiramapattinam	IV	47
		Thiruvarur	III	48
		Melayur	2.3	49
		Ponaiyar	VI	50
		Orthanad	V	51
		Papanasam		52
		Musiai	IV	53
		Tiruchirapalli	I	54
		Thiruverambur	2.3	55
	Tiruchirapa-lli	Ariyalva	IV	56
		Karua	II	57
		Pudukottai	II	58
		Puthanampatti	2.5	59
Madurai	Madurai	Madurai	I	60
		Palni	II	61
		Karumathua		62
		Melua	IV	63
		Durdigul	I	64
		Ulthamapalayam	IV	65

1	2	3	4	5
	Madurai	Periakulam	III	66
		Usilampatli	III	67
		Thiruvedakam	2.4	68
		Tiruppalai	2.5	69
	Ramanatha-puram	Karaikudi	II	70
		Surakashi	II	71
		Tirupattur	IV	72
		Aruppukotai	II	73
		Kamikhi	IV	74
		Suraganga	III	75
		Pallatlur	II	76
		Devakottai	III	77
		Saltur	III	78
		Ramanathapuram	III	79
		Virudhunagar	II	80
		Pulankurichi		81
		Rajapalayam	II	82
		Rameshwaram	IV	83
	Tirunelveli	Tiruckendur	II	84
		Ambasamundram	III	85
		Kallikulam	2.4	86
		Kouilpatti	III	87
		Tuticonn	I	88
		Sankarankoil	III	89
		Pillyannan	2.4	90
		Sawyerpuram	IV	91

1	2	3	4	5
		Meleneehdhaaullur	2.3	92
		Alwarkurichi	V	93
		Countallam	VI	94
	Tirunelveli	Palayamkottai	I	95
		Srivankulam	IV	96
		Polhigaiyadi	-	97
		Aramboly		98
		Martandam	2.1	99
		Nageriul	I	100
	Kanya Kumari	Neyyoor		101
		Kuzlithurai	IV	102
		Alloor	2.1	103
		Agasleeswaram	2.3	104
Gorakhpur	Azamgarh	Azamgarh	III	1
		Maltari	2.7	2
		Bardah	2.4	3
		Koyalsa	2.5	4
		Ranisier	2.5	5
		Baraiampur	2.5	6
		Terhi	2.4	7
		Ghosi		8
	Ballia	Ballia	III	9
		Sudhistapur		10
	Basti	Basti	III	11
		Shoharalgarh	2.3	12

1	2	3	4	5
	Deoria	Deoria	III	13
		Barhaj	IV	14
		Bhatpur Rani	2.4	15
		Rudrapur	2.6	16
		Mathlar	-	17
		Padrauna	IV	18
		Fazil Nagar	2.4	19
	Ghazipur	Ghazipur	III	20
		Rudrapur	2.4	21
		Zamama	2.1	22
		Rhardrha	2.4	23
	Gorakhpur	Gorakhpur	I	24
		Chauri Chaura		25
		Barhalganj	V	26
		Maniram	2.4	27
		Shikangarh	2.5	28
	Jaunpur	Jaunpur	II	29
		Sanrodhpur	2.3	30
		Pratapganj	-	31
		Mauahu	V	32
		Janghai	2.5	33
		Singraman	2.5	34
		Janruhar	2.4	35
		Dobhi	2.5	36
		Mehrawan	2.5	37
		Badlapur	2.4	38

1	2	3	4	5
	Mirzapur	Mirzapur	I	39
		Bundi Katra	-	40
	Vanarasi	Vanarasi	I	41
		Baragaon	2.3	42
		Chandauli	V	43
		Jagatpur	2.5	44
		Gyanpur	V	45
		Sewapuri	2.6	46
		Mughalsarai	III	47
		Gangapur	2.3	48
		Jakhini	2.4	49
		Sakaldiha	2.3	50
Agra	Agra	Agra	I	51
		Dayalbagh	I	52
		Bichpuri	2.4	53
		Firozabad	I	54
	Aligarh	Aligarh	I	55
		Hathras	II	56
		Ganjdundwara	IV	57
	Etah	Etah	III	58
		Kashganj	III	59
	Mathura	Mathura	I	60
		Kosikalan	IV	61
		Bisawar	2.2	62

1	2	3	4	5
		Shikohabad	III	63
	Mainpuri	Mainpuri	III	64
		Bhogaon	V	65
	Agra	Moliganj	-	66
Allahabad	Allahabad	Allahabad	I	67
Lucknow	Lucknow	Lucknow	I	68
Garhwal	Chamoli	Gopeshwar		69
		Agastmuni	2.6	70
		Dehradun	I	71
	Dehradun	Mussorie	IV	72
		Rishikesh	IV	73
		Lansdowne	V	74
	Garhwal	Kololwara	IV	75
		Pauri	V	76
	Tehri Garhwal	Tehri Garhwal	V	77
		Lambgaon		78
	Uttar Kashi	Uttar Kashi	V	
Rohilkhand	Badaun	Kachla	-	79
		Badaun	II	80
		Bareilly	I	81
	Bareilly	Mirganj		82
		Baheri	III	83
		Chandpuri	III	84
	Bijnor	Bijnor	III	85

1	2	3	4	5
		Dhampur	III	86
	Bijnor	Nazibabad	III	87
		Rai Dani		88
		Moradabad	I	89
		Kanth	IV	90
	Moradabad	Sambhal	II	91
		Chandausi	II	92
		Surjannagar	2.3	93
	Pilibhit	Pilibhit	II	94
	Rampur	Rampur	I	95
	Shahjahanpur	Shahjahanpur	I	96
Bundelkhand	Banda	Atarra	IV	97
		Banda	II	98
		Rath	III	99
	Hamirpur	Hamirpur	IV	100
		Orai	III	101
	Jalauni	Kalpi	III	102
		Konch	III	103
		Jhansi	I	104
	Jhansi	Lalitpur	III	105
		Mauranipur	III	106
Avadh	Baharaich	Rasia	2.6	107
		Baharaich	II	108
		Barabanki	III	109
	Gonda	Gonda	II	110

1	2	3	4	5
		Faizabad	I	111
	Faizabad	Tanda	III	112
		Akbarpur	IV	113
		Pratapgarh	III	114
	Pratapgarh	Dhendhuna	2.6	115
		Lalganj	2.7	116
		Sultanpur	III	117
	Sultanpur	Amethi	2.2	118
		Kadipur	2.3	119
Kanpur	Allahabad	Handia	2.3	120
		Sirsa	V	121
		Shaligram		122
		Bharwari	2.3	123
		Ajitmal	2.3	124
		Bakewar	2.2	125
		Etawah	II	126
	Etawah	Auriya	III	127
		Dibiapur	2.3	128
		Farukkabad	I	129
		Fatehgarh		130
		Karimganj	IV	131
	Farukkabad	Chibraman	IV	132
		Kanauj	III	133
		Fatehpur	II	134
	Fatehpur	Chheolaha	2.5	135

1	2	3	4	5
	Hardoi	Hardoi	III	136
		Kanpur	I	137
	Kanpur	Madhana	-	138
		Pukhrayah	V	139
	Lakhimpur Kheri	Lakhimpur Kheri	III	140
		Lalganj	2.2	141
	Rae Bareilly	Rae Bareilly	III	142
		Tejgaon	2.4	143
	Sitapur	Sitapur	II	144
	Unnao	Unnao	III	145
Meerut	Bulandshahr	Lakhaoti	2.3	
		Khurja	II	
		Sikandrabad	III	
		Bulandshahr	II	
		Deba	II	
		Anupshahr	IV	
		Gulaothi	IV	
		Dadri	IV	
	Meerut	Meerut	I	
		Hapur	III	
		Basant	III	
		Ramala	2.3	
		Patla	2.2	
		Macchra	2.4	

1	2	3	4	5
	Meerut	Simbholi	2.4	
		Sahibabad	2.4	
		Ghaziabad	I	
		Modinagar	III	
		Khekra	2.1	
		Pilkhuwa	III	
	Muzaffarnagar	Muzaffarnagar	I	167
		Shamli	III	169
		Khatauli	III	170
	Saharanpur	Roorkee	II	171
		Rampur	IV	172
		Jwalapur	VI	173
		Saharanpur	I	174
		Satikundkankal	2.4	175
		Hardwar	II	176
		Narsankhurd	2.4	177
Kumaon	Almora	Almora	III	178
		Ranikhet	IV	179
		Bageshwar	VI	180
	Nainital	Kashipura	III	181
		Haldwani	II	182
		Rudrapur	III	183
		Ramnagar	-	184
	Pithoragarh	Pithoragarh	IV	185
		Berinag	2.5	186

1	2	3	4	5
Burdwan	Bankura	Bankura	II	1
		Panchmura	2.4	2
		Sonamukhi	IV	3
		Saldiha	2.4	4
		Bishnupur	III	5
		Sainthia	IV	6
		Bolpur	III	7
	Birbhum	Khujutipara	2.4	8
		Hetampur	2.4	9
		Rampurhat	III	10
		Lakpur	2.3	11
		Asansol	I	12
		Burdwan	I	13
		Durgapur	I	14
		Chittaranjan	III	15
	Burdwan	Gushkara	IV	16
		Shyamsundan	2.3	17
		Kalna	III	18
		Katwa	III	19
		Taniganj	2.3	20
		Bengai	2.3	21
		Hachuna	2.4	22
		Chandergore	I	23
	Hoogly	Chinsura	2.1	24
		Arambagh	III	25

1	2	3	4	5
		Champadagna	I	26
		Mogra	2.4	27
		Kamarpukur	2.3	28
		Kamavchi	2.4	29
	Hoogly	Iaulana	-	30
		Thalda	IV	31
		Purulia	II	32
		Raghunathpur	IV	33
Calcutta	Calcutta	Calcutta	I	34
	Hoogly	Hoogly		35
		Konnagar	I	36
		Uttarapara	I	37
		Surampore	I	38
		Bagnan	2.3	39
		Howrah	I	40
		Bally	I	41
		Kanpur	2.3	42
		Jorehat	I	43
	Howrah	Amta	V	44
		Ajodhya	2.3	45
		Umberua	III	46
		Belurmath	-	47
		Sevangatam	-	48
		Jagatballavpur	2.3	49

1	2	3	4	5
	Midnapore	Kismat Bajkul	2.2	50
		Belda	2.4	51
		Dantan	2.4	52
		Egra	2.3	53
		Garbheta	V	54
		Ghatal	III	55
		Jhangram	IV	56
		Midnapore	II	57
		Moyna	2.1	58
		Mughberia	2.1	59
		Narajole	2.4	60
		Panskura	2.1	61
		Maligram	2.3	62
		Contai	III	63
		Depal	2.4	64
		Sutunia	2.5	65
		Panehati	-	66
		Silda	2.3	67
		Nandigram	2.3	68
		Tamluk	III	69
		Bara Basudeopur	2.3	70
		Manikparra	2.4	71
		Palparra	2.3	72
	Murshidabad	Berhampore	2.1	73
		Aurangabad	IV	74

1	2	3	4	5
	Murshidabad	Jangipur	III	75
		Kandi	III	76
		Jiaganj	III	77
		Beldanga	V	78
	Nadia	Karunpur	2.3	79
		Kaishnagar	II	80
		Nabadwip	II	81
		Ranaghat	III	82
		Santipur	II	83
		Bagula	V	84
		Majida	2.4	85
		Betai	2.2	86
	24 Parganas	New Barrackpore	I	87
		Jangrakhah	2.4	88
		Barasat	II	89
		Basirhat	II	90
		Parnasree	-	91
		Belgarhia	2.1	92
		Garia	I	93
		Bongaon	II	94
		Dum Dum	I	95
		Birweshwarpur	2.6	96
		Santinagar	2.4	98
		Gobanbanga	III	97
		Narendrapur	2.4	99
		Naihati	I	100

1	2	3	4	5
		Habra	II	101
		Battali	2.4	102
	24 Parganas	Kakdwip	2.2	103
		Champahatti	2.3	104
		Taki	III	105
		Rahara	III	106
		Belona	IV	107
	Tripura	Agartala	I	108
		Kailashshahr	IV	109
North Bengal	Cooch Behar	Cooch Behar	II	110
		Dinhala	IV	111
		Mathabanga	V	112
		Tufanganj	VI	113
		Darjeeling	III	114
		Kalimpong	III	115
	Darjeeling	Kurseong	II	116
		Sonada	2.4	117
		Siliguri	II	118
		Jalpaiguri	II	119
	Jalpaiguri	Alipurdawa	II	120
		Chanchal	2.3	121
		Malda	II	122
		Samsi	2.4	123
		Balurghat	II	124
		Kaliaganj	2.1	125
		Islampur	IV	126

APPENDIX - B

Census Classification

URBAN	CODE	
Class I	1.1	Population of 100,000 and above
Class II	1.2	Population of 50,000 to 99,999
Class III	1.3	Population of 20,000 to 49,999
Class IV	1.4	Population of 10,000 to 19,999
Class V	1.5	Population of 5,000 to 9,999
Class VI	1.6	Population of less than 5,000

RURAL

2.1	Village with Population 10,000 & above
2.2	Village with population 5,000 - 9,999
2.3	Village with population 2,000 - 4,999
2.4	Village with population 1,000 - 1,999
2.5	Village with population 500 - 999
2.6	Village with population 200 - 499
2.7	Village with population less than 200

According to Indian Census convention any place with a population exceeding 100,000 is called a City.

APPENDIX - C

List of Universities 1857 - 1947

Name of University		Date of Establishment
1.	Calcutta	1857
2.	Bombay	1857
3.	Madras	1928 Reconstituted 1857 1923 Reconstituted
4.	Punjab	1882
5.	Allahabad	1887 1922 Reconstituted
6.	Banaras	1916
7.	Mysore	1916
8.	Patna	1917
9.	Osmania	1918
10.	Aligarh	1920
11.	Lucknow	1920
12.	Dacca	1921
13.	Delhi	1922
14.	Nagpur	1923
15.	Andhra	1926
16.	Agra	1927
17.	Annamalai	1929
18.	Travancore	1937
19.	Utkal	1943

Appendix C Cont'd...

20.	Saugar	1946
21.	Rajputana	1947

Source : Progress of Education in India : 1937-47 Decannial Review, vol. 1, Central Bureau of Education, Ministry of Education, p. 107.

APPENDIX - D

STATE

COASTAL AREAS

Kerala

Bombay (Maharashtra, Gujarat)

Madras

West Bengal

Punjab

INTERIOR OF THE HEARTLAND

Bihar

Uttar Pradesh

Madhya Pradesh

Rajasthan

Orissa

APPENDIX - E

Increase in the Number of Universities: 1947 - 1975

Year	No. of New Universities Established	No. of Institutions declared as deemed to be Universities
1947 - 1949	8	Nil
1950 - 1954	8	Nil
1955 - 1959	9	2
1960 - 1964	22	5
1965 - 1969	17	1
1970 - 1975	23	1

Source : Government of India, Draft Fifth Five Year Plan, 1974-1979, Part II, p. 198.

APPENDIX - F

Enrolment in Higher Education, India, 1960-61-74

Year	Enrolment	Percentage of Rate of Growth
1960-61	1,034,934	-
1961-62	1,155,380	11.60
1962-63	1,272,666	10.15
1963-64	1,384,697	8.80
1964-65	1,528,227	10.36
1965-66	1,728,773	13.12
1966-67	1,949,012	12.73
1967-68	2,218,972	13.85
1968-69	2,473,264	11.45
1969-70	2,792,630	12.91
1970-71	3,001,292	7.47
1971-72	3,262,314	8.69
1972-73	3,456,096	5.90
1973-74	3,583,986	3.70

Source : University Grants Commission, Annual Reports, 1965-1975, New Delhi.

APPENDIX 'G'

STATE-WISE LIST OF UNIVERSITIES AS ON 1.9.1976

State Code	State	Univ. Code	University	Location	Type (75-76)
1	2	3	4	5	6
01	Andhra Pradesh	001	Andhra	Waltair	Affiliating
		002	Osmania	Hyderabad	Affiliating
		003	Srivenkateswara	Tirupati	Affiliating
		004	A.P.Agricultural	Rajendranagar	Unitary
		005	J.N.Technological	Hyderabad	Unitary
02	Assam	006	Dibrugarh	Dibrugarh	Affiliating
		007	Gauhati	Gauhati	Affiliating
		008	Assam Agricultural	Jorhat	Unitary
03	Bihar	009	Bhagalpur	Bhagalpur	Affiliating
		010	Bihar	Muzaffarpur	Affiliating
		011	L.N. Mithila	Darbhanga	Affiliating
		012	Magadh	Bodh Gaya	Affiliating
		013	Ranchi	Ranchi	Affiliating
		014	Patna	Patna	Unitary
		015	Rajendra Agricultural	Pusa Samastipur	Unitary
04	Gujarat	016	Gujarat	Ahmedabad	Affiliating
		017	Saurashtra	Rajkot	Affiliating
		018	S. Gujarat	Surat	Affiliating
		019	Sardar Patel	Vallabh Vidyanagar	Affiliating
		020	Gujarat Ayurveda	Jamnagar	Affiliating

1	2	3	4	5	6
		021	Gujarat Agricultural	Ahmedabad	Unitary
		022	M.S.University of Baroda	Baroda	Unitary
05	Haryana	023	Kurukshetra	Kurukshetra	Affiliating
		024	Haryana Agricultural	Hissar	Unitary
06	Himachal Pradesh	025	Himachal Pradesh	Simla	Affiliating
07	Jammu & Kashmir	026	Jammu	Jammu	Affiliating
		027	Kashmir	Srinagar	Affiliating
08	Karnataka	028	Bangalore	Bangalore	Affiliating
		029	Karnatak	Dharwar	Affiliating
		030	Myso re	Mysore	Affiliating
		031	University of Agricultural Sciences	Bangalore	Unitary
09	Kerala	032	Calicut	Calicut	Affiliating
		033	Kerala	Trivandrum	Affiliating
		034	Cochin	Cochin	Federal
		035	Kerala Agricultural	Trichur	Unitary
10	Madhya Pradesh	036	Awadesh Pratap Singh	Rewa	Affiliating
		037	Bhopal	Bhopal	Affiliating
		038	Indore	Indore	Federal
		039	Jabalpur	Jabalpur	Affiliating
		040	Jiwaji	Gwalior	Affiliating

1	2	3	4	5	6
		041	Ravi Shankar	Raipur	Affiliating
		042	Saugar	Sagar	Affiliating
		043	Vikram	Ujjain	Affiliating
		044	J.N. Krishi	Jabalpur	Unitary
		045	Indira Kala Sangit	Khairagarh	Affiliating
11	Maharastra	046	Bombay	Bombay	Federal
		047	Marathwada	Aurangabad	Affiliating
		048	Nagpur	Nagpur	Affiliating
		049	Poona	Poona	Affiliating
		050	Shivaji	Kolhapur	Affiliating
		051	S.N.D.T. Women's	Bombay	Affiliating
		052	Konkan Krishi	Dapoli	Unitary
		053	Mahatma Phule Krishi	Rahuri	Federal
		054	Marathwada Krishi	Parbhani	Unitary
		055	Punjabrao Krishi	Akola	
12	Meghalaya	056	North Eastern Hill	Shillong	Affiliating
13	Orissa	057	Berhampur	Berhampur	Affiliating
		058	Sambalpur	Sambalpur	Affiliating
		059	Utkal	Bhubaneshwar	Affiliating
		060	Orissa University of Agriculture & Technology	Bhubaneshwar	Unitary

1	2	3	4	5	6
14	Punjab	061	Punjabi	Patiala	Affiliating
		062	Guru Nanak Dev	Amritsar	Affiliating
		063	Punjab	Chandigarh	Affiliating
		064	Punjab Agricultural	Ludhiana	Unitary
15	Rajasthan	065	Rajasthan	Jaipur	Affiliating
		066	Udaipur	Udaipur	Affiliating
		067	Jodhpur	Jodhpur	Unitary
16	Tamil Nadu	068	Madras	Madras	Affiliating
		069	Madurai	Madurai	Affiliating
		070	Tamil Nadu Agricultural	Coimbatore	Unitary
		071	Annamalai	Annamalai Nagar	Unitary
17	Uttar Pradesh	072	Agra	Agra	Affiliating
		073	Aligarh Muslim	Aligarh	Unitary
		074	Allahabad	Allahabad	Unitary
		075	Avadh	Faizabad	Affiliating
		076	Banaras Hindu	Varanasi	Unitary
		077	Bundelkhand	Jhansi	Affiliating
		078	Garhwal	Srinagar	Affiliating
		079	Gorakhpur	Gorakhpur	Affiliating
		080	Kanpur	Kanpur	Affiliating
		081	Kumaon	Nainital	Affiliating
		082	Lucknow	Lucknow	Unitary

1	2	3	4	5	6
		083	Meerut	Meerut	Affiliating
		084	Rohilkhand	Bareilly	Affiliating
		085	Roorkee	Roorkee	Unitary
		086	Chandrashekhar Azad University of Agriculture & Technology	Kanpur	Unitary
		087	G.B. Pant University of Agriculture & Technology	Pantnagar	Unitary
		088	Kashi Vidyapith	Varanasi	Unitary
		089	Burdwan	Burdwan	Affiliating
18	West Bengal	090	Calcutta	Calcutta	Affiliating
		091	North Bengal	Darjeeling	Affiliating
		092	Jadavpur	Calcutta	Unitary with Affiliating powers
		093	Bidhan Chandra Krishi	Kalyani	Unitary
		094	Kalyani	Kalyani	Affiliating
		095	Rabindra Bharati	Calcutta	Affiliating
		096	Visva Bharati	Shantiniketan	Unitary
19	Delhi	097	Delhi	Delhi	Affiliating
		098	Jawaharlal Nehru	New Delhi	Unitary

1. A
2.

UNIVERSITY-WISE DISTRIBUTION OF COLLEGES AMONG VARIOUS CLASSES OF URBAN & RURAL AREAS

APPENDIX 'M'

	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	2.5	2.6	2.7
1. ANDHRA	42.54	11.94	23.13	5.22	1.24		2.24	4.48	7.46	0.75	-	-	-
2. OSMANIA	70.18	7.90	13.16	6.14	0.88	-	-	0.88	-	0.88	-	-	-
3. SRIVENKATESWARA	34.78	34.78	17.39	2.17	-	-	-	6.52	4.35	-	-	-	-
4. DIBRUGARH	-	28.57	10.20	14.29	2.04	10.20	6.12	6.12	10.20	4.08	6.12	2.04	-
5. GAUHATI	23.28	12.47	9.48	13.79	13.79	2.59	2.59	2.59	6.90	11.21	0.86	0.86	-
6. BHAGALPUR, BIHAR L.N.MITHILA, MAGADH AND PATNA	29.79	8.94	23.40	9.79	5.11	-	3.83	8.08	5.96	2.55	2.13	0.43	-
7. RANCHI	47.01	5.88	16.18	11.77	1.47	2.94	1.47	-	4.41	7.38	1.47	-	-
8. SAURASTRA	63.23	22.58	14.52	6.45	-	-	-	1.61	1.61	-	-	-	-
9. SOUTH GUJARAT	38.89	27.78	16.67	11.11	2.78	-	-	2.78	-	-	-	-	-
10. SARDAR PATEL AND GUJARAT	40.12	16.86	20.93	18.02	1.74	-	0.58	1.16	0.58	-	-	-	-
11. KURUSHETRA	11.11	33.33	25.64	10.26	3.42	2.56	-	3.42	8.55	1.71	-	-	-
12. HIMACHAL PRADESH	-	22.58	3.23	25.81	9.68	12.90	-	-	3.23	12.90	3.23	6.45	-
13. JAMMU	75.00	-	-	18.75	6.25	-	-	-	-	-	-	-	-
14. KASHMIR	69.67	-	30.43	-	-	-	-	-	-	-	-	-	-
15. BANGALORE													
16. KARNATAK	46.04	10.79	16.55	15.83	0.72	-	-	5.76	2.88	1.44	-	-	-
17. MYSORE	46.61	13.56	16.10	10.17	0.85	2.54	0.85	4.24	4.24	0.85	-	-	-

	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	2.5	2.6	2.7
18. CALICUT	15.49	19.72	18.31	11.27	2.82	12.68	1.41	9.86	4.23	1.41	-	-	-
19. KERALA	31.73	4.81	25.00	6.73	1.92	-	13.46	6.73	7.69	0.96	0.96	-	-
20. A.P.SINGH	-	28.26	26.07	8.70	6.52	-	-	0.52	13.04	-	6.52	4.35	-
21. BHOPAL	73.08	-	23.07	-	3.85	-	-	-	-	-	-	-	-
22. JABALPUR	86.21	-	-	-	-	-	-	6.89	-	-	-	-	-
23. JIWAJI	31.71	4.88	26.83	12.20	4.88	-	-	2.44	9.76	2.44	4.88	-	-
24. SAUGAR	15.39	21.15	28.85	15.39	1.92	1.92	-	1.92	3.85	5.77	1.92	1.92	-
25. VIKRAM	33.33	11.11	20.00	33.33	2.22	-	-	-	-	-	-	-	-
26. BOMBAY	70.80	10.62	6.20	5.31	0.89	-	1.77	3.54	0.89	-	-	-	-
27. MARATHWADA	34.11	12.94	21.17	20.00	5.88	-	-	2.35	2.35	-	1.18	-	-
28. NAGPUR	43.97	14.89	17.02	13.48	2.13	-	2.13	4.91	1.42	-	-	-	-
29. POONA	51.00	4.00	18.00	8.00	4.00	-	6.00	4.00	3.00	2.00	-	-	-
30. SHIVAJI	37.65	20.00	12.94	9.41	1.18	-	4.71	9.41	3.53	-	1.18	-	-
31. NORTH EASTERN HILL	37.93	-	20.69	13.79	6.89	-	-	3.45	6.90	3.45	6.90	-	-
32. BERHAMPUR	35.00	-	20.00	35.00	5.00	-	5.00	-	-	-	-	-	-
33. SAMBALPUR	43.76	-	21.88	9.32	15.63	-	-	-	6.25	3.13	-	-	-

	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	2.5	2.6	2.7
34. UTKAL	31.03	6.90	13.79	13.79	13.79	-	3.45	1.72	10.35	3.45	1.72	-	-
35. Guru NANAK DEV	35.62	16.44	9.59	17.81	2.74	-	-	5.48	6.85	4.11	1.37	-	-
36. PUNJAB AND PUNJABI	34.59	15.79	19.55	9.77	7.52	0.75	0.75	1.50	2.26	6.77	0.75	-	-
37. RAJASTHAN AND UDAIPUR	41.72	11.66	18.40	14.72	2.45	-	1.23	1.23	3.07	4.29	0.61	0.61	-
38. MADRAS	62.13	11.33	10.65	5.92	2.37	0.59	0.59	1.78	2.96	-	1.18	-	-
39. MADURAI	49.04	17.31	8.65	8.65	0.96	0.96	2.88	2.88	2.88	5.77	-	-	-
40. AGRA	53.66	12.20	19.61	4.88	4-88	-	-	2-44	-	2-44	-	-	-
41. BUNDELKHAND	23.08	7.69	53.85	15.39	-	-	-	-	-	-	-	-	-
42. GARHWAL	53.52	12.68	14.09	5.63	2.81	-	-	5.63	4.23	1.41	-	-	-
43. KUMAON	-	9.09	45.46	27.27	-	9.09	-	-	-	-	9.09	-	-
44. AVADH BENARES HINDU GORAKHPUR AND KANPUR)	33.38	9.74	27.69	4.61	3.59	-	0.51	5.64	7.18	5.64	2.05	-	-
45. MEERUT	33.33	14.82	22.22	11.11	-	1.85	1.85	5.56	5.56	3.70	-	-	-
46. ROHILKHAND	41.38	20.69	24.14	3.45	-	-	-	6.90	3.45	-	-	-	-
47. NORTH BENGAL	-	50.00	23.53	8.82	2.94	2.94	2.94	-	2.94	5.88	-	-	-
48. CALCUTTA, BURDWAN AND JADAVPUR	57.30	10.22	8.76	3.28	2.19	-	3.86	1.10	5.84	7.30	0.73	-	-
49. DELHI	100.												