REGIONAL PATTERNS OF EDUCATIONAL AND OCCUPATIONAL STRUCTURE OF INMIGRANTS TO CLASS I CITIES OF INDIA — 1961.

by

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CERTIFICATE

I certify that the dissertation entitled "Regional Patterns of Educational and Occupational Structure of Inmigrants to Class I Cities in India 1961" submitted by Shri Babu Lal Gupta, in fulfilment of six credits out of the total requirement of twenty-four credits for the degree of Master of Philosophy (M.Phil) of the University, is, to the best of my knowledge, his original work and may be placed before the examiner for evaluation.

G.S. Bhalla.
Chairman

M.K. Premi.
Supervisor
30.7.76

A C K N O W L E D G M E N T

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I will be failing in my duty if I do not thank Shri Chinmoy Basu for Xerox copies of the maps.

B L Gupta

(Babu Lal Gupta)

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CHAPTER-I

I N T R O D U C T I O N

Of the three basic dynamic demographic processes working continuously on a population - birth, death and migration - the one directly concerned with economic development, both as determinant and consequence, is migration. Migration of population represents the flow of human resources from one area to another and, along with it, the redistribution not only of human but also of material resources and its attendant economic manifestations. Migration is a direct and tangible measure of a country's population policy whether consciously or unconsciously articulated, and also an instrument of achieving economic, social and cultural regionalization. Also as an instrument of levelling or accentuating regional differences and imbalances, migration functions as a direct tool of development planning.[1]

Migration, that has so many advantages and disadvantages to a country's economy is said to be very limited in India and in support of this, data on internal migration based on place of birth have been quoted from the Census. For example, in 1901 only 3.3 per cent of persons were enumerated in States other than the State of place of birth. The proportion was only 3 per cent according to the 1951 Census and it was again 3.3 per cent according to 1961

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1. Asok Mitra - unpublished Background papers prepared for Inter-regional Seminar on application of demographic data and studies to development planning, Kieve, September 1969, p. 132.

Census.[2] It must be noted here that, in all these cases the unit of observation was the State and not the place of enumeration. The 1961 Census collected data for the first time with reference to the exact place of enumeration and this reveals a very different picture.

According to the 1961 Census definition, almost one third (144.1 million out of 439 million) or 30.7 per cent of India's population was migrant (enumerated at a place other than that of birth). But out of these migrants, more than two-thirds about 67.6 per cent were females which is associated with their marriage. Male migration is, in fact, the true index to economic mobility in the Indian context. In 1961, 79.2 per cent of the males were enumerated at the place of birth, another 10.1 per cent elsewhere within the district of birth. Thus, nearly 90 per cent of the male population was recorded within its native district which indicates the general immobility of India's population. Nonetheless, 10.7% of the male population which migrated outside its native district, and another 10.1% which moved within it together make more than 47 million, a figure which approaches the population of countries like the U.K., France and Italy.[3]

Great economic and social importance is attached to the migration of the rural population to towns. The 1961 Census data show that 73.7% of the migrants moved within rural areas. Another

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2. Ashish Bose - Studies in India's Urbanization, 1901-1971, Institute of Economic Growth, 1973, p.7.

3. G.S. Gosal and G. Krishan - Patterns of Internal Migration in India, People on the move (Ed.) Leszek A. Kosinski and R. Mansell Prothero, Mathuen & Co. Ltd., London, 1975.

14.6% were involved in rural to urban migration. Urban to urban migrants accounted for 8 per cent of the total and the remaining few were the urban to rural migrants.

In the study of growth of urban population, internal migration occupies an important place. Internal movements have been observed during various decades, to be of some importance, particularly population transfers from villages to towns though there has been found a trend towards the rapid growth of cities due not only to influx from rural areas but also to considerable migration from smaller urban places.[4]

The decennial rate of growth of urban population in India moved from 0.35 per cent in 1901-1911 to 38.20 per cent in 1961-71. This considerable improvement in the rate of growth of urban population in India, indicates an accelerating process of urbanization. When urbanization is viewed in relation to total population, we find that the percentage of urban population to total population has gone up from 10.84 in 1901 to 19.91 per cent in 1971. Thus the rate of urbanization cannot be said to be very high. But the overall picture of urbanization becomes very interesting when we see percentage distribution of urban population by classes of towns according to the size of the population. The most interesting feature that emerges is the increasing role of class I cities

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4. G.S. Gosal and G. Krishan - Patterns of Internal Migration in India, op. cit., p. 201.

(population 100,000 and over). In 1901, the percentage of population in class I cities to total population was 2.61 which has reached 10.96 in 1971. On the other hand percentage of population in towns with less than 100,000 persons to the total population of India was 8.23 in 1901 which has moved to 8.95 in 1971. Thus the population of class I cities has experienced an increase of 8.35 percentage points whereas the population of towns with population below 100,000 could gain only 0.72 in its percentage to total population in 70 years.[5] Table I summarizes these figures.

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5. Aslam Mahmood - Patterns of Migration into Indian Cities and their Socio-Economic Correlates - A Multivariate Regional Analysis, M.Phil Dissertation (unpublished) 1975, P.V.

Table-1

Growth of Urban Population in India: 1901-1971

Year	Urban population as % of total population	% of population in class I towns to total population	% of population in towns with population less than 100,000 to total population	% of population in class I cities to total urban population	% increase in the urban population per decade
1901	10.84	2.61	8.23	24.08	-
1911	10.29	2.57	7.72	24.95	0.35
1921	11.18	3.02	8.16	27.04	8.27
1931	11.99	3.41	8.58	28.39	19.12
1941	13.86	5.02	8.84	36.25	31.97
1951	17.29	7.32	9.97	42.32	41.14
1961	17.97	8.69	9.27	48.36	26.41*
1971	19.91	10.96	8.95	55.06	38.20

* The definition of a town has been changed in 1961 and the 1961 and 1971 figures are according to the definition of 1961.

Source -

Adapted from A. Mahmood's Patterns of Migration into Indian Cities and their Socio-Economic Correlates - A Multivariate Regional Analysis, M.Phil Dissertation, 1975, p.VI.

N.B. 1) All the figures from 1901 to 1961 are found in Census of India 1961, General Population Tables Part II-A(i) on the following pages -

a) Total Population of India on page 181
b) Total urban population of India on page 54
c) Total population of class I towns on page 363

2) Figures of 1971 are taken from Census of India 1971, Paper I of 1972, Final Population Tables.

It is significant that about two-thirds of the decennial urban population increases have occurred in cities of more than 100,000 population. This implies that these large centres are still expanding in industrial and commercial activities, claiming at the same time a comparatively large share in construction activities, public amenities and transport services.[6]

It seems from the above discussion that the process of urbanization in India is being mainly polarized in the big urban agglomerations and thus the population of big cities is growing much faster in relation to the population of other urban centres and the rest of the country. The relative rapid growth of population of cities in India is mainly caused by internal migration into the cities from the rest of the country.

Practically in all the countries of the world, the rate of increase in the size of their cities, as revealed by their census reports, shows that in majority of cases migration has played a dominant role in the process of urbanization, i.e., the city populations have grown more as a result of a net favourable balance of migration (excess of in-migration over out-migration) than of the natural rate of increase in their population (excess of births over deaths). In case of India also, migration plays quite an important part.

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6. Census of India, 1961, Paper No.I of 1962, P.ix.

Thus, the study of internal migration is very important since it has immense economic, social and political significance. Migration has been considered as a synonymous of the progress of the country; Ravenstein remarked, "Migration means life and progress; a sedentary population stagnation."[7] In an economically developing country, migration occurs because of several reasons. It can be argued that a high rate of progress entails a population which is continually in a state of flux, responding quickly to new opportunities and reacting swiftly to diminishing opportunities. Hence migration can be said as a healthy sign of economic progress.

Migration occurs not only from rural areas but also from urban areas. Intra-urban migration is also an important component of Indian migration.[8] Intra-urban migration due to economic reasons is mainly directed towards industrial towns and big cities.

But industrialization has not been the most important cause of urbanization in India. In industrial America and Europe, urbanization occurred in response to the demand for labour from industry, while in India it is due mainly to lack of demand in the rural areas. Urban areas in India grow significantly by receiving migrants from the rural areas but in many cases the movement is one from rural under employment to urban unemployment.[9]

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7. E.G. Ravenstein - The Laws of Migration, "Journal of the Royal Statistical Society, 52, June 1889, p. 288.

8. M.K. Premi - Outmigrating Towns in India: An Analysis of their Socio-demographic Characteristics, Paper contributed to Census Centenary Seminar, New Delhi, October 1972.

9. G.C.K. Peach - "Urbanization in India" in Urbanization and its problems, Beckinsale R.P. and Houstan J.M. (eds.), Blackwell, Oxford, 1968.

Despite immense economic, social and political importance of migration, the characteristics of migrants have received inadequate attention from scholars. So far researchers have largely ignored the individuality of human beings and how does it differ from one territorial unit to another. Geographers have always been interested in population structure as it varies territorially between countries, regions and rural areas. The need to analyse the migration - stimulating effects of various demographic forces have been stressed by Bogue and Zachariah also.[10]

Hence an attempt has been made here to study the educational and occupational structure of in-migrants to class I cities in relation to their economic base.

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10. D.J. Bogue and K.C. Zachariah - 'Urbanization and Migration in India' in India's Urban Future (ed.) Roy Turner, University of California Press, p.127.

OBJECTIVES AND THE NATURE OF STUDY

1.2 OBJECTIVES

It has already been seen that Class I cities (population 100,000 and over) have been playing an increasingly important role in the process of urbanization in India. These cities claimed the highest increment of the total increase in urban population. Thus, urbanization in India, in the sense of absolute increase in urban population has grown much faster than the development of the secondary and tertiary sectors.

Hence it becomes imperative to know as to what kind of urbanization is taking place in India. Are the rural unemployed and illiterate people being transferred to these urban areas? Whether rural migrants are being redistributed or displaced in the urban areas with no consequent or definite change in their occupational pattern? What seems to be taking place is an urban growth at gigantic proportions fed by the rural stream to an extremely distorted and unbalanced regional development both at horizontal and vertical scale.

So far references have been made to the evidence of differential population movements in the provinces, districts and cities. It has been noticed that most of the researchers have quantified the internal movements of the population and very few of them have studied migrants from the point of view of their

socio-economic characteristics. Knowledge of the selective nature of migration is very important in assessing the problems that arise and those that face the economic and social planners.

Thus, the main objectives of this study are to answer the following questions:

(i) Are the persons who move to the cities the better educated villagers or the illiterates, and how do their levels of education differ according to the economic base of the cities?

(ii) What kinds of jobs do the migrants get in the cities after leaving their native places and how do they fulfil the educational demands of various occupations?

(iii) Do the migrants differ substantially as far as levels of education are concerned, from the people at the destination?

1.3 STATEMENT OF THE PROBLEM

In a developing country like India characterized by the existence of a traditional social structure, free migration of the populace has paramount implications for economic, political and cultural aspects manifested largely in the educational attainments of the inmigrating and outmigrating people of different regions. Rural to urban migration has assumed special significance in the process of migration in the developing regions of the world because

of its immense potentiality of inflating the urban population, of creating and accentuating the inequality between the two areas in terms of educational attainments of the population and their income and wealth and of leading to socio-politico-economic disequilibrium. In this context, the educational selectivity of the rural-urban migrants is supposed to have important bearing on the inter-regional transfer of capital and the pattern and pace of economic development.

Migration of the population from one area to another is based on economic calculations in terms of costs and benefits. It is, therefore, selective of age, sex, occupation and educational attainments of the potential migrants. The positive relationship of propensity to migrate with educational levels has placed the rural-urban relationship in a special framework in recent years. Hence, the present study aims to measure, first of all, that the proportion of migrants vary according to the economic base of the city. As urbanization is taken as synonymous of industrialization it is expected that the proportion of migrants would be higher in those urban areas which have industrial or service base.

Secondly, the study would measure the educational characteristics of the migrants with reference to the economic base of the city. It would also try to clear the apprehensions shown by Bogue and Zachariah[1] when they said, "In India, the propensity

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1. D.J. Bogue and K.C. Zachariah, op.cit., pp. 53-54.

to migrate to urban areas especially the cosmopolitans where the chances of employment are quite high, is higher among literates than illiterates and that as the level of education rises, the tendency to travel greater distances to seek employment increases." But our data do not allow to analyse this fully as no data have been given for the people at origin. Bogue has pointed out that since migration is always selective, therefore, there are migration differentials in many of the socio-economic and demographic traits of migrants. Those traits which generate sharp migration differentials, according to him, are age, sex ratio, urban and rural residence, education, occupation, etc.[2] Education differentials for migrants and non migrants (Residents at the place of destination) will also be found out in a few million plus cities to highlight their differences with those of the latter.

Thirdly, the study will also try to establish the relationship between the functional category of the city and the occupational categories in which migrants are most frequently found. To be more specific, the study would discover as to which are the occupations that attract the migrants the most.

In brief, it is always very important to know the socio-economic characteristics of the people who are flooding the already over-crowded cities and posing a problem before the planners.

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2. D.J. Bogue - Principles of Demography, John Wiley (1969), pp.753-55.

It is also equally worthwhile to know as to how are they absorbed in various occupations according to their levels of education.

The whole study has been organised in the following way:

Chapter II of this study is devoted for the description of the study area, data that are used in the study and the analytical approach to the problem. This Chapter has four sections. Section one deals with the delimitation of the study area. Second section contains the availability of the data on migration and the general list of the variables used in this study, their sources and reasons of their choice. Shortcomings and limitations have been discussed under the third section. The methodology and the analytical procedures have been discussed in section four.

The results of the analyses have been discussed in Chapters third to five. The regional patterns of volume of migrants have been interpreted and discussed in Chapter III. The regional patterns of educational and occupational characteristics of migrants in relation to the economic base of the city have been discussed in Chapters IV and V respectively. In Chapter VI the educational composition of migrants has been compared with those of non-migrants (residents at the place of destination).

In Chapter VII, conclusions from the foregoing chapters are drawn, a few comments are also made on them. The basic findings and the contribution in the field of internal migration are mentioned and some suggestions are put forward for future studies, those of which could not be done in this study due to various problems and limitations.

CHAPTER-II

AREA, DATA AND METHODOLOGY

2.1 THE AREA OF STUDY

To test the hypotheses developed in the preceding chapter, class I cities (places with population 100,000 and over) have been taken as the basic units for analyses; since

(i) most of the data required for testing the hypotheses concerning migrants are not available for other urban centres (with population less than 100,000).

(ii) Out of all the urban places of India, the population of class I cities has gorwn fastest and in 1971 their population constituted 55.06 per cent of the total urban population of India.[1]

(iii) Large urban centres like class I cities are responsible for the major changes in economic structure (non-agricultural) of the national economy.

Besides, four cities with million plus population for which more detailed data on migrants are available have been taken separately for comparing the educational composition of migrant workers with those of resident workers. The tables given for migrants are not given for non-migrants for the rest of cities in 1961. Even in these four metropolises (Calcutta, G. Bombay, Delhi and Madras) only workers have been taken because by taking workers, the age factor has been controlled to a certain extent.

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1. Aslam Mahmood - op. cit. Table I, p. vi.

As our hypotheses are related with the functional types of the cities, it is necessary first to have a classification of the cities according to their functions. However, as the objective of this study is not to analyse the functional classification of the cities, any classification of the cities fulfilling the requirements of the present study may be taken for granted. But various attempts made in this regard require mentioning.

Harris, Pownall and Duncan and Reiss[2] are the first to be mentioned.

Harris chooses a fixed percentage at or above which a city is considered to be specialized in a particular function. Pownall used a simple deviation of the percentage of a function of a city from the national percentage. Nelson used these deviations in terms of their ratios to their standard deviation in order to determine the intensity with which a function specializes.

The first systematic work on functional classification of Indian cities is done by Lal.[3] He follows a different method

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2. C.D. Harris, "A functional classification of cities in U.S.A.", Geographical Review XXXIII (Jan '43), pp.86-99; Pownall L.L., "The functions of Newzealand Towns", Annals of the Association of American Geographers, XLVII (Dec.1953), pp.332-50 and Duncan D. Otis and Albert J. Reiss Jr., "Social characteristics of urban and rural communities 1950, New York, John Wiley & Sons (1965) pp.112-116.

3. Amrit Lal, "Some characteristics of Indian cities of over 100,000 inhabitants in 1951 with special reference to their occupational structure and functional specialization (unpublished Ph.D. Dissertation,)Deptt. of Geography, Indiana University, 1957).

for classifying cities. He determines functional specialization of cities on the basis of "Location Quotients" given by the per cent of all workers in city in industry y to the median per cent of all workers in industry Y in all the cities. Then, he decides to consider cities with L.Q. values between 90-109 in any industry or service as having a normal specialization. Qazi Ahmad[4] has divided all the Indian cities into three broad groups viz; (1) Northern cities (2) Central cities and (3) Southern cities by taking the scores of ten principal components and using texonomic analyses.

It was Mitra[5] who attempted the functional classification of Indian cities for 1961 for the first time. His method requires a little more explanation for it has been used in the present study.

His method of classification is based on the concept of dominant functions of a city, using the nine division census industrial classification of workers. For each city a percentage distribution was made of all workers into seven non agricultural industrial categories which were grouped under three rubrics A.B.C. as below to take the advantage of triangular coordinates.

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4. Qazi Ahmad, "Indian Cities: Characteristics and Correlates", Research Paper No.102, Deptt. of Geography, Chicago University, Illinois, 1965.

5. Asok Mitra, "Internal Migration and Urbanization", ECAFE Working Group on problems of Internal Migration and Urbanization, Bangkok, Thailand, 1967, Published by Registrar General of India, New Delhi, 1967, pp.38-81.

Group	Census Industrial Categories[6]
Industry - A	III, IV, V and VI
Trade and Transport -B	VII and VIII
Services - C	IX

The three percentages of A, B and C, were plotted on the triangular coordinates, then the position of each in the field of triangle was taken as main determinant of its functional classification. The method given by him is as follows:

The intersection of the perpendiculars of an equilateral triangle will represent 33 $\frac{1}{3}$ per cent for each A, B and C. Three circles are drawn in the triangle taking this intersection point

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6. Industrial Categories — Brief Description

III	Forestry, Fishing, Plantations, Mining and Quarrying, etc.
IV	Household Industry
V	Manufacturing other than household
VI	Construction
VII	Trade and Commerce
VIII	Transport, Storage and Communication
IX	Services

as centre. The first circle has a radius of 6-2/3 and the second has a radius of 11-2/3 and the third of a radius 16-2/3. (1) Any city whose all the three coordinates A, B and C fall within the first circle will be highly balanced. (2) The city whose coordinates fall outside the first circle but inside the second circle will be moderately balanced with the sector value farthest away from the centre tending to disturb the equilibrium and (3) the cities whose coordinates fall outside the two inner circles but within the third circle will be ill-balanced the sector value farthest away from the centre accentuating the predominant characteristics of the city; and (4) the three coordinates A, B and C of any city falling outside the three circles will give the town a very pronounced character of that predominant sector the value of which pushes its position farthest away from the centre. This broad classification is further subdivided in the following manner:

(1) Service cities as high service (i) with low industry and medium trade and transport (ii) with low trade and transport and medium industry.

(2) Industrial towns as high industry (i) with low trade and transport and medium service (ii) low service medium trade and transport.

(3) Trade and transport cities as high trade and transport (i) with low service medium industry (ii) with low industry and medium service.

Since the main hypothesis of this study tries to establish the relationship between the educational and occupational

characteristics of the immigrants with the economic base of the city, a classification which clearly classifies the cities in terms of economic activities, will be appropriate. Asok Mitra's classification clearly classifies the Indian cities in terms of dominant functions performed by them. Thus, this classification has been borrowed in this study and the cities have been grouped under five broad categories as follows:-

Group I - Cities with dominant industrial function and low service (17 cities).

Group II - Cities with dominant industrial functions and moderate service (29 cities).

Group III - Cities with dominant service functions and moderate industries (27 cities).

Group IV - Cities with dominant service functions and low industry (20 cities).

Group V - Other cities (13 cities).

In 1961 there were 106 class I cities in India performing varied types of functions. Out of these 106 cities for which data are available, 93 cities are covered by the first four functional groups. Thirteen cities of Group V have been left out from analyses for they contained cities with miscellaneous functions. Hence, in all, 93 cities (Map No.I) have been studied here the list of which is given in Appendix-I.

2.2 Data on Migration and their limitations

The great importance of geographic or spatial mobility of the population in India is countermatched by lack of direct

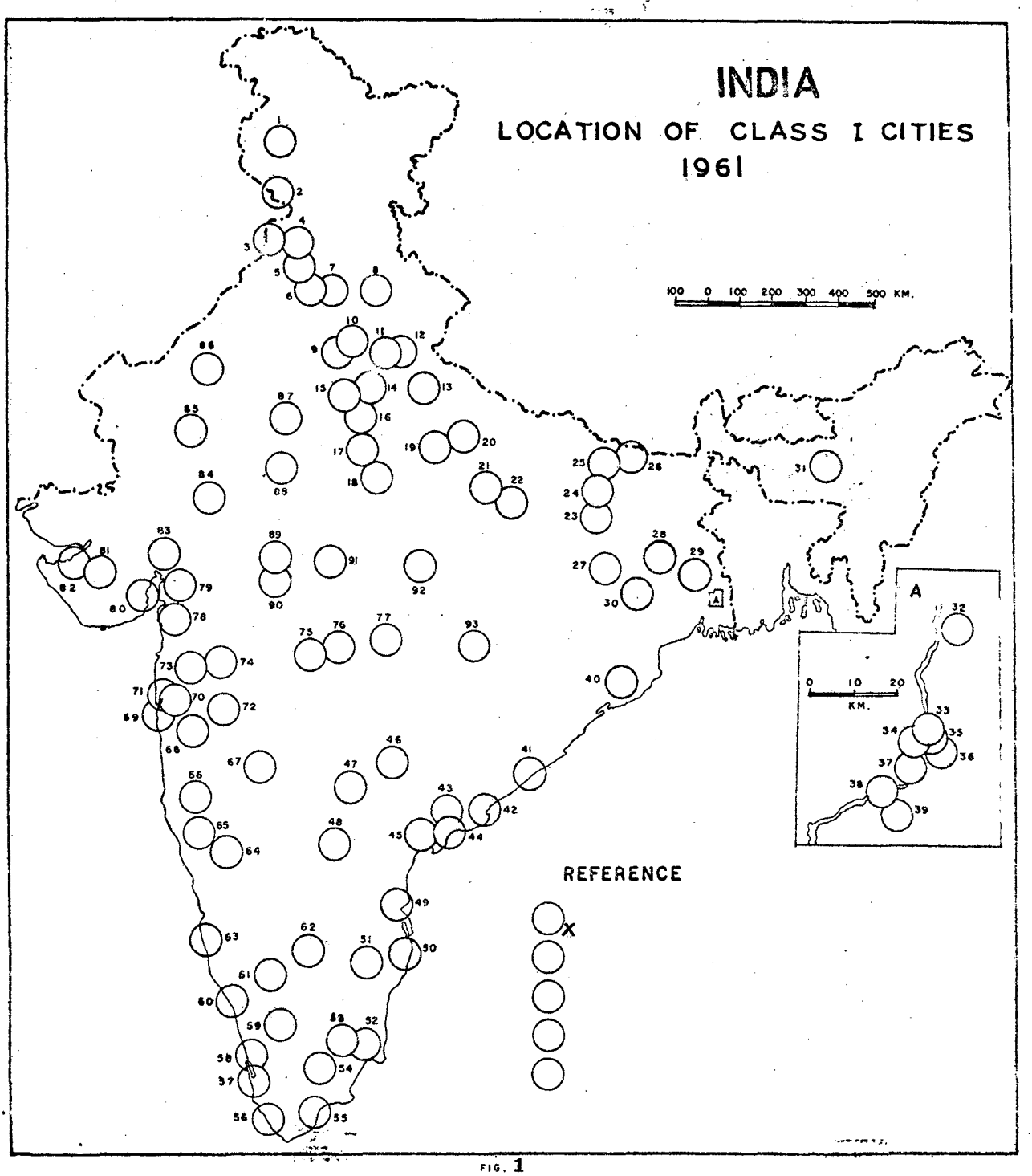
INDIA
LOCATION OF CLASS I CITIES
1961
100 0 100 200 300 400 500 KM.
A
0 10 20
KM.
REFERENCE

FIG. 1

Key to Map

1. Srinagar
2. Jammu
3. Amritsar
4. Jullundur
5. Ludhiana
6. Patiala
7. Ambala
8. Dehra Dun
9. Delhi
10. Meerut
11. Moradabad
12. Rampur
13. Shahjehanpur
14. Aligarh
15. Mathura
16. Agra
17. Gwalior
18. Jhansi
19. Kanpur
20. Lucknow
21. Allahabad
22. Mirzapur
23. Gaya
24. Patna
25. Muzaffarpur
26. Darbhanga
27. Ranchi
28. Asansol
29. Burdwan
30. Jamshedpur
31. Gauhati
32. Bhatpara
33. Kamarhati
34. Baly
35. Baranagar
36. S. Dum Dum
37. Howrah
38. Garden Reach
39. South Subarban
40. Cuttack
41. Vishakhapatnam
42. Kakinada
43. Elluru
44. Bandar
45. Guntur
46. Warangal
47. Hyderabad
48. Kurnool
49. Nellore
50. Madras
51. Vellore
52. Thanjavur
53. Trichurapalli
54. Madurai
55. Tuticorin
56. Trivandrum
57. Alleppey
58. Ernakulam
59. Coimbatore
60. Calicut
61. Mysore
62. Bangalore
63. Mangalore
64. Hubli
65. Belgaum
66. Kolhapur
67. Sholapur
68. Poona
69. G. Bombay
70. Ulhasnagar
71. Thana
72. Ahmadnagar
73. Nasik
74. Malegaon
75. Akola
76. Amraoti
77. Nagpur
78. Surat
79. Baroda
80. Bhavnagar
81. Rajkot
82. Jamnagar
83. Ahmedabad
84. Udaipur
85. Jodhpur
86. Bikaner
87. Jaipur
88. Kota
89. Ujjain
90. Indore
91. Bhopal
92. Jabalpur
93. Durg

data on this vital aspect of population. The main source of information for such investigations is the indirect data on 'place of birth' recorded in the Indian Census. Since the first regular Census in 1881, data of this kind have been collected, though the form and detail of its presentation has varied from Census to Census. It was only in the 1961 Census that the number of migrants enumerated at the place of birth was also given, making it possible to assess intra-district migration.

The 1961 Census introduced many other improvements and have given new dimensions to the study of migration in India. Besides giving rural/urban classification of both, place of birth and place of enumeration of migrants in the case of cities, data on age, sex, literacy and occupation of migrants have also been published.

According to the Indian Census, a migrant is one who is enumerated at a place other than that of his birth. As such, migrants include persons who migrate for economic reasons, married females who move from their parents' to husbands' places, children born at the places other than those of normal residence of their parents, students getting education outside their birth places, families evacuated from new construction sites and rehabilitated elsewhere, persons on a casual visit to places other than those of their birth for the entire period of census enumeration.

Place of birth data are only an indirect tool for an analysis of migration and for that reason suffer from numerous handicaps. During this work, certain very serious omissions were found. The tables which are prepared for migrants should also have been prepared for the people at the place of origin or at the destination or for the general population, in the absence of which migration differentials cannot be calculated. The levels of education of migrants (Table D-IV) should also have been cross-classified with that of duration of residence and distance as has been done with the National classification of occupation. Had it been cross classified in the manner mentioned above, it would have been much easier to associate distance moved with level of education. In the absence of a cross classification between the duration of residence at the place of enumeration and education, it becomes difficult to discern whether the levels of education were gained at the place of enumeration or at the place of origin. These are the limitations under which the present study has been carried out.

Keeping all these limitations in mind, a rational choice of some meaningful indicators to study the migration differential in terms of education and employment is essential. Fifteen variables have been chosen for this study and are given in Table II. Since the migration tables for 1971 have not been published so far by the Census Organization, the study has been based on the 1961 Census data. The list of variables and the rationale for their choice is also given below:

Table 2

List of Variables Studied

- Percentage of migrants to the total population of the city.
- Percentage of illiterate migrants to total migrants.
- Percentage of literate migrants to total migrants.
- Percentage of literates without educational levels to total literates among migrants.
- Percentage of literates up to Hr.Sec./Matric to total literates among migrants.
- Percentage of literates above Hr.Sec./Matric (Non-Tech.).
- Percentage of literates above Hr.Sec./Matric (Technical).
- Percentage of migrants in non-agricultural activities (category III to IX) cross classified with levels of education.
- Percentage of migrants in division O to X according to N.C.O. cross classified with levels of education.
- Percentage of illiterate non-migrants to total non-migrant population of the city.[7]
- Percentage of literate non-migrants to total population of non-migrants.[7]
- Percentage of literate non-migrants without education levels to total literate population of non-migrants.[7]
- Percentage of literate non-migrants up to Hr. Sec./Matric to total literate population of non-migrant.[7]
- Percentage of literate non-migrant above Hr.Sec./Matric (Non-Tech.) to total literate population of non-migrants.[7]
- Percentage of literate non-migrants above Hr.Sec./Matric (Tech.) to total literate population of non-migrants.[7]

Source: Census of India, 1961, Part II-C, State Migration Tables D-IV.

Ibid, State Volumes, Part II-B (i) General Economic Tables, Table B-III, Part A.

The first variable percentage of migrants to total population has been taken to indicate the overall pull of the cities with diverse functions. Variables 2 to 7 have been taken to show the educational aspects of the migrants to cities. Variable 8 indicates the participation of migrants in non-agricultural pursuits taken together cross classified by their education. Variable No.9 has been selected to indicate proportion of migrants absorbed in occupations O - X (at division level) vis-a-vis their educational levels in that particular occupation. Variable No.10 to 15 indicate proportion of non-migrants in different levels of education. These variables indicate the overall educational composition of non-migrants at the place of destination.

2.3 Some Constraints

A note of explanation about educational attainments in relation to life time migration is required. Unlike the data for adults over short migration periods, where all or virtually all of the education is attained before migration in the case of long duration migrants. Some adult migrants might have received part or all of their education after migration. Thus, all or part of the migrants' education may have been received at the place of destination rather than at that of origin. Hence, his attainments are conditioned by his new environment as well as by the resources, way of life, and attitudes that he and his family brought with them from old home. This circumstance may affect the patterns of educational selectivity of migrants.

According to 1961 Census definition "a literate is one who can read and write a simple letter with understanding."

This study has not taken into consideration the age structure and sex composition separately but has taken them together. This might also affect the results as selectivity is not always clear cut for all ages and for all sexes. Sometimes there is a tendency in many age groups for those with least education to have slightly higher rates than those of intermediate education level. The low level of education among women in India may also effect the overall picture of the findings.

There would almost be general agreement that the selectivity of a stream can be measured by comparing the characteristics of migrants with those of the population in the area of origin. It is also legitimate to make the parallel comparison, namely between an inmigrant population and the non migrant at the place of destination, even though opinions may differ on whether these differences indicate selectivity of the migrants. This analysis, therefore, compares the migrant with those of the residents at the place of destination who will be called non migrants in the present study. The Census does not give the actual place of origin of the migrating streams and hence nothing can be said about the same.

2.4 Methodology

After choosing the cities as the basic units of study, identifying their economic base and selecting the important variables, a careful selection of the suitable analytical tool is extremely important.

As the basic purpose of this study is to find out regional patterns of educational and occupational structure of the inmigrating stream, the simplest statistical methods have been used. Though the method is crude, yet it serves the purpose well. First of all simple percentages have been calculated to know the proportion of migrants in different divisions of National Classification of Occupation and the proportion of migrants in different levels of education in different occupations. Proportions were also calculated to know the volume of migrants into the cities with different economic bases. To be more precise, the proportions of different levels of education and different divisions of N.C.O. were grouped into three categories each. With the help of natural break points and graphs, the grouped percentages were plotted on the maps of India to know the spatial patterns of educational composition of migrants and proportion of migrants in different occupations. For showing the association of education with occupation, the median values of all the columns of levels of education were calculated separately for each occupation and for each functional group separately. The median values thus, obtained were plotted on the graphs to show how education and occupation of the migrants are associated.

It is expected that the levels of education and proportion of migrants differ according to the economic base of the city and hence analyses of variance with one way classification has been used in the study.

Analysis of Variance - The main source of variation in any particular characteristic (X) of the migrant is the economic function of the city and a random element. The effect of the economic functions on the characteristics remains the same within the group of the same economic functions but varies for one economic function to another 'e' function. However, whatever the variations within the same economic functions are found, they are attributed to the random factors. In terms of mathematical symbols the above model can be written as:-

$$X_{jk} = \mu + \beta k + \epsilon jk$$

Where X_{jk} is the jth value of the characteristics in kth economic group, μ is the overall mean value of the characteristics (represented by X) βk is the group effect of economic functions and ϵjk is the effect of random factor on jth value in kth economic group.

Under the null hypothesis there is no variation caused by group effect. In other words, the values vary randomly only. This can be written symbolically as follows:

$$\beta_1 = \beta 2 \ldots\ldots\ldots\ldots \beta k = 0$$

The F ratio of mean sum of squares between groups of different economic functions to the mean sum of squares within groups of different economic functions should be non-significant. The values of these mean sum of squares are found as below:

Source of variation	Sum of Squares	D.F.	Mean sum of squares
Between Group	$q_1 = \sum_{r=1}^{k} n_r \quad (\bar{X}.r - \bar{X})^2$	K-1	$q_1/K-1$
Within Group	$q_2 = \sum_{r} \sum_{j} (x_{jr} - \bar{X}.r)^2$	N-K	$q_2/N-K$
Total			

Where n_r is the number of cities in rth group

$r = 1, 2, 3, 4$

$\bar{X}$ = Grand mean of X

$\bar{X}_{jr}$ = Mean of X values in the rth group

X_{jr} = the jth value in rth group

Thus the null hypothesis mentioned above is either rejected or not rejected according to the value of F being significant or not.

CHAPTER-III

REGIONAL PATTERNS OF INMIGRATION INTO INDIAN CITIES

It is evident from the available data that our people move lesser distances. The haphazard growth of the bigger cities shows that the preferential direction of migration in India is towards large urban areas. Hence, in this chapter, an attempt has been made to measure the volume of migrants in class I cities of India. It would also be the endeavour of this study to bring into relief the regional patterns of migration.

For identifying the regional patterns of volume of migrants into class I cities the calculated proportions of migrants were put in a descending order and then were plotted on the map of India according to natural break points. Analyses of variance was also carried out to find out which group of cities attracts migrants the most. Analyses of variance technique help in concluding whether there is a significant difference or not in the volume of migration into various functional groups of cities.

If immigration is viewed in spatial perspective, it has been characteristic of the areas like urban industrial concentrations, multi-purpose project sites and other areas of development activities. The major and minor industrial concentrations have proved as magnets for migrants. The distribution of total movements within a country is closely associated with the degree of economic

and social development. Migration, therefore, is generally associated with the availability of job opportunities.

It has already been stated that large urban agglomerations are receiving a lion's share of migrants. The picture becomes still more interesting when proportion of migrants to the total population of these cities are seen separately. The proportion of migrants to total population differs from one city to another. The lowest proportion, i.e., 6.25 per cent has been observed in Srinagar while Bhatpara has received maximum proportion (76.11 per cent) as migrants.[1] In other words, three fourth of the population of Bhatpara is made up of migrants. Leaving aside 18 cities whose migrants population is less than 30 per cent, rest of the cities have at least one third of their population as migrants.[1] Out of the 18 cities with fewer migrants, 2 are in functional Group I, 6 in Group II, 4 in Group III and 6 in Group IV.

The picture becomes more interesting when the proportion of migrants is viewed in the background of predominant functions performed by the cities. Table No.3 and Map No.2 seem to demonstrate that industry and service are the main sources of attraction for migrants. If the map is examined in detail, it is found that only certain major industrial complexes have attracted the migrants to the greatest extent. Among these industrial complexes Calcutta

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1. See appendix II.

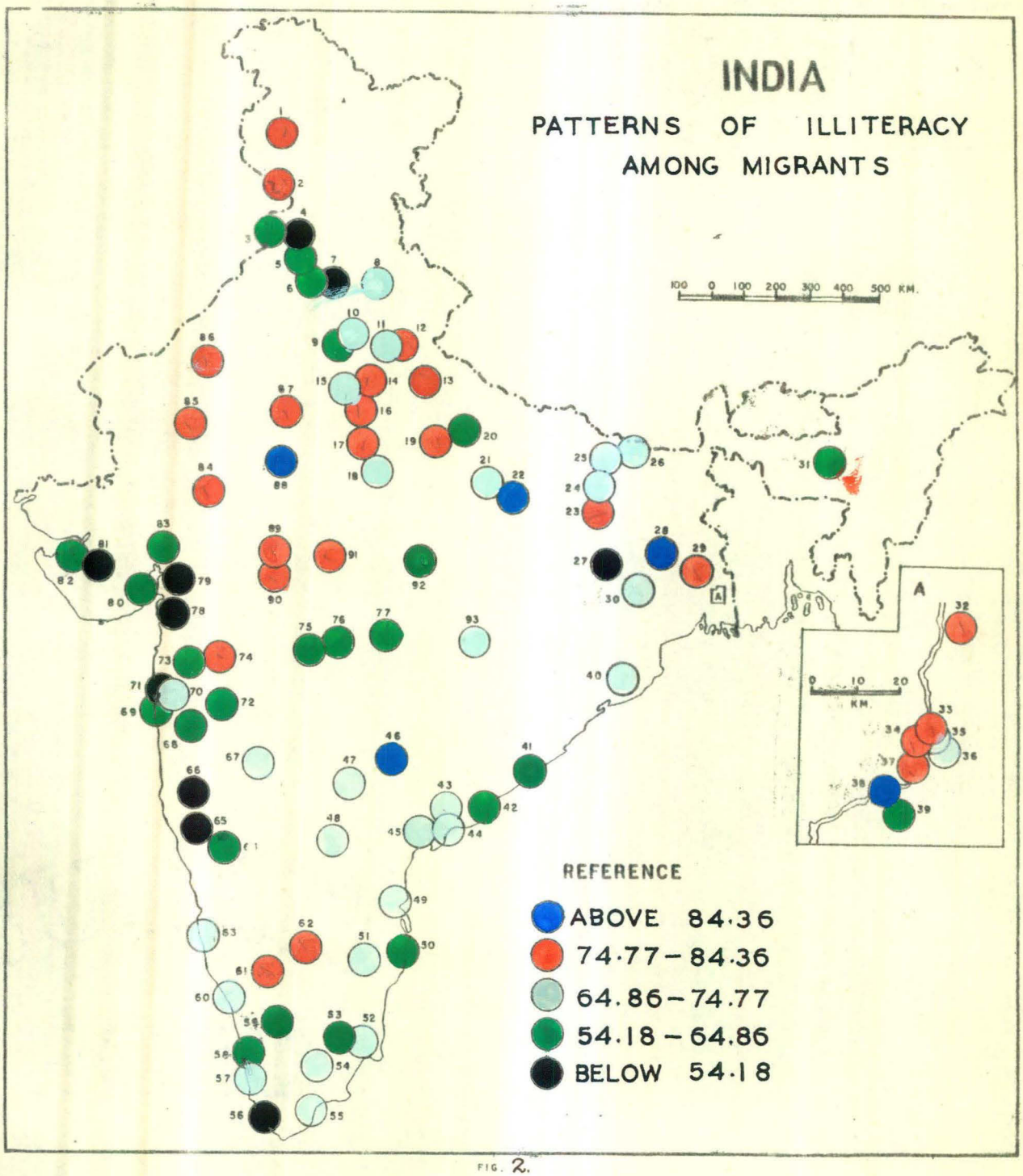
INDIA
PATTERNS OF ILLITERACY
AMONG MIGRANTS
100 0 100 200 300 400 500 KM.
A
0 10 20
KM.
REFERENCE
ABOVE 84.36
74.77 – 84.36
64.86 – 74.77
54.18 – 64.86
BELOW 54.18

FIG. 2.

conurbation, Bombay-Thana-Poona industrial complex and a few newly developed industrial cities are prominent. The two famous industrial complexes of Calcutta and Bombay are well marked on the map whereas a few industrial magnets like Jamshedpur, Akola, Guntur and Calicut are looking like separate centres that seem to be well distributed over South and South-East India.

After looking into the map, it seems as if the people are migrating towards these two industrial complexes and to the areas of new industrial ventures in the cities of Madhya Pradesh and Andhra Pradesh. The cities in the South are attracting the migrants more than the cities to the North. In whole of Indo-Gangetic plain, except a few cities, most of the cities fall below median proportion of migrants which clearly indicates that north Indian cities have nothing to offer to attract the migrants. To be more precise North Western region of India attracts very low proportion of migrants. Except a few clear cut regions, the whole of the map looks to have contained regions within regions.

If one examines Table No.3, both row-wise and column-wise, it is noticed that the proportions of migrants can be summarized according to the intensities of proportions as follows:

Very High Proportion of Migrants

Column-wise data of Table No.3 indicate that out of ten cities of very high migration 4, 3, 2 and 1 city fall in functional groups I, II, III and IV respectively which are receiving very high

proportion of migrants. In brief, the cities of Group I and II with industrial functions and moderate and low service seem to attract the migrants more than the cities of Group III and IV (Service Cities) when the table is seen row-wise, it is found that out of 17 cities of Group I, 4 cities receive very high, 5 high, 4 median, 2 low and only two cities receive very low proportions of migrants. Greater Bombay, Bhatpara, Baly and Ulhasnagar receive very high proportions of migrants whereas Moradabad and Amritsar receive the lowest proportions of migrants. Moradabad's case can be explained in terms of cottage industries which do not attract too many migrants but the case of Amritsar remains unexplained. It may be explained in terms of partition of the country and nearness of the international border.

High Proportion of Migrants

Under this category there are 29 cities out of which high proportion of migrants is again attracted by industrial cities though they are closely followed by the service cities. The cities with high proportion of migrants seem to have a tendency to cluster around the cities receiving very high proportion of migrants. Group II has largest number of cities receiving high proportion of migrants. These are Elluru, Baroda, Coimbatore, Kolhapur, Kanpur, Bangalore, Indore, Gwalior, Durg and Bhopal. To summarize, it can be said that the migrants are pulled by certain cities when both industry and service join hands.

Table 3

Proportion of Migrants into Indian Cities by Functional Groups

Functional Groups	Very High (49.17)	High (40.21 to 49.17)	Medium (35.08 to 39.87)	Low (25.01 to 34.42)	Very Low (25.01)	Total
I	4	5	4	2	2	17
II	3	10	6	9	1	29
III	2	5	9	9	2	27
IV	1	9	4	4	2	20
Total	10	29	23	24	7	93

Median or average proportion of migrants

Under this category, there are 23 cities of which maximum number of cities fall in Group III (predominantly service cities) showing that the average proportion of migrants is attracted by service cities. These cities cannot absorb more persons like industrial cities.

Low and very low proportion of migrants

Under low proportions of migrants, if the cities of Group II and III are added together they form three fourth of the total number of cities indicating very clearly that low proportions of migrants are attracted by the cities of predominantly industrial and service functions followed by moderate service and moderate industry respectively. It may be explained in terms of cities with small scale industries. Probably, cities with small scale industries attract low proportion of migrants. It, therefore, reaffirms the belief that there is a close association between proportion of migrants and job availability in industrial and service cities.

So when proportion of migrants is seen in terms of their regional distribution, it is found that maximum number of cities with high proportion of migrants are located in the west and especially in Bombay-Poona industrial complex. In the east, Calcutta industrial region has some power to match the pull power of Bombay-Poona industrial complex. In short, Bombay-Poona

region is becoming more popular with the migrants while Calcutta industrial region is losing its popularity with the migrants. It may be because of certain regional factionalism. Though it is said that Indian urbanization is not the result of industrialization but after this discussion it can well be inferred that in India, by and large urbanization is following industrialization.

As the map is not free from subjectivity, analyses of variance was calculated to be more objective in drawing our conclusion. Analyses of variance is a technique for testing the significane of means of variables. The table of analyses of variance is given below:

Table No.4

Analyses of variance for differences in the proportion of migrants to different functional categories of cities

Source of Error	D.F.	S.S.	M.S.S.	$F_{3, 89}$
Between Groups	3	576.837	192.279	1.7467*
Error	89	9797.1930	110.080	
Total	92	10374.0300		

* Insignificant at 5% level of significance.

According to the table of analyses of variance the observed F is very less than the table value of F at 5% level of significance for 3,89 d.f. Hence, it is concluded that there is no significant difference in proportion of migrants between functional groups of cities.

In the light of the above discussion based on the map, and analyses of variance, it is concluded that the proportion of migrants is not significantly related with the economic base of the city. People move to the cities without giving much consideration to economic bases of the cities. This conclusion also leads us to believe that most of the migrants from rural areas and smaller towns are pushed by unhospitable circumstances at home and therefore move to these cities with either weak pull or without any sort of pull of the cities. The second explanation lies in terms of functional classification of cities. The classification used in this study is based on the industrial classification alone which is a high aggregation. It does not distinguish between labour intensive technology of Moradabad and Sholapur, etc., and capital intensive technology of Bombay, Ahmadabad and Howrah, etc. and classifies all as industrial base cities. The migration pattern of these two sets of cities are not the same and therefore should be studied separately.

CHAPTER IV

PATTERNS OF EDUCATIONAL LEVELS OF MIGRANTS

Among the several socio-economic characteristics of the migrants education is also an important factor which considerably influences the process of migration. The higher propensity to move among the educated has been discussed by Bogue[1], Shryock and Nam[2], Nabila[3], Maritine[4] and Herrick[5] besides many others. Along with the study of general characteristics of the migrants, their literacy position also needs to be studied. Industrialization not only requires the manpower but manpower with qualitative importance. The technological advancement requires high education along with technical knowledge to set up the machine and to plan the productive method. Thus, such migration consists of both educated and uneducated persons.

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1. D.J. Bogue, op. cit., pp.769-771.

2. Henry S. Shryock Jr. and Charles B, Nam - Educational Selectivity of Inter-regional Migration, Social Forces, Vol. 43(3), March 1965, pp.299-302.

3. John Sebiyam Nabila, 'The migration of the Frafra of Northern Ghana - A Case Study of Cyclical Labour Migration in West Africa, Dissertation Abstracts International, Vol. 35(7), Jan.1975, p.4340A.

4. George Maritine, 'Volume, Characteristics and Consequences of Internal Migration in Columbia, Demography, Vol.12(2), May 1975, pp.193-207.

5. Bruce Herrick, Urban Migration and Economic Development in Chile, Cambridge; Massachusetts Institute of Technology, 1964, p.80.

Migration may redistribute the educational resources of the nation as people move in search of jobs, better living conditions or for other reasons. With few exceptions, persons with higher levels of education are more migratory than persons with lower levels of education and the difference in migration rates between poorly educated and well educated persons increases for longer distance moves.

One may expect that the better educated are better informed about opportunities and, therefore, their migration would be more effective. The data to support this contention is not available. Although the Census obtains information on the place of birth and place of current residence, it is impossible to tell from the statistics whether the person moved before obtaining the desired education in his home town, to acquire new knowledge, or obtained part of it after having moved into the community of destination since the available data relate to life time migration. Further, this study is restricted to the redistribution of the educational resources of the nation or the distribution of levels of education of migrants into different economic groups of cities. The study cannot trace the educational differentials of migrants with non-migrants because of the limitations of the data. The data which are given for the migrants, are not given for the people at the origin as well as at the destination. Hence, an analysis can only be made of the distribution of migrants to each city by their levels of education.

So far as reasons of redistribution of education resources are concered they can be numerous. Education in itself may stimulate outmigration inasmuch as it raises the level of aspirations in the population of rural communities and small urban centres. Individuals having attained a higher level of education in smaller centres may have difficulty in finding positions corresponding to their level of skills and are thus more prone to migrants.

Looking at Map No.3 showing proportions of illiterate migrants, it can well be inferred that most of the migrants moving to these cities are illiterate. The highest proportion of illiterate to total migrants, i.e., 93.21 per cent (Appendix III) has been observed in Garden Reach, while the lowest percentage of 41.94 has been observed in Rajkot. The most astonishing observation is that both the highest and lowest observations have been found in Group III which has service as the predominant function followed by moderate industry. It is also true that most of the fluctuations are found in Group III and IV and no such fluctuation in the proportion of illiterate migrants is observed in Group I and II cities whose predominant function is industry followed by service. It can also be argued that roughly half of the migrants in each city are illiterates. Hence it is true that in regions where the level of education is low and yet there are no job opportunities at home, the majority of the movers will be illiterates. However, when educational facilities are increased, the greater proportion of young movers will be those who are educated. In India where level of education is low in rural areas and in small towns in comparison to bigger urban agglimerations, the most of the movers have to be illiterates.

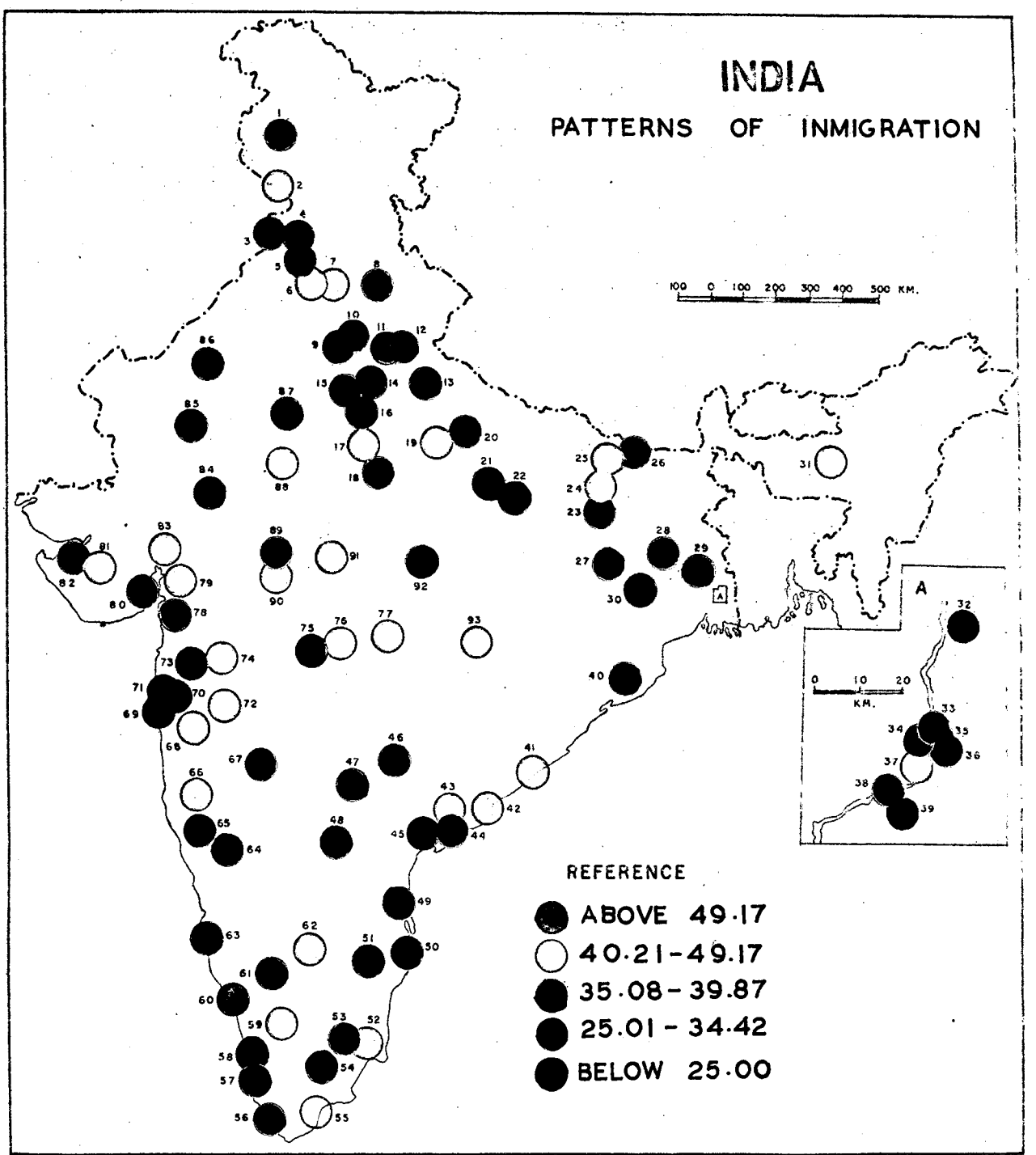
INDIA
PATTERNS OF INMIGRATION
100 0 100 200 300 400 500 KM.
A
0 10 20
KM.
REFERENCE
ABOVE 49.17
40.21-49.17
35.08-39.87
25.01-34.42
BELOW 25.00

FIG. 3

When we look upon the map for regional variations in the distribution of illiterate migrants, a number of well marked regions of concentration of illiterates are observed. In Northern India the proportion of illiterates in most of the cities is more than 64 per cent. There are a few cities which attract the lowest proportion of illiterates. These are the cities of Punjab, Delhi and Lucknow. In East, the Calcutta conurbation attracts very high proportion of illiterates while the Bombay-Poona industrial complex receives low or very low proportion. In South India, Madras complex of cities and a ring of towns near the coast receives average proportion of illiterate migrants. There are no clear cut regional variations. In certain regions of high proportion, a few cities of low proportion are situated inside and vice-versa.

With the help of the following table of analysis of variance, it is found that functional classification of cities has no relationship with the level of literacy.

Table No.5

Analysis of variance for differences in the proportion of illiterate migrants to different categories of cities

Source of Variation	D.F.	S.S.	M.S.S.	$F_{3,89}$
Between Groups	3	324.3859	108.128	1.678
Error	89	5734.3078	64.430	
Total	92	6058.6937		

According to this table, the observed F is lesser than the value of F at 5% level of confidence for 3,89 d.f. We reject or nullify our hypothesis that industrial cities or regions attract more mill hands or illiterate workers than white collar workers or literates. In other words, the mean proportions of migrants do not differ from one group to another. Education, therefore, does not seem to be a bar for migration.

Proportion of Migrants below Matric/Higher Secondary level of Education

It has been made clear that most of the people migrating to class I cities in India are illiterates. However, it would be useful to analyse the pattern of migration according to the formal level of education. This has been divided into two categories: (i) below matric/higher secondary and (ii) higher secondary and above. The proportion of migrants below matric/Hr.Secondary is just opposite to the patterns of illiteracy. Garden Reach which received the highest number of migrants with no level of education has received very low proportion of migrants with this level of educstion. Rajkot which received the lowest has received the highest proportion of migrants with this level of education.

But the regional patterns of the proportion of migrants below Matric/Higher Secondary are clear cut and distinguishable. Only two tracts, viz., Rajkot-Bhavnagar-Surat and Ambala-Jullundur-Ludhiana get highest proportion of such migrants. Belgaum is situated in the region of high proportion

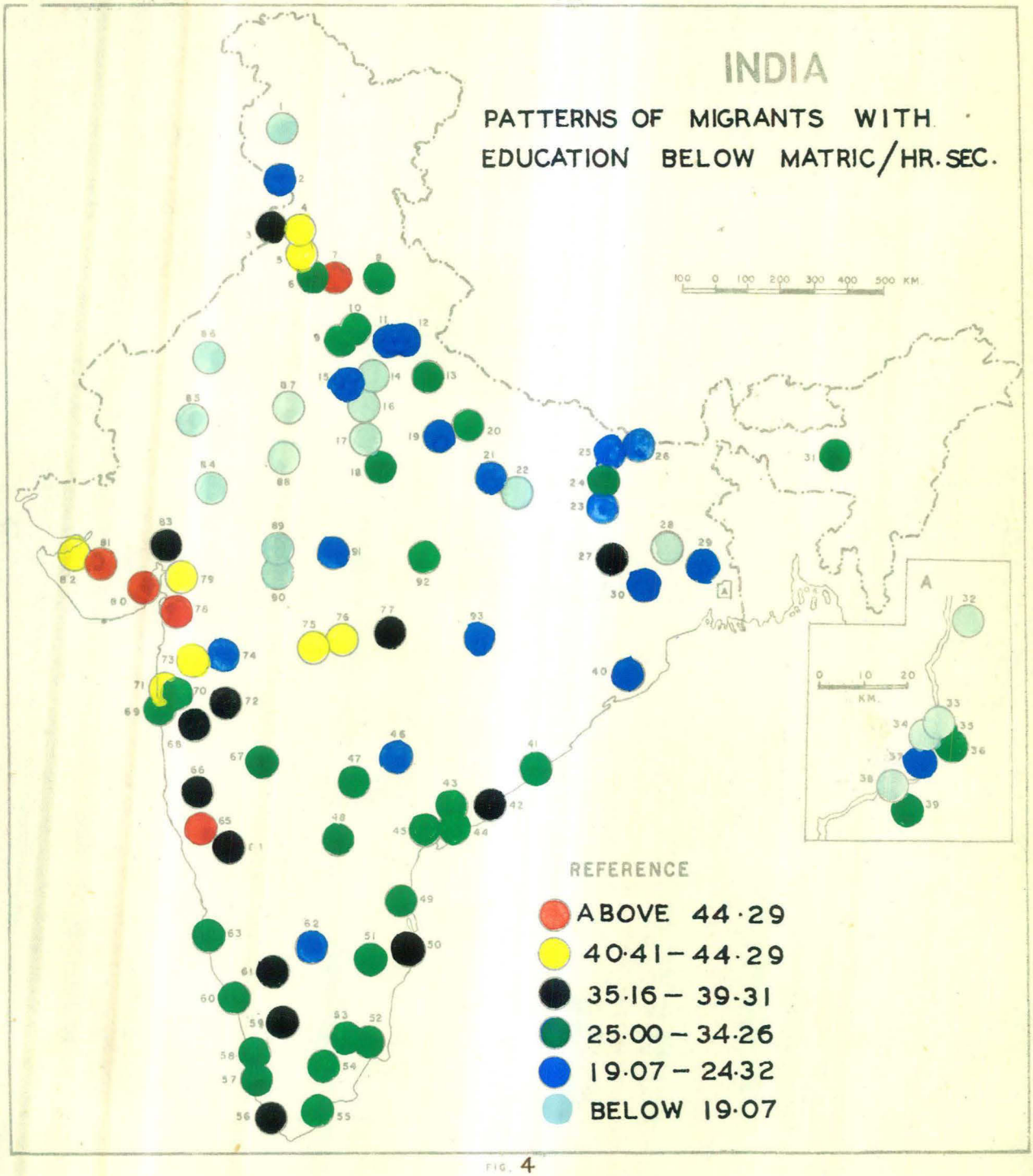
INDIA
PATTERNS OF MIGRANTS WITH
EDUCATION BELOW MATRIC/HR.SEC.
100 0 100 200 300 400 500 KM.
A
0 10 20
KM.
REFERENCE
ABOVE 44·29
40·41 – 44·29
35·16 – 39·31
25·00 – 34·26
19·07 – 24·32
BELOW 19·07

FIG. 4

tract. Opposite to it in the east Calcutta conurbation forms a region of lowest proportion though dotted over by a few cities receiving low and very low proportion of migrants of such level of education. In North Western India all the cities of Rajasthan form a region of lowest proportion engulfing the cities of Agra, Aligarh, Indore, Ujjain and Gwalior (see Map No.4).

Again if the following table of analysis of variance is seen, the conclusion remains the same, i.e., the functional classification of cities has no bearing on the levels of education of migrants.

Table No.6

Analysis of variance for differences in the proportion of migrants below Matric/Hr.Sec. Education to different categories of cities

Source of Variation	D.F.	S.S.	M.S.S.	$F_{3,89}$
Between Groups	3	233.9308	77.9769	.754
Error	89	9196.6791	103.3334	
Total	92	9430.6099		

According to this table also, the observed F is lesser than the value of F at 5% level of confidence for 3,89 d.f. suggesting thereby that the proportion of migrants does not differ significantly according to the level of education.

Proportion of Migrants with Matric/Hr.Sec. and above level of Education

Because of the low level of education in India, the proportion of migrants with Matric/Hr.Sec. and above levels of education is very little. The proportion varies from 0.50 to 10.23 per cent. A few cities of Educational Centres and the Service Centres attract the maximum proportion. Only a few regions seem to be well marked over the map. Migrants with medium proportions of higher secondary and graduate level of educational attainment are attracted again by Bombay-Poona Industrial Complex. Rest of the cities with this medium proportion are spread over whole of India (See Map No.5).

Analysis of variance was again applied to see if there is any impact of the functional classification of cities on the level of education.

Table No.7

Analysis of variance for differences in the proportion of migrants with matric/Hr.Sec. and above education to different categories of cities

Source of Variation	D.F.	S.S.	M.S.S.	$F_{3,89}$
Between Groups	3	19.6269	6.542	2.631
Error	89	221.3314	2.486	
Total	92	240.9583		

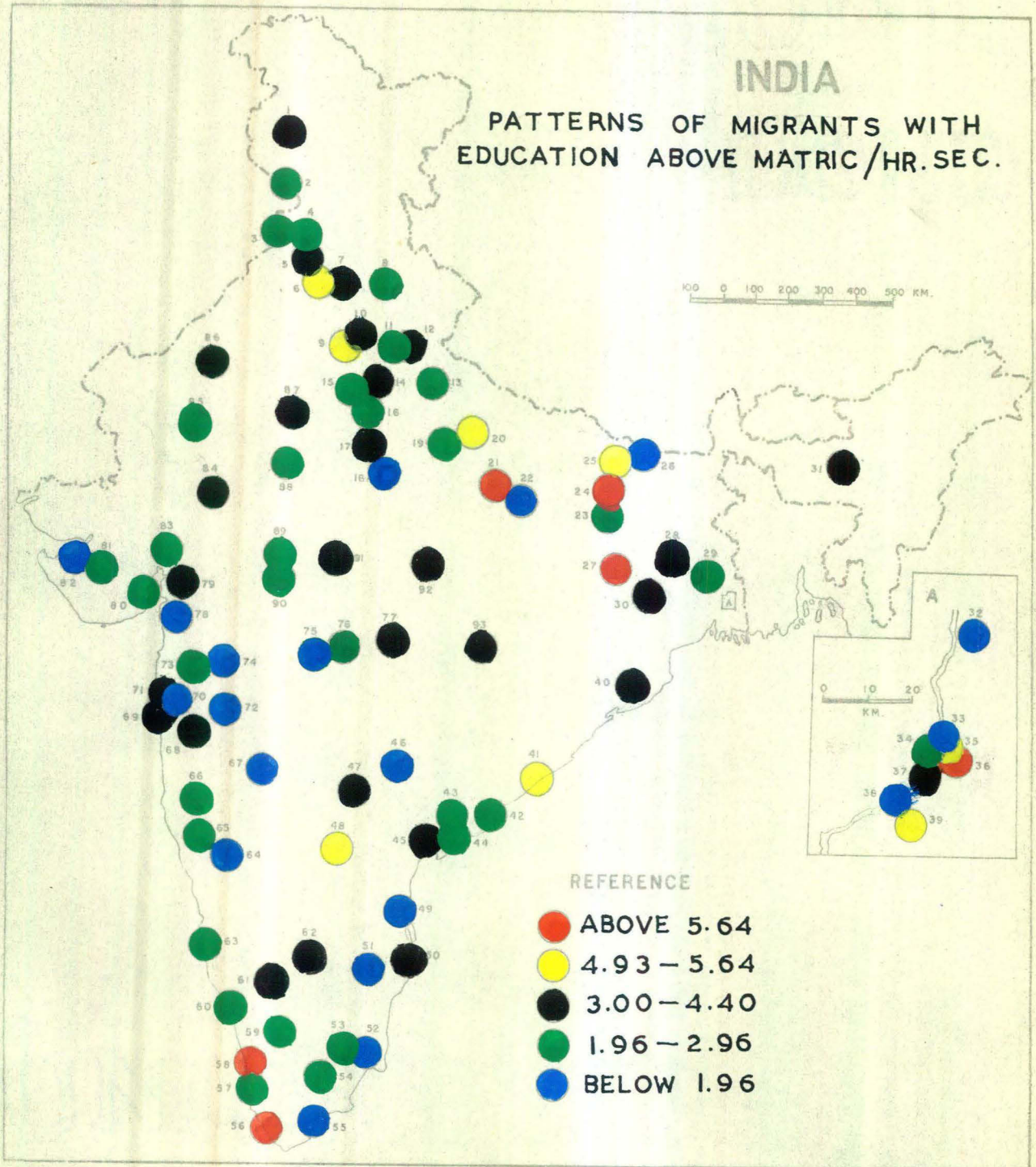
INDIA
PATTERNS OF MIGRANTS WITH EDUCATION ABOVE MATRIC/HR. SEC.
100 0 100 200 300 400 500 KM.
A
0 10 20 KM.
REFERENCE
ABOVE 5.64
4.93 – 5.64
3.00 – 4.40
1.96 – 2.96
BELOW 1.96

FIG. 5

It was again observed that observed F being much less than the value of F at 5% level of confidence for 3,89 d.f. We reject the hypothesis that migrants with higher levels of education are attracted by service cities alone. In other words, the mean proportion of migrants with this level of education does not differ among the groups.

As most of our migration is related with either the construction of the infra-structure or employment in industries which, in fact, do not require much education, the conclusion of most of the researchers that higher the educational level, the higher will be the proportion of migrants does not seem to be true with these data in Indian case as migration is not very systematic.

CHAPTER-V

PATTERNS OF OCCUPATIONAL STRUCTURE

The process of economic development set in by the five year plans and the need for balanced regional development point to the necessity of accurate internal migration data. The need for such data is overwhelming in places like class I cities (population 100,000 and over) of India wherein sizeable proportion of total population is constituted of migrants only.

The most important cause of migration from rural to urban areas and from less prosperous to rich areas is economic. The causes of migration may be several but it is the most important cause. When the pressure of population on agriculture increases, some of the redundant workers escape to the cities in search of jobs in industries. In brief geographical mobility is directly linked with the aspirations of social mobility or linked with the spatial distribution of job opportunities. It is, therefore, clear that most of the migration is economically inspired.

After looking into the table (appendix II) of migrant workers and non-workers the conclusion is drawn that the economic attractions of cities and towns may be playing only a minor role in the motivational process compared to the role of the adverse economic conditions in rural areas. Zachariah[1],

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1. Zachariah K.C. 'Internal Migration in India 1941-51, D.T.R.C., Bombay, 1959, p. 45.

in his study based on the 1951 Census, found that higher the migration to the urban areas of a district during 1941-51, the higher was the rate of unemployment in the area.

The rural 'push' and urban 'pull' has important effects on migration differentials. When migrants move to the cities because of rural push or rural poverty, their number and characteristics are mostly conditioned by external factors. In such cases, the volume of migration may not have any relation to urban facilities.

It should be made clear at the outset of this part of anslyses that for preparationof maps and for the analyses of variance, ten divisions of National Classification of Occupations[2] have been squeezed into three merging Division 0 (Professional, Technical and Related workers with Division I (Administrative, Executive and Managerial Workers) into Occupational Category No.I, Division 2 (Clerical and Related Workers) with (Sales Workers) Division 3 into Occupational Category No.II and the rest of the divisions have been put under Occupational Category No.III. It has been done so with the intention of facilitating the analyses of variance to show the variability of proportion of migrants between different functional groups of cities.

For showing the association, if any, between educational attainment of the migrants with the occupational divisions

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See Appendix V.

in which they are found in the places of destination median values of the proportion of migrants in each city with the particular levels of education in given occupational categories have been taken after putting them in descending order separately for each division and for all the four groups. Thus, graphs for each division have been prepared on the basis of median values.

When the data arranged in descending order are seen, certain interesting facts are observed. The highest proportion (Ambala 48.14) of migrants in Occupational Category No.I is in Group IV functioning as Service cities with low industry. The lowest proportion is observed in Bhatpara in group I functioning as Industrial cities followed by low service (appendix III). This finding explains that most of our professionals and executives live in Service Cities. There is one more supporting finding to this conclusion that most of the cities of Group I and II are unable to touch even average proportion of migrants in this occupational category. To be more precise, only 33 cities out of 93 cities have more than the average proportion of migrants in this Occupational Category.

When Map No.6 showing proportion of migrants in Occupational Category No.I is examined, the conclusion drawn out of the table is strengthened. There are five cities which receive the highest proportion of migrants workers in occupational category I. These are Ambala, Meerut, Mathura, Shahjehanpur and Jhansi. They form a group under the shadow

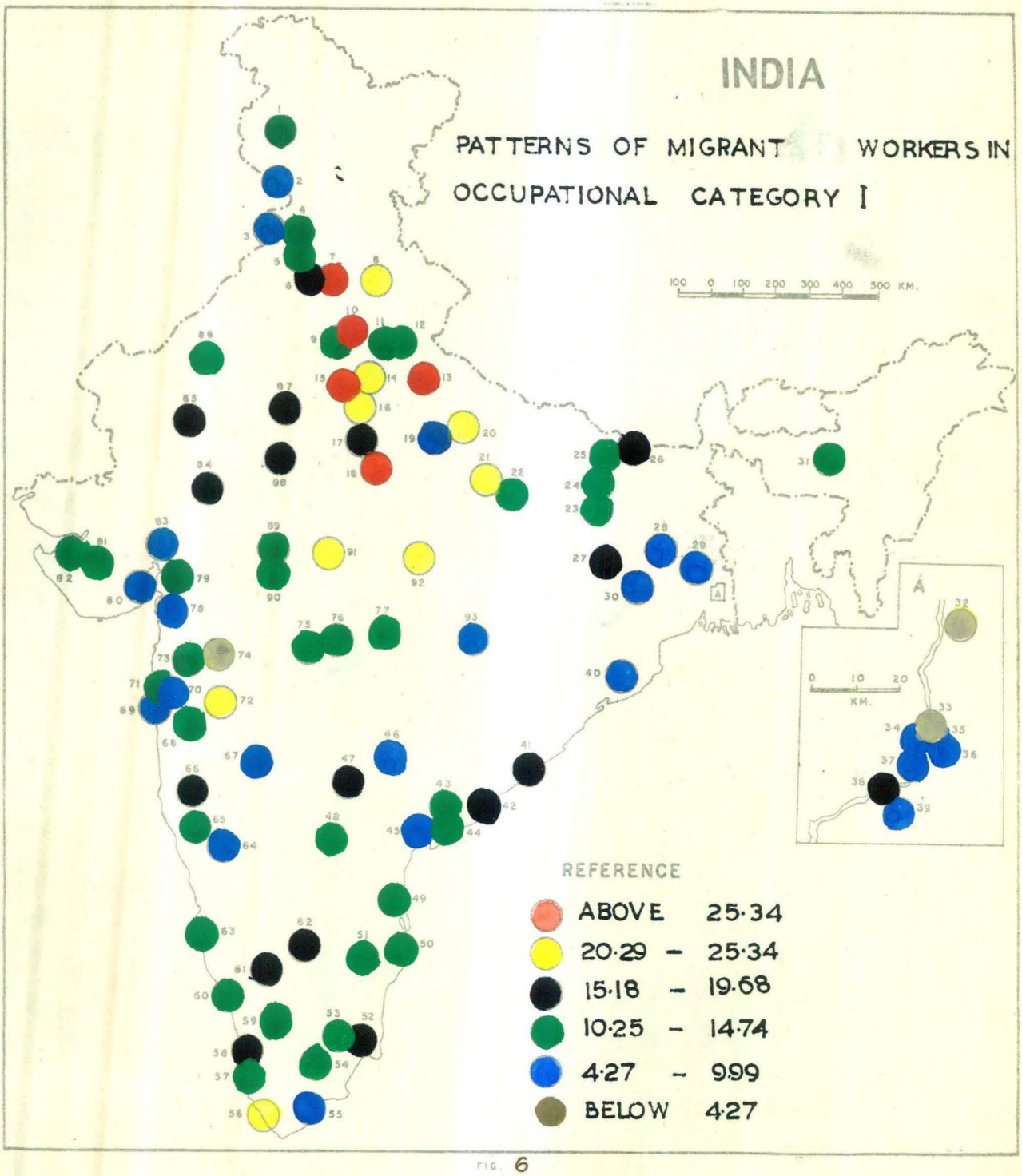

INDIA
PATTERNS OF MIGRANT WORKERS IN
OCCUPATIONAL CATEGORY I
100 0 100 200 300 400 500 KM.
A
0 10 20
KM.
REFERENCE
ABOVE 25·34
20·29 – 25·34
15·18 – 19·68
10·25 – 14·74
4·27 – 9·99
BELOW 4·27

FIG. 6

of bigger cities like Delhi and small scale industrial city like Moradabad. There is another group of cities in this region whose proportion ranges between 20.29 to 25.34 and its tail is formed by Ahmadnagar. The industrial complexes like Calcutta Industrial region and Bombay-Poona conurbation receive low to lowest proportion of migrants who are in occupational category I. All the cities bound by three industrial poles of Bombay-Poona conurbation, Madras and Calcutta industrial region seems to be one, continuous belt of low proportion of migrants with professional and executive jobs dotted over here and thereby high proportion of migration in this category. Whole of this part of analysis suggests that most of the industrial cities receive only mill hands but why such cities as cited above receive more technocrats remain unexplained.

According to the following table of analysis of variance, the observed F is very much high (10.45) than the value of F (2.76) at 5% level of confidence for 3,89 d.f. As this is highly significant, it suggests that there is much variability between various groups of cities in the proportion of migrants in the occupational category No.I.

Table 8

Analysis of variance for differences in the proportion of migrants in occupational category No.1 to different categories of cities

Source of Variation	D.F.	S.S.	M.S.S.	F	$F_{(Table)}$
Between Groups	3	1611.9052	537.30	$F_{3,89}$ 10.45	2.76
Error	89	3292.1322	36.99		
Total	92	4904.0374			

Proportion of migrants in Occupational Category No.II

Looking at the proportion of migrants in Division 2 and 3 in appendix III, it is concluded that though the proportion of migrants in this category is increasing yet the industrial cities are still not getting higher proportion of migrants. It is the predominantly service towns which are receiving higher proportion of migrants. Bhatpara has again begged least percentage of migrants and Burdwan has got the highest. It is quite interesting that some industrial cities still got higher proportion of migrants.

When Map No.7 showing proportion of migrants in occupational category No.II is examined, no clear cut regional patterns of proportion of migrants emerge. The cities with high or very high proportions are dotted throughout the map.

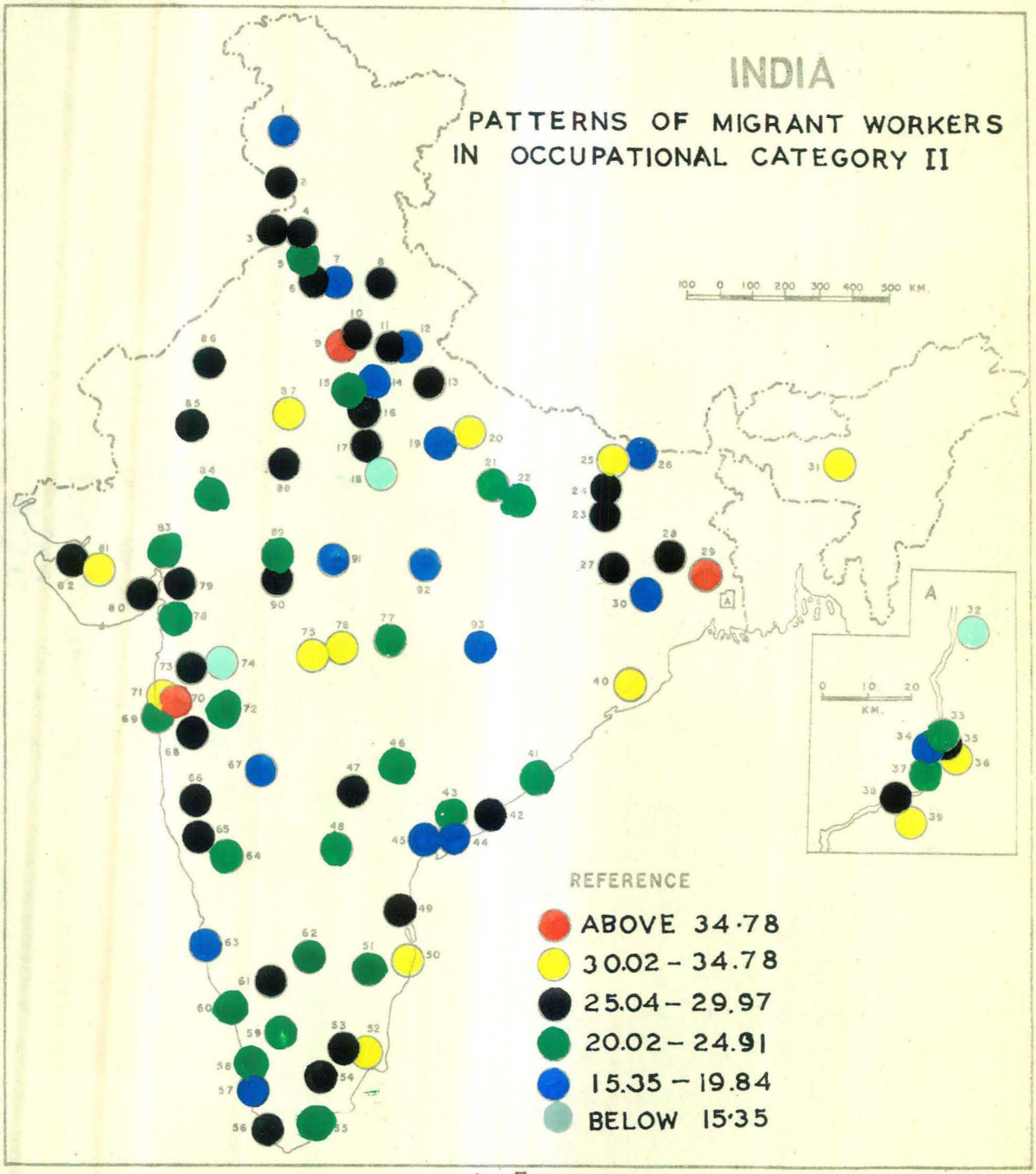

INDIA
PATTERNS OF MIGRANT WORKERS
IN OCCUPATIONAL CATEGORY II
100 0 100 200 300 400 500 KM.
A
0 10 20
KM.
REFERENCE
ABOVE 34·78
30.02 – 34.78
25.04 – 29.97
20.02 – 24.91
15.35 – 19.84
BELOW 15·35

FIG. 7

Industrial regions like Bombay-Poona conurbation, Madras industrial region and Calcutta industrial region have received both highest and lowest proportions of migrants in this occupational category. In brief the cities which functions both industrial as well as service get higher proportions than average proportion of migrants.

Table No.9

Analysis of variance for differences in the proportion of migrants in occupation category No.II to different categories of cities

Source of Error	D.F.	S.S.	M.S.S.	F
Between Groups	3	284.1200	94.7066	$F_{3,89}$ = 3.3159
Error	89	2541.9305	28.5610	
Total	92	2826.0505		

With the help of the above table of analysis of variance it is concluded that functional classification of cities is directly related with the proportion of migrants in this category of occupation. According to the above table the observed F for between groups is much higher than the value

of F at 5% level of confidence for 3,89 d.f., we accept the hypothesis that proportion of migrants of this category of occupation differ or vary very much. In other words, the mean proportions of migrants between groups differ very much from one group of cities to another group of cities.

Proportion of migrants in occupational category No.III

In this category of occupation, all the divisions from 4 to X of National classification of occupations have been merged. When we examine the table of proportions of migrants in this category, it is found that about 43 cities have higher proportions than the average proportion of 59.85. It explains that most of the migrants are absorbed in this category of occupation. Bhatpara which had very low proportion of migrants in the previous two categories, has the highest proportion of migrants in this category. Ambala which had very high proportion of migrants in occupational category No.I has the lowest proportion of migrants (33.72) in this category. Examining the table more closely, it is found that very high proportion of migrants is closely associated with this category of occupation.

Table No.10

Analysis of variance for differences in the proportion of migrants in occupational category No.III to different categories of cities

Source of Error	D.F.	S.S.	M.S.S.	$F_{3,89}$
Between	3	3274.7514	1091.5838	21.097
Error	89	4605.2312	51.7441	
Total	92	7879.9826		

Most of the high proportions are in Industrial Cities (Group I and II). It also shows that these cities of group I and II have more strong pull on migrants than the Service Cities of Group III & IV.

This finding is again confirmed by the above table of analyses of variance. According to this table the observed F is very much higher than the value of F at 5% level of confidence for 3,89 d.f., we accept the hypothesis that the proportion of migrants in this category is higher in Industrial Cities than Service Cities. In other words the mean proportions of migrants in this category differ very much from one functional group to another.

Map No.3 also confirms above finding. Ahmedabad-Ulhasnagar and Sholapur industrial belt and Calcutta Industrial region along with the steel town of Jamshedpur have received very high proportion of migrants. In northern India, there is a continuous belt of low proportion receiving cities broken here and there by median proportions. Surprisingly, Bombay-Poona industrial region has received very low proportion in this occupation. It may be the effect of decentralization of industries. The above discussion leads to the conclusion that migrants in class I cities are working at a lower status. It is impossible to determine whether this is due to lower educational qualifications of the migrants.

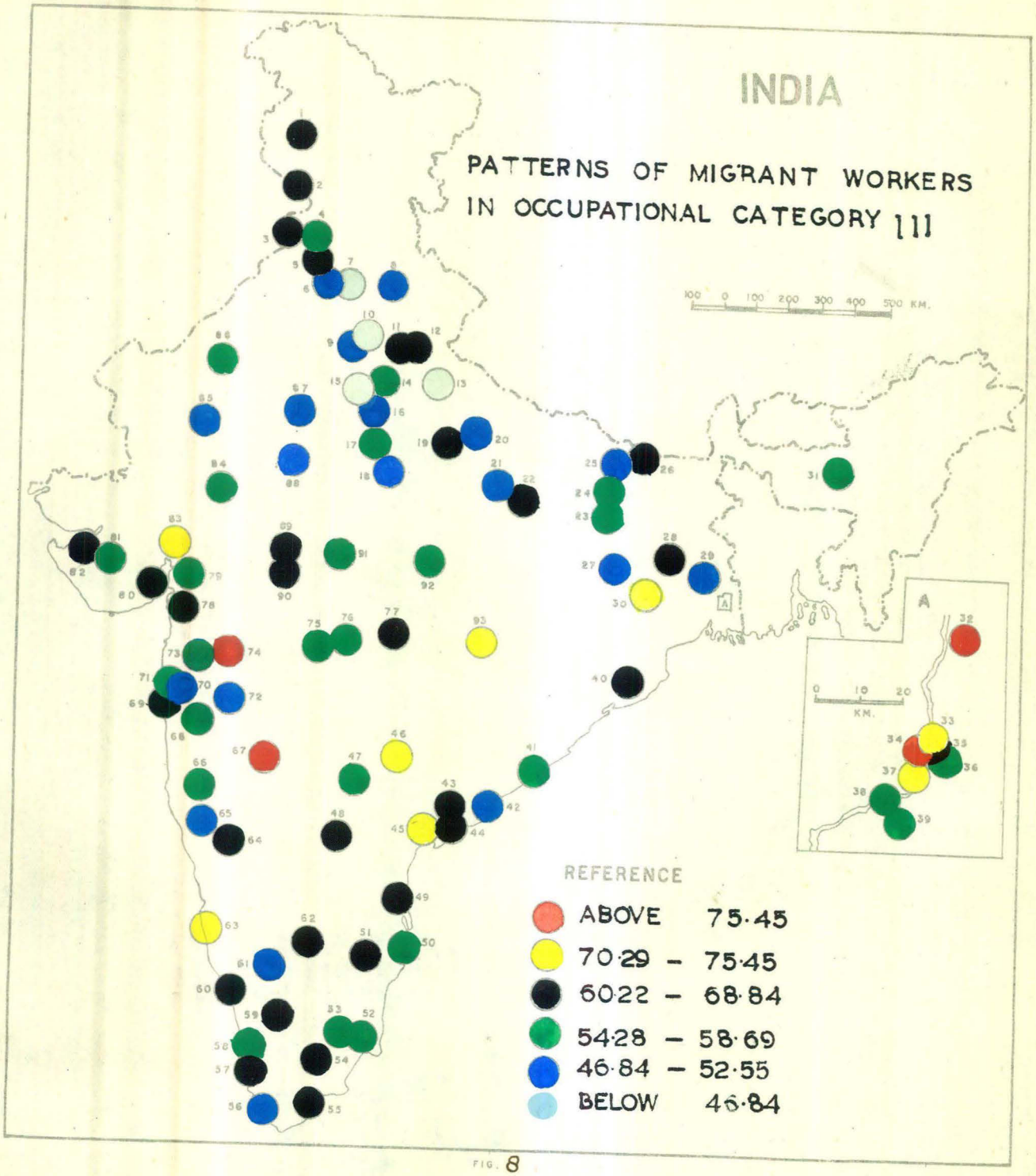
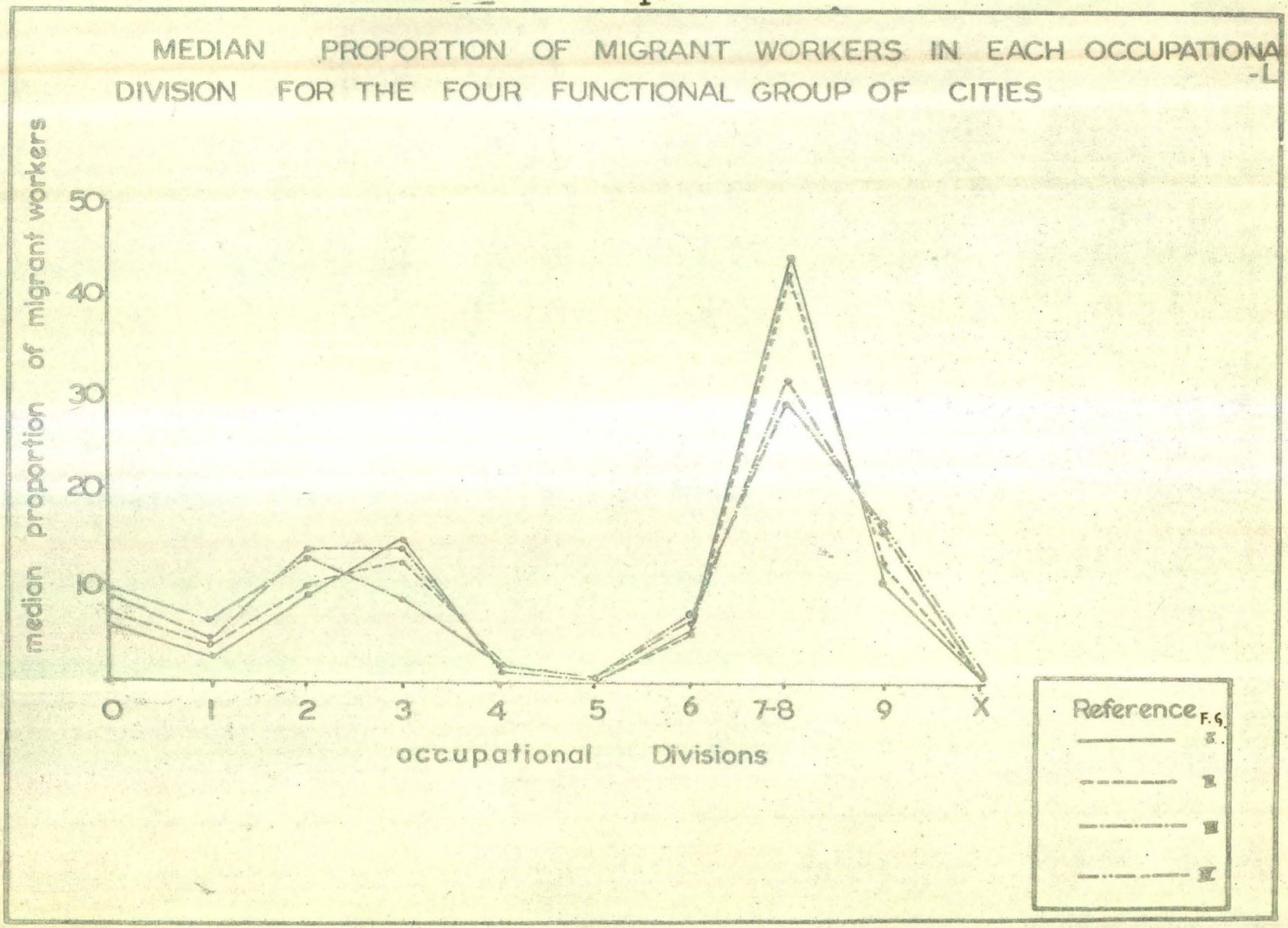

INDIA
PATTERNS OF MIGRANT WORKERS
IN OCCUPATIONAL CATEGORY III
100 0 100 200 300 400 500 KM.
A
0 10 20
KM.
REFERENCE
ABOVE 75·45
70·29 – 75·45
60·22 – 68·84
54·28 – 58·69
46·84 – 52·55
BELOW 46·84

FIG. 8

MEDIAN PROPORTION OF MIGRANT WORKERS IN EACH OCCUPATIONAL DIVISION FOR THE FOUR FUNCTIONAL GROUP OF CITIES



The above analysis is summarised in Graph I. On the X-axis we have the ten occupational divisions in which the migrant workers have been classified. The Y-axis depicts the medians of proportion of migrants in the particular occupational categories. The line graphs have been prepared separately for each functional category in order to bring out the differences in the functional categories and the median proportion of migrants in the particular occupational divisions. It is clear from this graph that the highest proportion of migrant workers is in occupational division 8 in all the functional categories. However, the median of the proportions reaches to about 50 per cent in the functional category No.I. The most popular occupation among migrants is 7-8 i.e. craftsmen, production process workers and labourers not elsewhere classified.

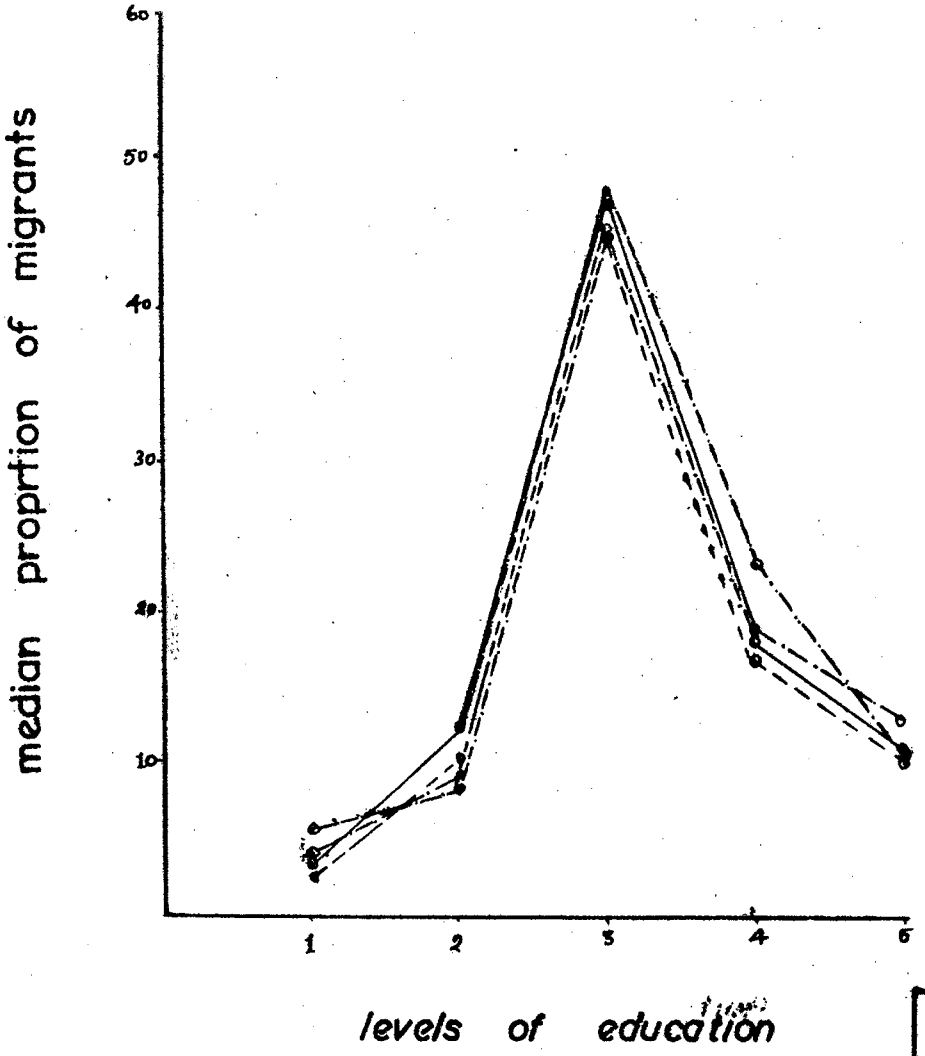
Though the median proportion of migrants has differed from one group to another, yet all the groups are pointing to the same direction. The probable explanation for this is that by taking median of the proportions, the fluctuations have been concealed to a great extent.

Association of Education and Occupation

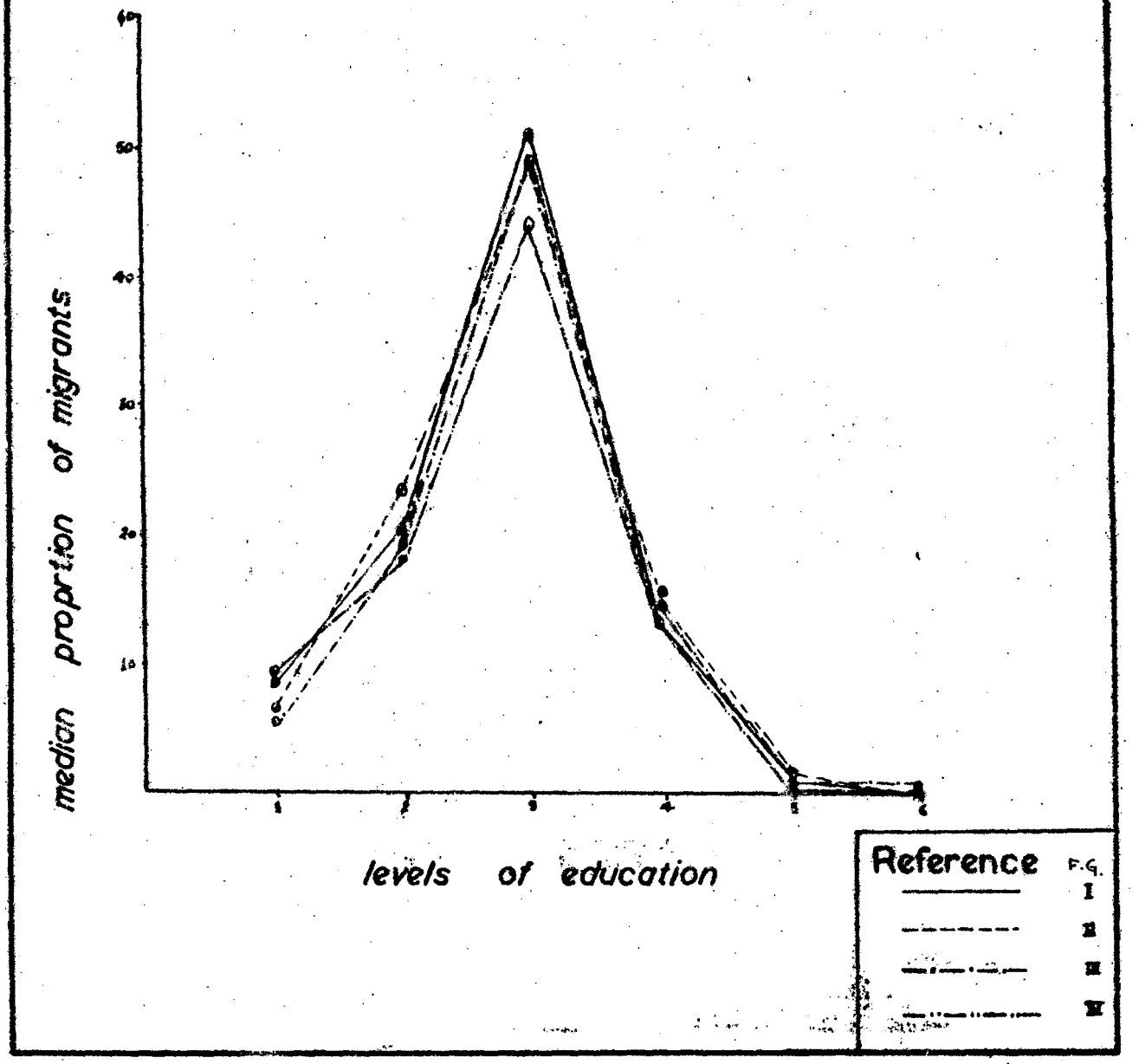
This section of the chapter analyses relationship between educational attainment of the migrants and their occupational placement. This is done by plotting graphs depicting the various levels of educational attainment of the migrants in four functional categories of cities for each

-ii-

median proportion of migrant workers according to the levels of education in division - O

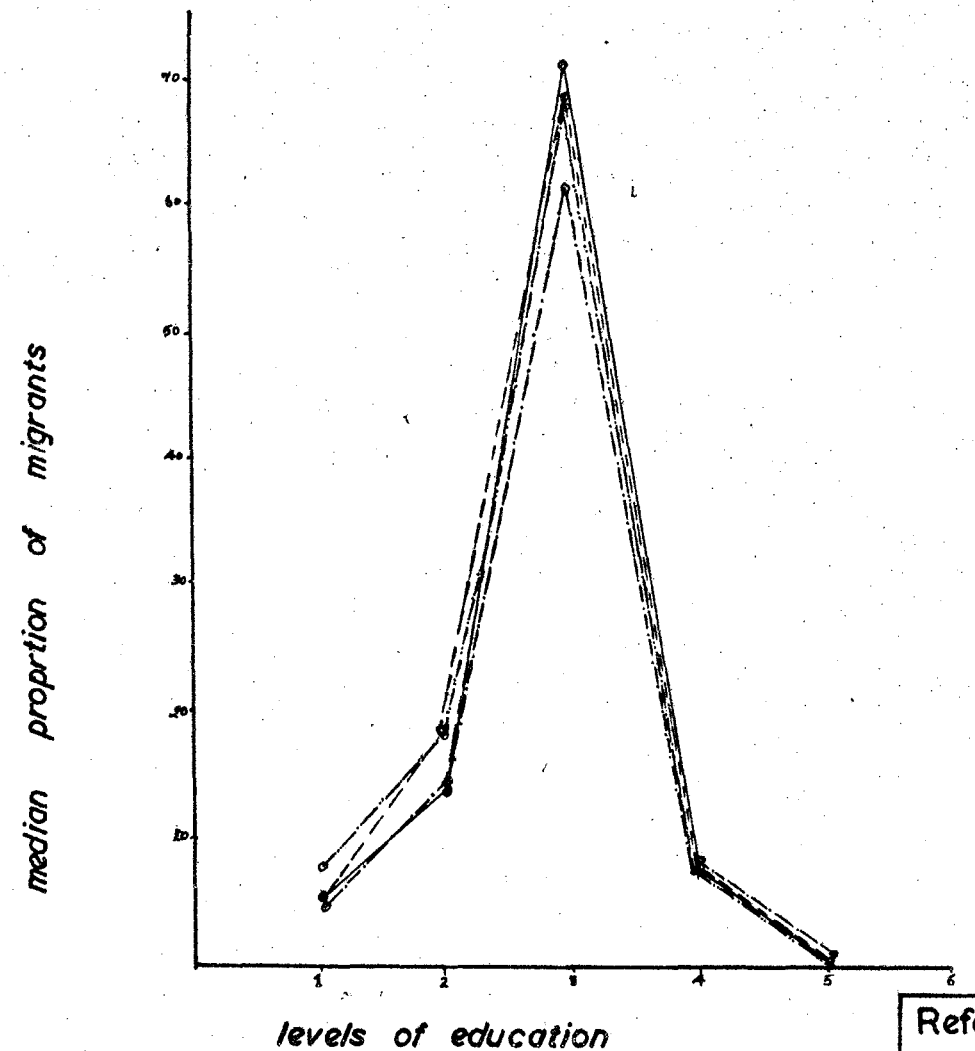


median proprtion of migrant workers according to the levels of education in division - 1



- iv -

median proprtion of migrant workers according to the levels of education in division - 2

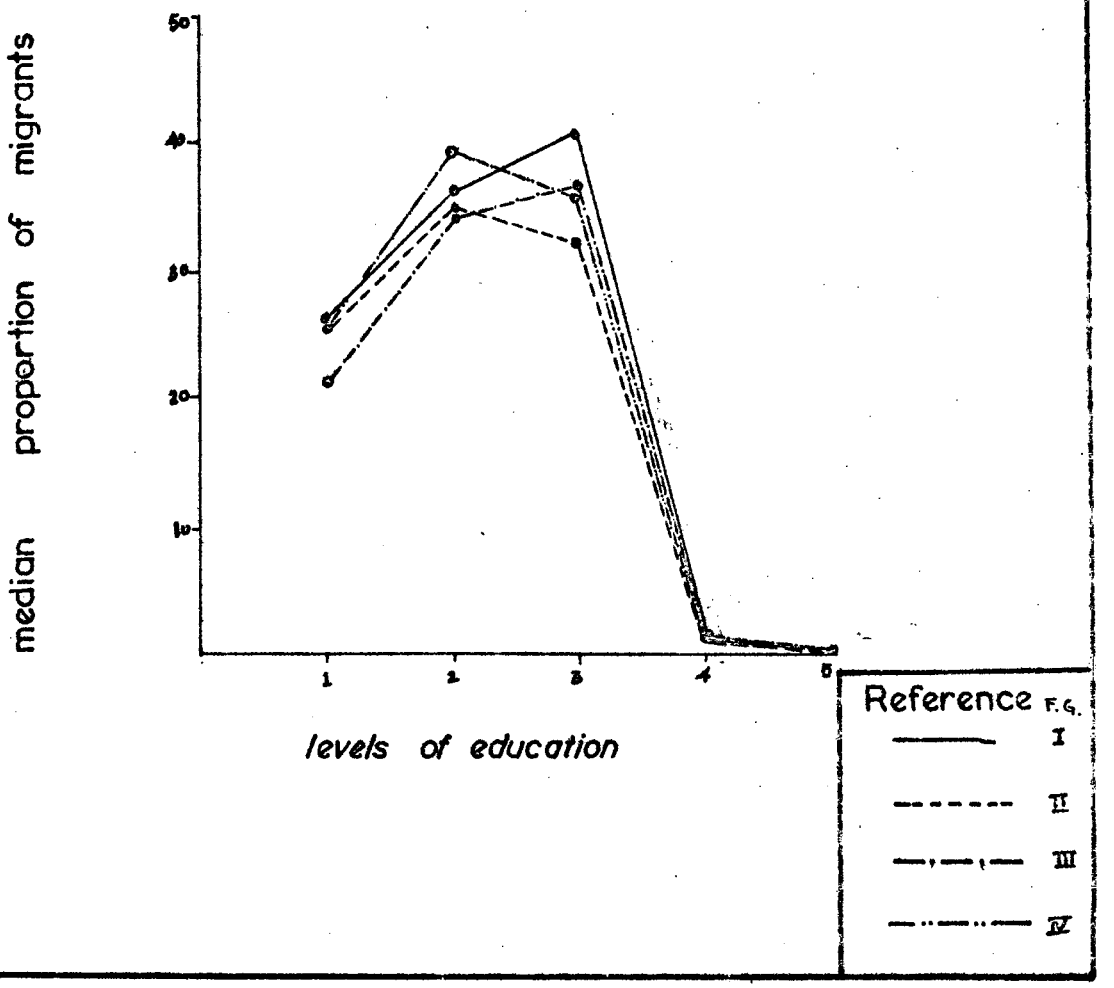


occupational division. The Y-axis presents the median values of the proportion of migrants with a particular level of educational attainment for each occupational category. Graph No.II showing median proportion of migrants with various levels of education in Division O shows close association between the proportions of migrants and the levels of education. Highest percentage of migrants possess higher secondary/matric certificates. The percentage of both technical and non-technical levels of education is also appreciable. There are very few migrants who are illiterate in this division. The pattern of distribution of migrants according to their educational attainment is very similar in the different functional categories. The difference between the proportion of migrants with technical and non-technical education above matric can also be seen. According to the expectations, the proportion of migrants with non-technical education above matric are more in Group IV than other functional groups.

Graph III and IV showing median proportion with levels of education in Division I and 2 also shows almost the same pattern shown by Graph No.II. Maximum percentage of migrants is with Hr.Sec./Matric and non-technical graduates. But these divisions have very few technical personnels. In Graph No.IV, the proportion of migrants with Hr.Sec./Matric level of education touches about 70 per cent in functional group I.

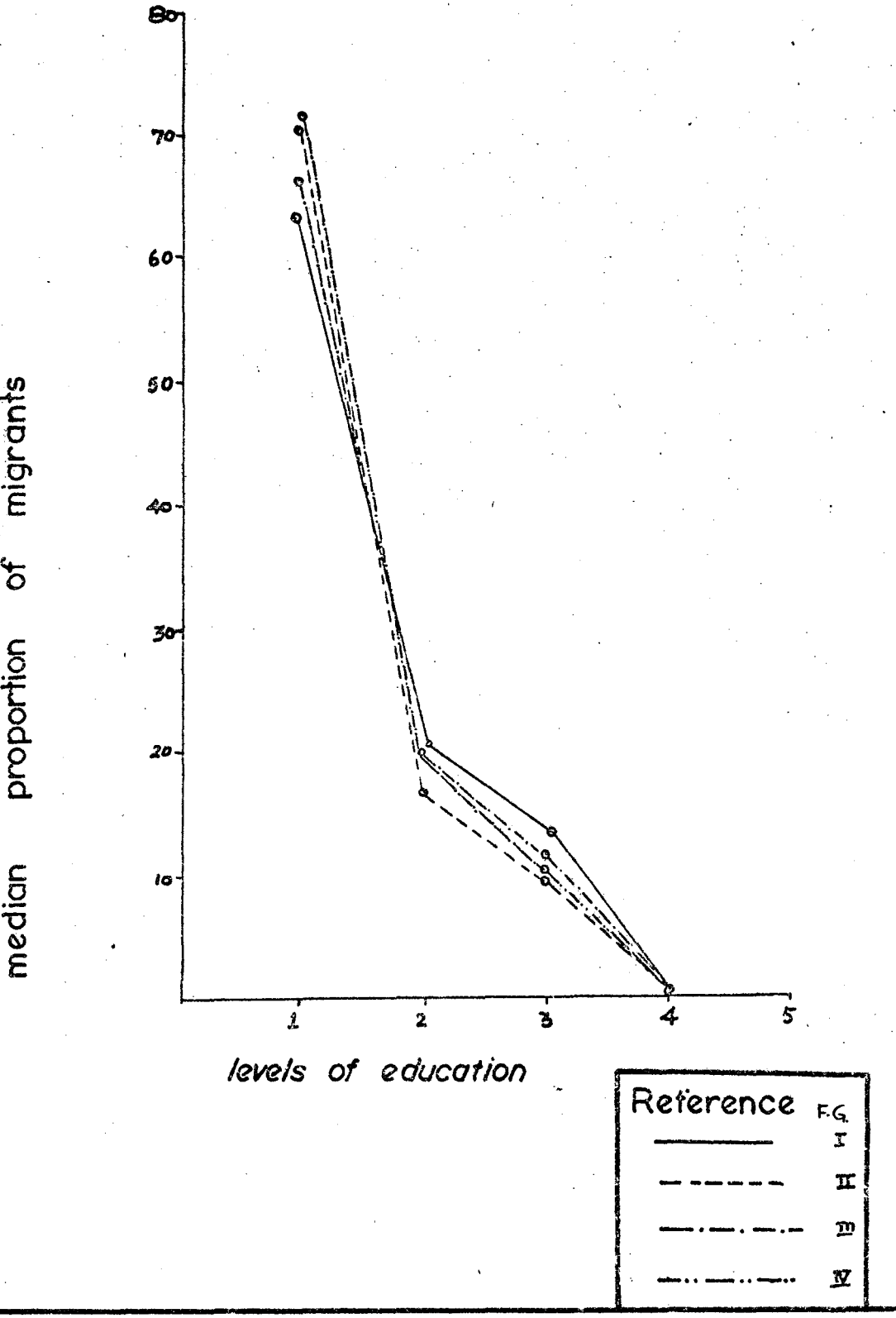
- V -

median proportion of migrant workers according to the levels of education in division - 3

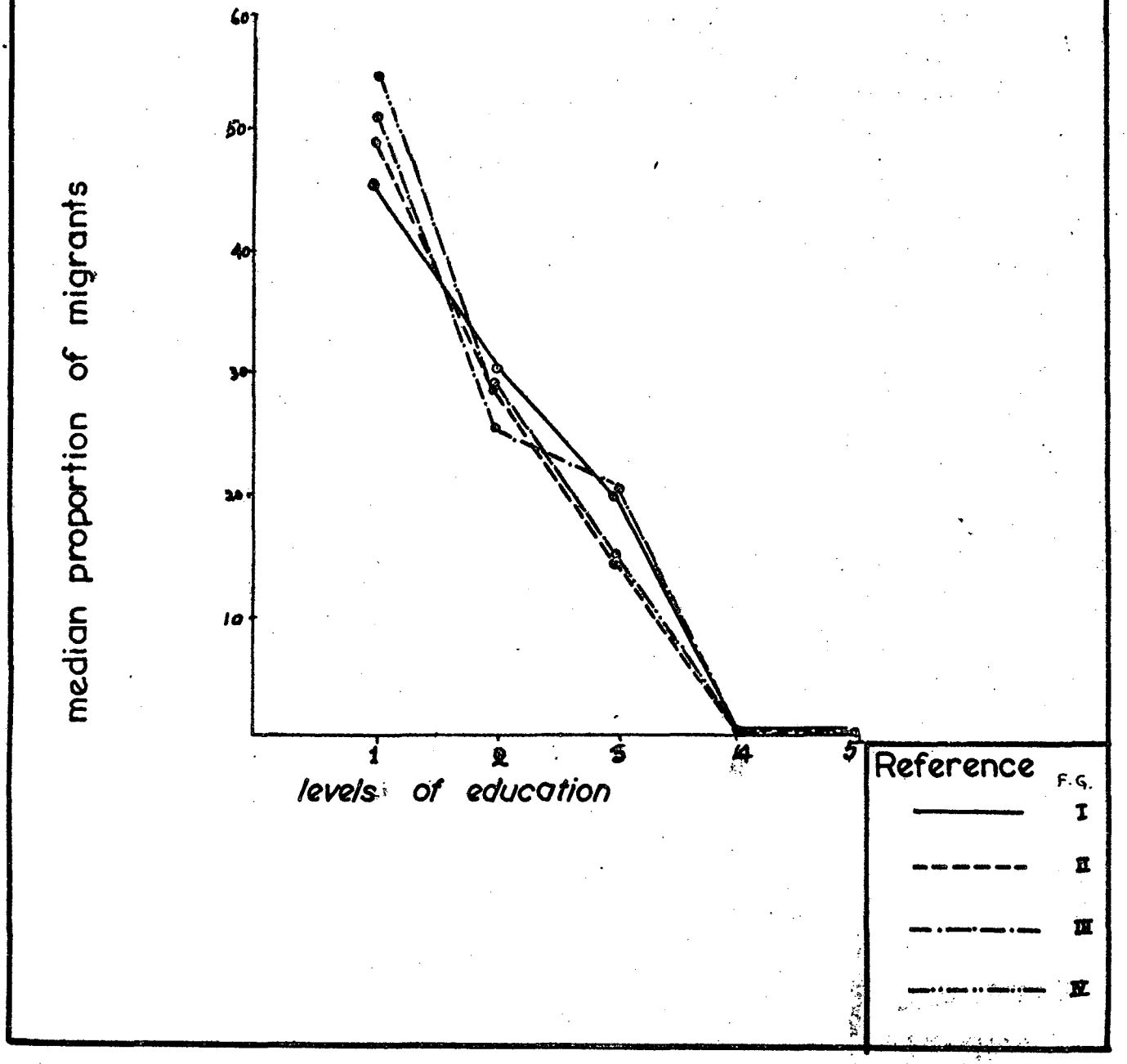


-vi-

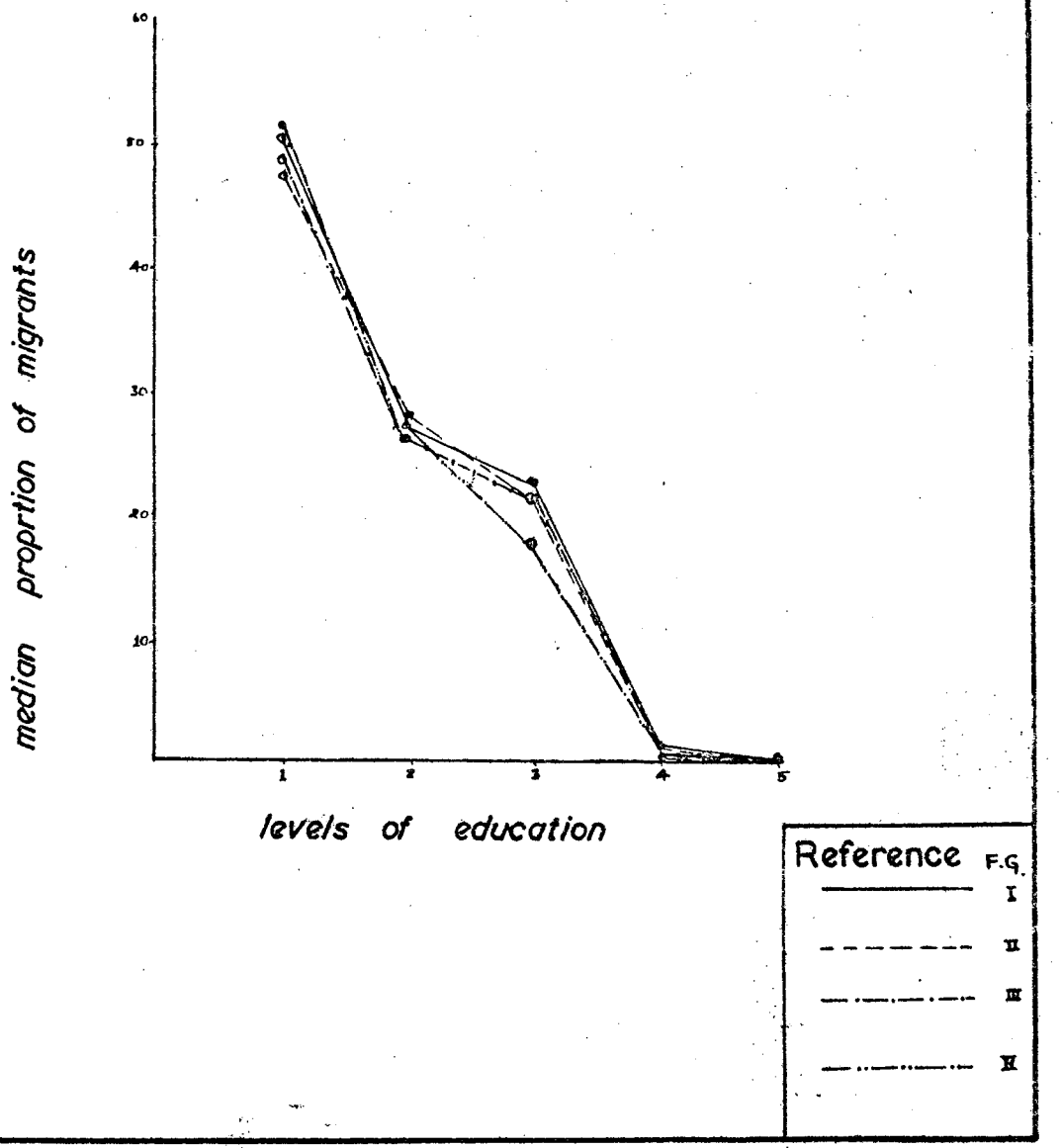
median proportion of migrant workers according to the levels of education in division – 4



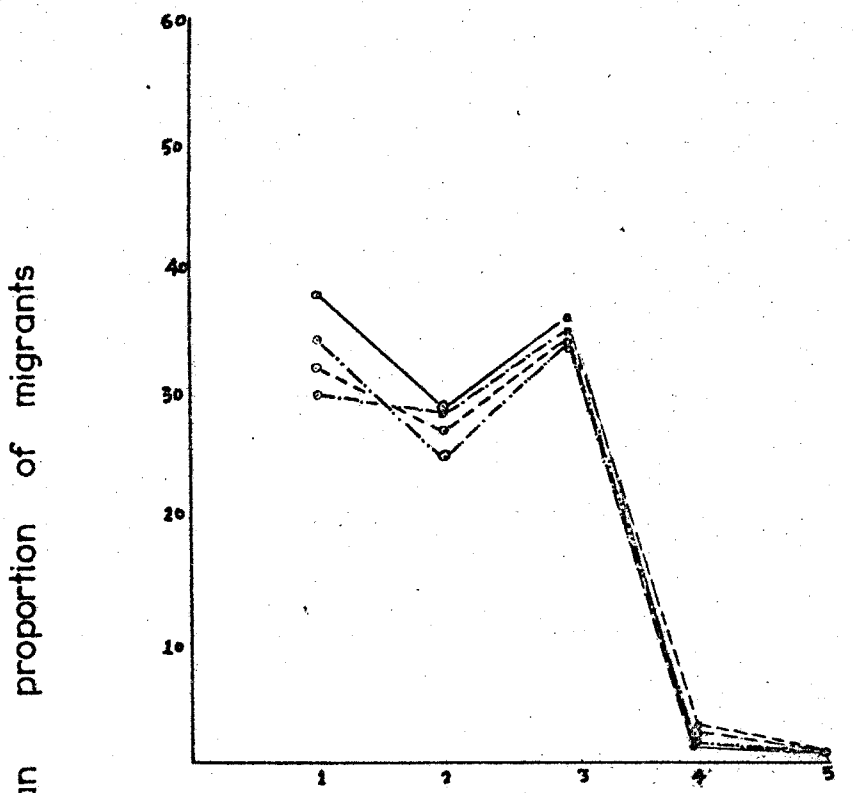
median proportion of Imigrant workers according to the levels of education in division - 7-8



median proprtion of migrant workers according to the levels of education in division - 9



Median Proportion of Migrant Workers According to the levels of education in division - 6



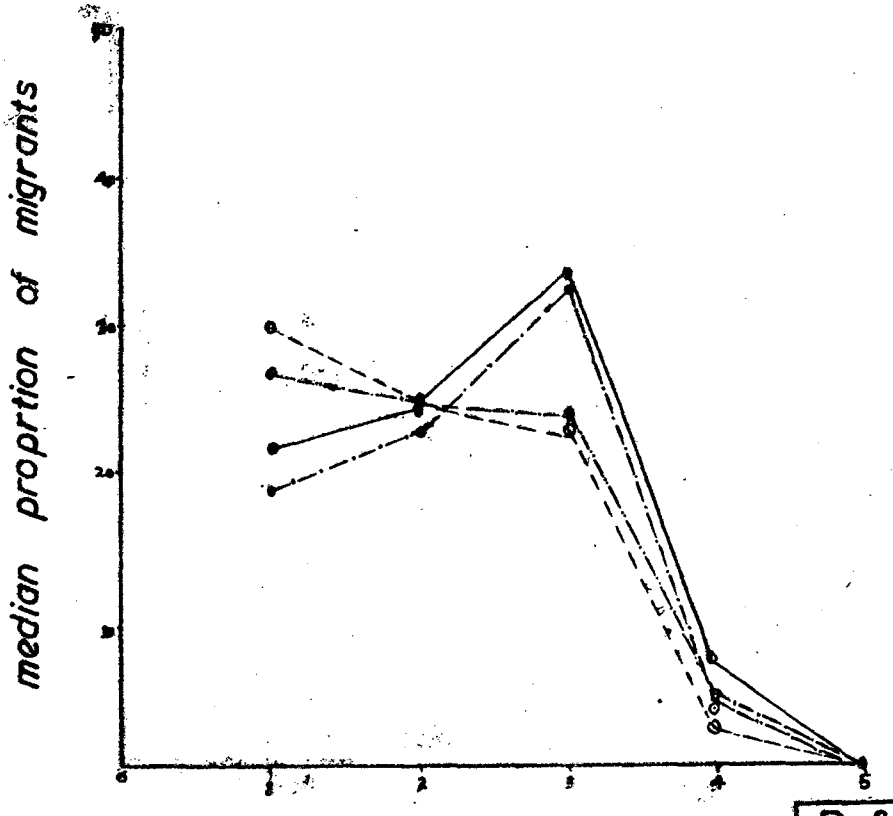
Graph No.V showing Division 3 (Sales workers) shows a different pattern in comparison with the earlier three graphs. In this graph, the median proportion of migrants with Hr.Sec/ Matric level of education touches only 40 per cent. What is more important is wide variations in the proportion of migrants with this level of education in various functional groups. Functional group I begs the highest proportion of migrants with such level of education. The proportion of illiterates is very much high in this division.

Graph No.VI, VIII and IX showing median proportion of migrants with levels of education of Divisions 4, 7-8 and 9 very interestingly show that as high as 75 per cent migrants are illiterate. The percentage drops very quickly as the level of education increases. There seems to be an inverse relation between the median proportion of migrants and the levels of education in these occupational categories. In almost all the three graphs functional group I and II have less proportion of illiterates than functional group III and IV.

Graph VII showing the median proportion of migrants engaged in Division 6 (workers in transport and communication) presents a unique picture. It shows that the proportion of migrants with Hr.Sec/Matric level of education are little lesser than proportion of illiterates. Functional group I has the highest proportion of illiterates as well as Hr.Sec/ Matric.

- X -

median proprtion of migrant workers according to the levels of education in division - 10



Graph X showing the median proportion of migrants in Division X (workers not classified by occupation) also shows a haphazard pattern. The highest proportion of migrants with Hr.Sec/Matric education is in functional group of cities I and III whereas highest proportion of illiterates is in functional group II and IV. The proportion of migrants with non-technical degrees is surprisingly more in almost all the functional groups of the cities in this occupational division.

After the close observation of the data and these graphs certain seemingly inconsistent occupational groups vis-a-vis the levels of education were noticed which seem to conform to the existing facts of our present day economy wherein occupations and educational qualifications do not go always hand in hand. For persons, after moving to the cities follow any occupation they get, irrespective of their levels of education as the primary consideration which influences a person in such matters is that of earning bread or making money.

CHAPTER VI

EDUCATIONAL DIFFERENTIALS AMONG MIGRANTS AND NON-MIGRANTS

Information on this aspect of the migrants is available only for recent dates. The National Sample Survey and 1951 and 1961 Censuses are the major sources of information. Zachariah[1] found that 'migrants to urban areas, particularly to large cities, possess a higher average educational achievements than the general population of the areas from which they are drawn. On the whole, however, they are lower in educational attainments than the population of the cities to which they migrate.'

The migration from villages to the cities tends to lower the educational level of the population at the place of origin as well as at the place of destination. "When distance is taken into consideration, migrants moving to remoter points have a favourable educational distribution compared to short distance migrants."[2]

Analysis of education differentials among migrants and non-migrants, is very essential for an understanding of the mechanism of rural push and urban pull. Are the persons who move, the better educated villagers or the poorest, most desperate and least educated villagers? These questions are very important but unfortunately

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1. K.C. Zachariah, A note on Internal Migration in India in Rural-Urban Differences in Southern Asia, UNESCO Research Centre on Social and Economic Development in Southern Asia, Delhi, pp. 72-73.

2. Ibid., p.73.

the data are very sparse. This study aimed at finding out the patterns of educational differentials but it could not be done for all the cities because of data limitations. The format in which the information for migrants is given, is not given for non-migrants.

In 1961, Census Organisation prepared six special migration tables for cities of one million and over and for Kanpur Town Group besides D series tables on migration.[3] These tables could have been used here to find out migration differentials as these give information on such important aspects of migrants as age, sex, educational level, category of worker/non-worker, religion, place of birth, duration of residence and marital status. Most important of these was the cross classification of educational levels with age, sex and duration of residence. But unfortunately the researcher could not trace these tables for all the cities except for Madras, Ahmedabad and Greater Bombay.[4]

Because of all these reasons only four metropolitan cities - Delhi, Calcutta, Greater Bombay and Madras - have been taken for analysis. Besides, only workers have been taken because by taking them, the study has controlled, to a certain extent the age factor which could have disturbed the true shape of both the migrants and non migrants.

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3. Census of India, Vol. I, Part II-C(iii) Migration Tables, pp. i & ii.

4. On enquiry from Census Organisation, it was found that special migration tables for the rest of one million and over cities were not published for some unavoidable circumstances.

Bogue and Zachariah[5] have written that in India the propensity to migrate to urban areas is much higher among literates and educated people than among the illiterates, and that as the level of education rises the tendency to travel greater distances to seek employment increases. If this is true as a general pattern throughout the country, it may be expected that as school attendance in the villages increases there will be an increased flow into the cities of literate rural youths seeking their fortunes. Many researchers fear that as a result of economic development Indian cities will soon be flooded with illiterate, unskilled and inexperienced agricuturists who will only burden the labour market with large quantities of manpower that cannot be absorbed. It is further argued that rural to urban migration in India may deliver large number of youngmen and women who have no prospect of a decent livelihood in the village because of population pressure on the land, but who have received a minimum education in the expanding educational system and are ready to be absorbed in the expanding economy.[6]

Speculation about the educational selectivity of internal migrants has, thus, been going on for a long time. Nobody has reached a consensus about the nature of this selection. Is it the well educated, the poorly educated or the extremes who are selected?

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5. D.J. Bogue and K.C. Zachariah, op. cit., p.53.

6. Ibid., p.54.

Table No.11

Percentage Distribution of Migrants and Non-Migrant Workers engaged in III to IX Categories by educational levels

Cities	Status	% of illiterates	% of literates	% of literates without Edl. levels	% of literates up to Matric/Hr. Sec.	% of literates above Matric/Hr. Sec. Non Technical	% of literates above Matric/Hr.Sec. (Tech.)
1. Calcutta	Non-Migrant	35.22	64.78	28.11	25.51	9.64	1.58
	Migrant	34.69	65.30	47.30	39.58	11.73	1.30
2. Greater Bombay	Non-Migrant	35.15	64.85	17.99	42.99	3.87	0.01
	Migrant	34.47	65.53	25.61	35.41	2.66	1.86
3. Delhi	Non-Migrant	38.96	61.04	29.40	25.98	3.88	1.78
	Migrant	29.84	70.16	24.12	35.51	8.94	1.56
4. Madras	Non-Migrant	24.61	75.39	24.27	46.80	2.90	1.42
	Migrant	26.12	73.88	22.47	44.43	5.37	1.61

Source: Non-Migrants (residents) at the place of destination computed from Census of India State Volumes, Part II-B (i) General Economic Tables. For Migrants Census of India - State Volumes, Part II-C, Migration Tables, Census of India, 1961.

The fears expressed by Zachariah and speculations by others in relation to the educational selectivity of migrants, do not seem to be totally valid when table No.11 is closely examined. In this table, the migrants have been compared with those of the residents of the city, though opinions may differ on whether these differences indicate the selectivity of inter-regional migration.

In Calcutta and Greater Bombay there is not much difference in the proportion of illiterates between migrants and non-migrants when the formal levels of education are taken into consideration, it is found that they rise sharply up to Matric/Higher Secondary level of education in Calcutta but at the same time they also fall very sharply when proportion of migrants with more than Matric/Higher Secondary (Tech. and Non-technical) education is taken into consideration. When the percentage of migrants above Matric/Hr.Sec. non-technical education is only 3.87 per cent, residents have the proportion of 9.64 per cent. In this city migrants are again lagged behind in technical education. In Bombay also the condition, more or less remains the same except that of technical education where migrants were able to override the non-migrants or residents at the place of destination. In Delhi, migrants have superseded non-migrants in all levels of education except that of literates without educational levels and technical education. In Madras, proportion of highly educated persons both technical and non-technical got selected.

The above discussion very clearly demonstrates that migration if stimulated by economic growth, technological improvement,

etc. attracts the better educated while areas tending to stagnate loose their better educated and skilled persons.[7]

(ii) Where the 'push' factor is very strong selectivity is at minimum, where the 'pull' stimulus is greater, there will be an appreciable selectivity.

Higher levels of education among the migrants have surprising effect. It can be explained in so many ways. The first explanation can be the high economic growth and technological advancement by which the cities have become selective of migrants' educational composition.

The second explanation can be that we have taken life time migration and duration of residence has not been taken into consideration. Most of the migrants come to the cities with comparatively lower levels of education but enhance their levels of education after coming to the cities unlike the data for adults over short migration periods, where all or virtually all of the education was attained before migration, in the case of life time migration, some adults migrants might have received part or all of their education after migration. Thus, all or part of the migrants' education may have been received in the region of destination rather than in that of the origin. Thus, these circumstances might have affected the indicated patterns of educational selectivity.

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7. D.J. Bogue, "Techniques and hypothesis for the study of differential migration", International Population Conference (1961), p. 114.

A few words about the impact of educational differential is warranted. By the transference of the educated masses, the rural areas are left with the residual. All studies have admitted that migration from villages to the cities tends to lower down the educational level of the population at the place of origin. Though migration of the people is a healthy sign of the development, yet it creates imbalances in literacy between urban and rural areas and thus prevents informal motivation towards education. In such cases illiteracy becomes its own cause. A cursory glance at table No.12 will explain the vast differences in literacy rates between rural and urban areas.

Table-12

All India Literacy rates for cities, towns and rural areas in 1961 (excluding NEFA, Goa, Daman and Diu

Description	Rate Percent		
	Persons	Males	Females
Literacy rates in:			
1. Cities over 1 million	56.40	63.85	46.36
2. Cities of 0.5 to 1 million	49.60	58.38	38.43
3. Cities of 0.1 to 0.5 million	48.52	58.51	36.78
4. Cities above 100,000	51.81	60.74	40.65
5. Non City Urban Population	42.99*	54.69*	29.73*
6. Urban India	46.94*	57.46*	34.48*
7. Rural India	19.00	29.07	8.54
8. All India	24.02	34.44	12.95

* Excludes Union Territories except Delhi.

Source: Extracts from the all India Census Reports on literacy, Census Centenary Monograph No.9, Census of India, New Delhi, 1971, p.118.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Migration which is a movement or a redistribution of human resources is one of the most intricate and complex problems in the whole gamut of demographic and economic processes. It not only denotes a pre-existing economic or social condition as a cause of the movement but also an effect as it brings forth some of the most striking spatial variations with regard to population size and character of population.

The process of urbanization is mainly polarized in the big urban agglomerations and thus the population of cities is growing much faster in relation to the population of other urban centres and the rest of the country. The relative rapid growth of population of cities in India is mainly caused by internal migration into the cities from rest of the country.

The geographic or spatial mobility of the population, therefore, is a matter of direct concern to economic planning because of its impact upon the distribution of the population in the economy and of its interaction with other aspects of social and economic change and differentiation of the same.

The planners argue that the higher rate of urbanization is a healthy sign of economic growth. What is really worrying the authorities is the high rate of growth in the larger urban centres.

An approach paper prepared by T.C.P.O. argues that the trend towards a higher population in large cities and a declining one among the smaller towns needs to be corrected.[1]

Concern with migration differentials has also been central to the interest in migration. The effects of migration whether for sending areas, for receiving areas or for the migrants themselves are in large part a function of the composition of the migrant population. But researchers have neglected this compositional or socio-economic or cultural characteristics of the migrants to a substantial degree. They have not seen the migrants from their qualitative angle which is very important to measure the effects of migration oriented urbanization. The patterns of educated and occupational characteristics have, therefore, been studied with respect to the economic base of the city as mentioned earlier.

The main purpose of this study was (a) to investigate different regional patterns of educational and occupational structure of migrants to class I cities and, (b) to test that these patterns are related with the economic base of the cities.

Regional Patterns of inmigration

It has already been stated that large urban agglomerations are receiving a lion's share of migrants. The proportion of migrants to total population of the city differs from one city to another.

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1. "Deliberate Urbanization Policy Suggested," Hindustan Times daily, Jan. 28, 1976.

Leaving aside 18 cities whose migrants' population is less than 30 per cent, rest of the cities have at least one-third of their population as migrants.

According to the map, it is found that only certain major industrial complexes like Calcutta conurbation and Bombay-Thana-Poona area have attracted the migrants to the greatest extent. Except a few cities of Indo-Gangetic plain, Northwest region and Southwest region of India have attracted migrants to a lower extent.

The most startling observation in this study is that the proportion of migrants does not differ significantly between functional groups of cities. The absence of strong pull of the cities may be considered as one of the explanations for this. The second explanation lies in terms of functional classification of cities. The classification used in this study is based on the industrial classification alone which is a high aggregation. It does not distinguish between labour intensive technology of Moradabad and Sholapur etc. and capital intensive technology of Bombay, Ahmedabad and Howrah etc. and classifies all as industrial base cities. The migration pattern of these two sets of cities is not the same and therefore should be studied separately.

Patterns of Educational Levels of Migrants

Education is the most important factor which considerably influences the process of migration. Education in itself may stimulate outmigration in as much as it raises the level of aspiration of the people.

But most of the movers to Indian cities are illiterates. The percentage of illiterates is as high as 93.21 per cent. Roughly half of the migrants in each city are illiterates. Except a few cities of Punjab, Delhi and Lucknow most of the cities in northern India have more than 64 per cent of illiterates, among migrants. Besides northern India, Calcutta industrial region also attracts illiterate migrants. Bombay-Poona industrial complex and south India receives low and average proportion of migrants with no formal level of education. The opposite of this is true for higher levels of education. Education does not seem to be a bar for migration since analyses of variance does not show significant difference in the proportion of migrants with various levels of education between groups of cities with differing economic bases. The proportion of migrants with formal levels of education is very less. It may be due to the fact that India has very low level of literacy in rural and lesser urban centres from where the migrants move to these cities. It seems that the regions from where our migrants are drawn have neither proper facilities for education nor there are job opportunities, hence, most of our migrants are uneducated. It would have been possible to find out the level of literacy and availability of job opportunities in the place of origin had there been data on place of origin.

Patterns of Occupational Structure

As is evident, the most important cause of migration from rural areas and from less prosperous areas to urban areas is economic

Geographical mobility is directly linked with the aspirations of social mobility.

The findings explain that most of our professionals and executive migrants live in service cities and most of the industrial cities receive mill hands. The analysis of variance also supports this finding as proportion of migrant workers in the category of occupation I differs between the groups very significantly. The northern region of India receives the highest proportion of migrant workers in this category while industrial complexes of Calcutta and Bombay receive the lowest proportion.

The same is the case with the occupational category II except that some industrial cities have received higher proportion of migrants where these have joined hands with the service cities. Analysis of variance also confirms this.

Proportion of migrant workers is the highest in the occupational category containing divisions 4 to X suggesting thereby that most of the migrants are absorbed in this category of workers. The proportion of migrants in this category is the highest in functional groups I and II. According to the analysis of variance the mean proportion of migrant workers in this category differ very much from one functional group to another. In brief, the migrants in class I cities are working at a lower status. In the absence of requisite data, it is impossible to determine whether this is due to lower educational attainments of the migrants.

Efforts have also been made to analyse the relationship between educational attainments of the migrants and their occupational placement.

In division 0, I and 2 there is close association between levels of attainment and the proportion of migrants, i.e., higher the level of education, the higher is the proportion of migrant workers in these divisions. In divisions 4, 7-8 and 9 the case is entirely different. In these divisions there seems to be an inverse relation between the median proportion of migrants and the levels of education. In division 6 the migrants present a unique picture where the proportion of illiterates and Higher Secondary/Matric is almost equal.

There does not seem to be a close relationship between proportion of migrants in various divisions of N.C.O. and level of education.

Education Differentials among migrants and non-migrants

The migration of talent from one part of the country to another and from rural to urban areas has been a subject of interest to researchers for a long time. The educational selectivity of migration streams could have substantial effects on both the sending and receiving areas if it continued for a long time, if migration rates were high and if selectivity was of sufficient magnitude.

Analysis of educational differential among migrants and non-migrants is very essential for understanding the mechanism of

rural'push' and urban 'pull' but unfortunately the data do not permit to probe into this very important aspect of migrants in detail. Because of the limitations of the data only four metropolitan cities have been analysed.

In Calcutta and Greater Bombay the illiterates are almost the same among migrant and non-migrant. The percentage of migrants remains almost equal up to Hr.Sec./Matric but in case of technical education Bombay and Calcutta differ very much. In case of Calcutta, the migrants have less proportion while they override non-migrants in Bombay. In Delhi migrants have superseded non-migrants in all levels of education except in technical education. In Madras, proportion of highly educated persons both technical and non-technical get selected. The causes of higher levels of education among migrants have been discussed earlier.

Perhaps the most important reason may be that we have analysed only life time migrants who may have received their higher education after migrating to these cities. As has been said earlier, the analysis of education differentials is very important but because of paucity of data, it could not be carried in detail. It is proposed to analyse the educational differentials more extensively in further research work.

Suggestions for future work

The present study is an attempt to analyse the migration into Indian cities which is the most complicated aspect of

urbanization by certain crude statistical tools. In doing this some of the shortcomings and the imperfections are self evident. The most serious limitations of this study is that the available data used here deal only with the characteristics of life time migrants at destinations and thus giving only half of the picture of migration. In order to complete the picture of migration at least, exact place of birth of origin of migrants is necessary so that its available characteristic could be found from other sources.

As has been stated earlier there should be a functional classification which distinguish the cities of capital intensive technology to the cities of labour intensive technology. The migration patterns of the two sets of industrial cities, therefore, should be studied separately.

The low level of literacy pose another problem in finding out its relative role in the whole process of migration into Indian cities. It should also be studied whether outflow of talents from backward or less prosperous areas creates imbalances or it helps in the overall development of those regions?

Finally, this study may be considered as a crude attempt to analyse the process of migration into Indian cities with the help of secondary data. The researcher suggests that there should be some improvements in the data base of internal migration. The data about migrant selectivity (age, sex, educational attainments etc.) should be given along with the characteristics of the

non-migrants population in the Census in order to facilitate the analysis of the dynamics of the migratory process. The researchers should also, simultaneously develop some more powerful analytical tools and theoretical framework to accept the challenges of shortages of data on this vital aspect - migration.

APPENDIX-I

List of cities with economic base

Cities with dominant industrial functions and low service (Group I)

1. Amritsar
2. Tiruchirapalli
3. Tuticorin
4. Moradabad
5. Asansol
6. Madurai
7. Greater Bombay
8. Nagpur
9. Ludhiana
10. Howrah
11. South Dum Dum
12. Ahmedabad
13. Sholapur
14. Malegaon
15. Bhatpara
16. Baly
17. Ulhasnagar

Cities with dominant industrial functions and moderate service (Group II)

1. Bhavnagar
2. Hubli
3. Agra
4. Rampur
5. Mirzapur

Appendix-I contd.....

6. Guntur
7. Warangal
8. Elluru
9. Kurnool
10. Baroda
11. Alleppy
12. Coimbatore
13. Vellore
14. Kolhapur
15. Kanpur
16. Thana
17. Bangalore
18. Mangalore
19. Jamshedpur
20. Surat
21. South Suburban
22. Kamarhati
23. Baranagar
24. Indore
25. Jabalpur
26. Gwalior
27. Ujjain
28. Durg
29. Bhopal

(iii)

Appendix-I contd....

Cities with dominant Service functions and moderate industries (Group III)

1. Bandar
2. Gaya
3. Rajkot
4. Jamnagar
5. Madras
6. Thanjavur
7. Mysore
8. Aligarh
9. Nellore
10. Darbhanga
11. Calicut
12. Poona
13. Belgaum
14. Jaipur
15. Udaipur
16. Lucknow
17. Meerut
18. Ranchi
19. Srinagar
20. Nasik
21. Ahmadnagar
22. Cuttack
23. Jullundur
24. Patiala
25. Delhi
26. Trivandrum
27. Garden Reach

(iv)

Appendix-I contd.....

Cities with dominant Service functions and low industry (Group IV)

1. Kakinada
2. Amravati
3. Akola
4. Jodhpur
5. Kota
6. Jhansi
7. Vishakhapatnam
8. Bikaner
9. Allahabad
10. Burdwan
11. Hyderabad
12. Gauhati
13. Muzaffarpur
14. Ernakulam
15. Mathura
16. Shahjehanpur
17. Jammu
18. Ambala
19. Dehra Dun
20. Patna

Appendix-I contd.....

Cities with miscellaneous functions
(Group V)

1. Bhagalpur
2. Nagarcoil
3. Varanasi
4. Salem
5. Kharagpur
6. Gorakhpur
7. Ajmer
8. Vijaywada
9. Calcutta
10. Bareilly
11. Rajamundry
12. Saharanpur
13. Kolar Gold Field

APPENDIX-II

Proportion of migrants and their levels of education

GROUP-I

Cities	Percentage of migrants to total population	Proportion of migrants with educational attainments		
		Illiterate and literate without educational levels	Below Matric/ Hr. Secondary	Matric/Hr. Sec. and above
1	2	3	4	5
1. Amritsar	22.29	62.89	35.52	2.56
2. Tiruchirapalli	38.72	62.93	34.26	2.75
3. Tuticorin	43.41	73.50	25.30	1.17
4. Moradabad	20.74	74.39	23.56	2.02
5. Asansol	38.15	85.88	10.84	3.26
6. Madurai	33.56	68.41	29.35	2.23
7. G. Bombay	52.47	63.74	33.25	3.00
8. Nagpur	42.90	59.32	37.04	3.63
9. Ludhiana	33.35	55.36	41.55	3.05
10. Howrah	46.00	76.02	20.13	3.80
11. S. Dum Dum	36.11	67.38	26.74	5.86
12. Ahmedabad	49.00	62.50	35.45	2.05
13. Sholapur	38.90	71.74	26.90	1.35
14. Malegaon	44.20	77.60	21.87	0.50
15. Bhatpara	76.11	84.20	14.65	1.14
16. Baly	54.00	81.25	15.87	2.88
17. Ulhasnagar	62.35	68.56	30.25	1.18

Appendix-II contd....

GROUP II

1	2	3	4	5
1. Bhavnagar	26.43	57.34	40.69	1.96
2. Hubli	38.29	63.44	35.16	1.38
3. Agra	27.83	79.73	17.82	2.44
4. Rampur	11.42	75.46	21.36	3.17
5. Mirzapur	26.70	85.11	13.90	0.99
6. Guntur	51.18	69.49	27.17	3.34
7. Warangal	33.86	78.47	19.88	1.64
8. Elluru	47.10	68.47	28.64	2.89
9. Kurnool	34.42	67.03	27.42	5.56
10. Baroda	40.22	53.76	42.58	3.66
11. Alleppey	25.58	71.66	25.99	2.35
12. Coimbatore	44.34	61.47	36.09	2.44
13. Vellore	34.03	67.60	30.45	1.94
14. Kolhapur	40.51	58.95	38.90	2.14
15. Kanpur	46.14	78.76	19.07	2.16
16. Thana	59.20	52.87	43.99	3.13
17. Bangalore	41.17	75.94	20.27	3.77
18. Mangalore	34.38	71.26	26.43	2.29
19. Jamshedpur	53.00	74.49	22.42	3.09
20. Surat	27.27	50.65	47.42	1.92
21. S.Suburban	35.43	64.43	30.46	5.04
22. Kamarhati	39.15	81.30	17.33	1.34
23. Baranagar	35.12	69.32	25.01	5.64
24. Indore	42.23	83.38	13.74	2.87
25. Jabalpur	38.28	64.86	32.06	3.09
26. Gwalior	41.45	81.73	14.52	3.75
27. Ujjain	36.33	82.06	15.50	2.44
28. Durg	48.50	70.13	26.16	3.71
29. Bhopal	47.20	76.56	20.15	3.29

Appendix-II Contd....

GROUP III

1	2	3	4	5
1. Bandar	37.95	67.68	29.70	2.62
2. Gaya	35.29	77.70	19.79	2.51
3. Rajkot	41.01	41.94	55.66	2.40
4. Jamnagar	30.91	57.20	41.27	1.53
5. Madras	35.74	56.91	38.87	4.22
6. Thanjavur	41.05	68.94	29.31	1.74
7. Mysore	32.28	59.46	36.15	4.36
8. Aligarh	16.21	83.69	13.16	3.15
9. Nellore	37.35	66.48	31.61	1.91
10. Darbhanga	32.27	74.77	23.57	1.66
11. Calicut	52.20	68.51	28.54	2.96
12. Poona	49.17	58.77	37.43	3.78
13. Belgaum	33.73	44.83	52.43	2.70
14. Jaipur	28.42	82.52	13.21	4.23
15. Udaipur	30.08	84.36	11.23	4.40
16. Lucknow	38.80	65.35	29.72	4.93
17. Meerut	35.08	69.72	27.09	3.19
18. Ranchi	38.78	54.02	39.31	6.65
19. Srinagar	6.25	79.21	17.59	3.17
20. Nasik	55.91	57.52	40.41	2.03
21. Ahmednagar	42.98	60.35	37.96	1.67
22. Cuttack	36.36	74.22	22.69	3.06
23. Jullundur	27.57	52.32	43.94	3.71
24. Patiala	41.93	61.07	33.45	5.45
25. Delhi	39.87	63.35	31.01	5.60
26. Trivandrum	32.08	54.18	37.11	8.70
27. GardenReach	33.47	93.21	5.25	1.54

Appendix-II Contd....

GROUP IV

1	2	3	4	5
1. Kakinada	41.69	61.79	35.41	2.80
2. Amraoti	48.83	55.56	42.14	2.28
3. Akola	51.41	57.16	41.25	1.56
4. Jodhpur	21.46	84.28	13.61	2.09
5. Kota	42.24	85.34	12.28	2.36
6. Jhansi	39.07	72.61	25.44	1.92
7. Vishakhapatnam	41.61	61.01	33.52	5.43
8. Bikaner	21.49	79.76	16.95	3.26
9. Allahabad	31.49	65.45	24.32	10.23
10. Burdwan	27.72	77.19	19.88	2.91
11. Hyderabad	25.01	67.95	27.79	4.28
12. Gauhati	45.41	63.10	33.07	4.00
13. Muzaffarpur	48.26	73.16	21.68	5.15
14. Ernakulam	29.64	60.10	33.59	6.31
15. Mathura	36.44	73.34	23.81	2.84
16. Shahjehanpur	26.45	70.32	27.31	2.36
17. Jammu	48.31	77.56	19.53	2.88
18. Ambala	41.72	52.28	44.29	3.41
19. Dehra Dun	39.86	66.31	30.75	2.93
20. Patna	40.21	68.88	25.00	6.11

APPENDIX-III

Proportion of migrants in various occupational categories for each city by functional groups

GROUP-I

Cities	Proportion of migrant workers in occupational categories			Proportion of			
	I	II	III	Workers in division X	Workers engaged in primary sector	Workers in III-IX categories	Non-workers
1	2	3	4	5	6	7	8
1. Amritsar	9.10	25.04	65.83	0.01	0.49	43.29	56.21
2. Trichurapalli	12.19	29.50	58.22	0.03	0.78	36.44	62.77
3. Tuticorin	8.54	23.10	67.08	0.50	0.37	42.55	57.07
4. Moradabad	10.48	26.92	62.42	0.13	0.57	29.93	69.49
5. Asansol	5.96	29.97	62.68	1.35	N.A.	45.34	54.46
6. Madurai	10.25	27.95	61.77	0.03	0.27	42.03	57.70
7. G. Bombay	8.77	24.52	66.63	0.06	0.14	53.60	46.26
8. Nagpur	10.86	24.01	65.12	-	1.38	42.55	56.07
9. Ludhiana	11.74	24.88	63.33	0.02	0.36	40.13	59.49
10. Howrah	5.78	23.12	70.20	0.81	N.A.	50.53	49.43
11. S. Dum Dum	8.06	34.09	56.82	0.99	N.A.	36.86	63.04
12. Ahmedabad	6.24	20.84	72.90	0.01	0.09	43.54	56.36
13. Sholapur	6.16	15.35	78.48	-	0.91	44.62	54.46
14. Malegaon	3.45	13.27	83.14	0.12	1.84	48.37	49.79
15. Bhatpara	1.79	12.65	84.43	1.10	N.A.	51.14	48.83
16. Baly	4.27	17.06	77.96	0.68	N.A.	51.21	50.87
17. Ulhasnagar	9.29	39.04	51.43	0.24	0.21	38.14	61.66

Appendix-III contd.....

GROUP II

1	2	3	4	5	6	7	8
1. Bhavnagar	9.60	28.98	61.38	0.03	0.22	34.70	65.07
2. Hubli	9.34	21.02	66.73	1.87	1.85	34.30	63.83
3. Agra	21.54	26.94	50.37	1.15	0.14	33.88	65.96
4. Rampur	13.48	19.22	67.28	0.01	1.27	40.39	58.34
5. Mirzapur	11.51	24.84	63.64	-	1.34	33.75	64.91
6. Guntur	8.95	17.26	73.69	0.08	1.54	44.29	54.16
7. Warangal	8.30	20.02	71.62	0.05	3.37	38.87	57.76
8. Elluru	11.25	24.11	64.62	-	3.15	34.80	62.05
9. Kurnool	12.26	24.13	63.59	0.02	4.03	38.85	57.12
10. Baroda	12.81	29.50	57.65	0.02	0.50	35.63	63.87
11. Alleppey	13.11	19.84	66.41	0.62	1.19	39.77	59.03
12. Coimbatore	10.52	24.91	64.35	0.20	0.62	45.94	53.44
13. Vellore	14.35	24.76	60.87	0.02	0.98	36.51	62.51
14. Kolhapur	15.18	26.47	58.34	-	3.15	33.28	63.57
15. Kanpur	9.99	19.41	68.84	1.76	0.35	45.15	54.50
16. Thana	10.52	30.59	58.69	0.17	0.79	42.04	57.16
17. Bangalore	16.29	22.73	60.41	0.52	1.26	42.86	55.87
18. Mangalore	10.77	18.07	71.01	0.11	0.99	47.82	51.17
19. Jamshedpur	7.71	17.70	74.00	0.59	0.30	46.80	52.89
20. Surat	9.12	22.09	68.74	0.04	0.06	42.12	57.75
21. S. Suburban	9.73	32.54	56.18	1.78	N.A.	31.71	68.12
22. Kamarhati	3.50	20.03	75.45	0.62	N.A.	38.97	60.98
23. Baranagar	8.06	27.35	63.53	1.02	N.A.	37.30	62.70
24. Indore	10.35	26.18	63.31	0.16	0.28	40.75	58.97
25. Jabalpur	23.47	18.26	58.12	0.14	1.27	43.11	55.61
26. Gwalior	15.52	26.12	58.30	0.04	2.24	38.48	60.64
27. Ujjain	10.89	23.69	66.05	0.35	0.72	40.03	59.25
28. Durg	7.30	17.77	74.81	0.10	1.67	54.29	44.03
29. Bhopal	22.50	19.30	58.20	-	-	-	-

Appendix-III contd.....

GROUP III

1	2	3	4	5	6	7	8
1. Bandar	11.44	17.25	67.30	-	4.17	34.79	61.04
2. Gaya	13.42	28.74	56.93	0.89	1.87	32.44	65.69
3. Rajkot	11.44	31.31	57.18	0.06	0.63	33.91	65.45
4. Jamnagar	13.28	26.15	60.54	0.02	0.42	37.73	61.84
5. Madras	13.34	31.91	54.49	0.25	0.04	42.10	57.86
6. Thanjavur	15.58	30.02	54.28	0.12	2.33	31.18	66.48
7. Mysore	18.16	28.52	52.55	0.72	0.75	32.17	67.06
8. Aligarh	23.77	17.16	57.93	0.12	0.95	28.09	70.96
9. Nellore	12.37	27.31	60.22	0.09	2.74	38.91	58.35
10. Darbhanga	15.19	16.80	67.83	0.17	2.03	32.58	65.39
11. Calicut	13.44	20.09	65.47	1.01	0.28	44.09	55.63
12. Poona	13.02	28.31	58.66	-	0.87	38.29	60.83
13. Belgam	13.96	29.40	46.95	9.69	1.76	35.38	62.84
14. Jaipur	15.45	34.76	48.98	0.68	N.A.	38.14	61.77
15. Udaipur	17.05	24.82	56.54	0.54	N.A.	40.27	58.69
16. Lucknow	20.29	30.62	48.96	0.12	0.34	40.54	59.10
17. Meerut	30.51	28.77	39.66	1.07	0.51	40.55	58.94
18. Ranchi	17.60	29.75	51.64	0.99	1.75	37.62	60.62
19. Srinagar	12.60	19.09	68.00	-	-	35.31	64.69
20. Nasik	12.78	28.55	58.59	0.11	1.92	36.21	61.87
21. Ahmadnagar	25.19	24.16	50.58	0.05	1.27	36.92	61.80
22. Cuttack	5.03	30.36	63.75	0.79	0.68	37.26	62.04
23. Jullundur	13.45	29.57	56.91	0.03	0.65	36.72	62.61
24. Patiala	19.29	29.25	52.11	-	0.90	37.41	61.66
25. Delhi	12.08	35.34	52.36	0.18	0.19	41.92	57.87
26. Trivandrum	22.34	27.71	48.99	0.95	0.54	40.77	58.69
27. Garden Reach	15.20	28.20	56.60	-	-	-	-

Appendix-III Contd.....

GROUP IV

1	2	3	4	5	6	7	8
1. Kakinada	18.37	29.31	52.35	0.03	1.31	27.12	71.57
2. Amravati	14.09	31.12	54.56	0.21	4.13	34.08	61.79
3. Akola	12.05	30.53	57.41	-	2.94	36.32	60.74
4. Jodhpur	18.63	26.29	52.16	2.88	N.A.	36.21	63.71
5. Kota	19.68	27.62	51.98	0.69	N.A.	40.20	58.43
6. Jhansi	32.65	14.33	51.24	1.79	0.15	40.21	59.64
7. Vishakhapatnam	19.60	22.62	57.64	0.13	0.37	36.06	63.56
8. Bikaner	14.67	25.22	56.35	3.70	N.A.	35.04	64.68
9. Allahabad	22.19	22.36	52.52	2.91	0.47	40.69	58.84
10. Burdwan	9.75	39.35	48.72	2.12	N.A.	33.21	66.46
11. Hyderabad	16.01	27.72	56.20	0.06	0.63	41.42	57.95
12. Gauhati	11.16	30.51	55.95	2.38	0.28	51.95	47.77
13. Muzaffarpur	13.03	34.78	48.66	3.51	0.89	35.54	63.56
14. Drnakulam	18.72	24.06	55.96	1.26	0.71	38.62	60.66
15. Mathura	33.29	23.42	43.05	0.25	0.21	35.57	64.22
16. Shahjehanpur	32.92	26.75	40.22	0.12	0.66	31.21	68.13
17. Jammu	8.03	26.76	65.15	-	-	39.93	59.75
18. Ambala	48.14	18.10	33.72	-	0.25	43.98	55.76
19. Dehra Dun	25.34	27.76	46.84	0.06	0.43	40.39	65.34
20. Patna	14.74	27.10	56.38	1.84	1.55	40.43	58.02

APPENDIX-IV

NATIONAL CLASSIFICATION OF OCCUPATION

The relevant extract from the National Classification of Occupations for Divisions and Groups is reproduced below to help the reader to ascertain the descriptions or references of Divisions occurring in this study.

DIVISION 0

Professionals, Technical and related workers consist of Architects, Engineers, Surveyors, Physicists, Chemists, Geologists, other Physical Scientists, biologist, Veterinarians, Agronomists, Related Scientists, Physicians, Surgeons, Dentist, Nurses, Pharmacists, Medical and Health Technicians, Teachers, Jurists, Social Scientists, Artists, Writers, Related Workers, Draughtsmen, Science and Engineering Technicians and other Professional, Technical and Related Workers.

DIVISION I

Administrative, Executive and Managerial Workers consist of Administrators and Executive Officials of Government, Directors and Managers of Wholesale and Retail Trade, Directors, Managers and Working Proprietors of Financial Institutions, Directors, Managers and Working Proprietors of others.

Division 2

Clerical and Related Workers -
consist of Book Keepers, Cashiers, Stenographers, Typists, Office Machine Operators, Clerical Workers and Unskilled Office Workers.

Division 3

Sales Workers -
consist of Working Proprietors of Wholesale and Retail trade, Insurance and Real Estate Salesmen, Salesmen of Securities and Services and Auctioneers, Commercial travellers and Manufacturing Agents, Salesmen, Shop Assistants and Related Workers, Money Lenders and Pawn Brokers.

Division 4

Farmers, Fishermen, Hunters, Loggers and Related Workers - consist of farmers and farm managers (excluding families 400 - cultivators (owners) and 401 - cultivators - tenants, Farm Workers (excluding family 414 - Agricultural Labourers), Hunters and Related Workers, Fishermen and Related Workers, Loggers and other forestry workers.

Division 5

Miners, Quarrymen and Related workers, Miners and quarrymen, well drillers and Related workers, Minteral Treaters, Miners, quarrymen, and Related Workers.

Division 6

Workers in Transport and Communication Occupations - consist of Deck Officers, Engineer Officers and Pilots of the Ship, Deck and Engine-room ratings (ship) Barge Crews and Boatsmen, Aircraft Pilots, Navigators and flight Engineers, Drivers and Firemen of Railways, Drivers of Road Transport, Conductors, Guards and Brakesmen of Railways, Inspectors, Supervisors, Traffic Controllers and Dispatchers of Transport, Telephone, Telegraph and Related Tele-Communication Operators, Postmen, and Messengers, Workers in Transport and Communication Occupations.

Division 7 - 8

Craftsmen, Production Process Workers and Labourers, not elsewhere classified -
consist of the largest number of groups - Spinners, Weavers, Knitters, Dyers and Related Workers, Tailors, Cutters, Furriers and Related Workers, Leather Cutters, Lasters and Sewers and Related Workers, Furnacemen, Rollers, Drawers, Moulders and Related Metal Making and treating workers, Precision Instrument Makers, Watch Makers, Jewellers and related workers, Tool makers, Machinists, plumbers, welders, platers and Related workers, Electricians and Related Electrical

and Electronics Workers, Carpenters and Related Workers, Painters and Paper Hangers, Bricklayers, Plasterers and Construction Workers, Compositors, printers, Engravers, Bookbinders, etc. Potters, Kilnmen, Glass and Clay formers and Related Workers, Millers, Bakers and Related food and Beverage Workers, Chemical and related process workers, Tobacco preparers and products makers, craftsmen and production process workers, Testors, packers and sorters, Lifting equipment operators, etc, and Labourers n.e.c.

Division 9

Service, Sport and Recreation Workers -
consist of Fire fighers, policmen, Guards and Related workers, househkeepers, cooks, maids and related workers, waitors, Building caretakers, cleaning and related workers, Barbers, Hairdressers, Beauticians and Related Workers, Launderers, Dry Cleaners and pressers, Athletes, Sportsmen and Related Workers, Photographers and Camera-operators, Service, Sport and recreation workers, n.e.c.

Division X

Workers not classified by Occupation -
consist of workers without occupations, workers reporting occupations unidentifiable or unclassifiable and workers not reporting occupations.

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