도시화와 인구분포 URBANIZATION AND GEOGRAPHICAL DISTRIBUTION OF POPULATION

Proceedings of the Project Initiating Meeting Pusan, Korea, 29 September - 3 October 1989

Edited by Bui Dang Ha Doan

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Social Survey Research Center, Pusan National University

and

Committee for International Cooperation in National

Research in Demography (CICRED)

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FOREWORD

Léon Tabah Vice Chairman, Committee for International Cooperation in National Research in Demography (CICRED)

For the time being, new patterns of city growth and population distribution constitute a major concern to policy makers and underline the necessity for further scientific exploration. The General Assembly of CICRED, at its 1985 session in Florence, Italy, decided to include a project on "Urbanization and Population Distribution" in the CICRED Inter-Center Cooperative Research Programme. The decision was renewed at the General Assembly of New Delhi in 1989.

On the invitation of the Social Survey Research Center of the Pusan National University, the initial meeting of the project was held in Pusan, Korea, from 29 September to 3 October 1989. The meeting was under the guidance of Prof. Alan B. Simmons, who has been assigned by the CICRED Bureau the task of coordinating this collaborative effort.

On behalf of the Bureau, I would like to express our sincere gratitude to the Social Survey Research Center and, more particularly, Prof. Dae Ki-Kang, the Center's Director, for their generous hospitality and their enthusiastic participation in the project. My thanks also go to Prof. Simmons and all the participants. Mr Bui Dang Ha Doan, CICRED Director for Scientific Affairs, had to carry out the difficult task of editing all the proceedings of the Meeting. I would like to express to him my warmest appreciation. The project is now on the move, and we invite all interested research centers to join the common endeavour.

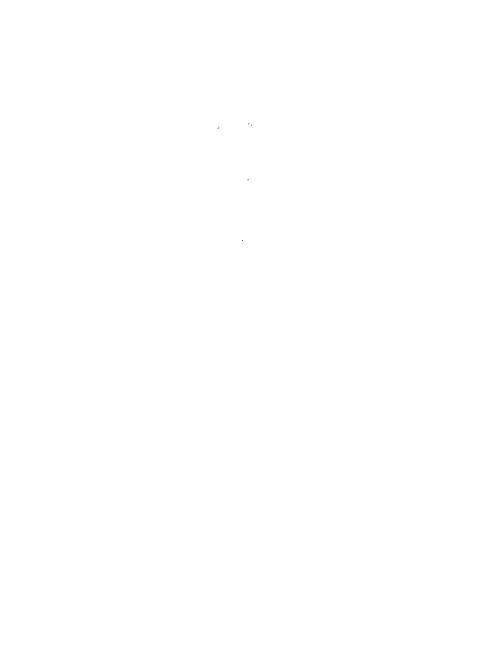


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CONFERENCE OPENING CEREMONY

ADDRESS BY PROF. DAE KI KANG DIRECTOR, SOCIAL SURVEY RESEARCH CENTER

It is an honor to welcome you to the CICRED conference here in Pusan, Korea. As chairman of the local organizing committee, I wish to express my sincere appreciation to all of you.

This conference had its beginnings in 1988, when Dr. Yun Kim of Utah State University suggested that I host this conference in Pusan. This proposal was accepted by the University as well as by the Ministry of Education. Dr. Ock Yang Lyun, former Director of the Social Survey Research Center of Pusan National University, confirmed our willingness to do so at the CICRED meeting in Bali, Indonesia, in November 1988.

Our conference theme, "Urbanization and Geographical Distribution of Population," is a topic of vital importance not only to Korea but also to many other developing countries. The directions which emerge from our discussions will most certainly benefit other countries facing similar urban problems. It is my sincere hope that this conference will facilitate professional interactions and foster new friendships. Please feel free to call upon me if I can be of any assistance to you during your stay in Pusan.

We are indeed grateful for all the local support we received when organizing this congress. Specifically, I would like to thank the City of Pusan, the Pusan Chamber of Commerce and Industry, and the members of our local advisory committee. Appreciation is also extended to our local financial sponsors: Mr. Oh Wan Soo, the President of Daehan Sangsa; Dr. Choi Wi Kyung, the President of Taechang Enterprise; Mr. Yoon Boo Whan, the President of Kukjae Paper Manufacturing Company; and Mr. Lee Jae Hun, an individual contributor.

Finally, I would like to thank Dr. Bourgeois-Pichat, who is responsible for the successful inauguration of this conference, but who is unfortunately not able to be with us. Dr. Leon Tabah, Vice-Chairman of CICRED, will replace Dr. Bourgeois-Pichat. I would like to express my best wishes to him and to all of you.

ADDRESS BY DR. KUN SIK SHIN PRESIDENT PUSAN MUNHWA BROADCASTING CORPORATION

I am very privileged to be able to host this international conference in this beautiful and historic hae-un-dae. And I am thrilled to see so many great scholars and distinguished guests from all over the world.

Welcome to all of you, and especially to those participants who come from countries with whom Korea has not had close diplomatic relations in the past. You are international authorities on the issues of population, urban sociology, economics, or public administration. Therefore, as President of Pusan MBC, one of Korea's major broadcasting companies, I wish to say that we are deeply honored by your visit. Pusan MBC is hosting this conference, together with the Social Survey Research Center of Pusan National University, one of the leading universities in Korea. The reason for this is that we support academic research activities that have the aim of advancing local, regional and national culture. This is a most important function of broadcasting and, in my opinion, the role and mission of the media.

The theme of this conference are the issues of population and urbanization, both of which form the basis of modern social change. I look forward to having concrete positive discussions and analyses on the subject that may lead to positive results.

At the present time our urban environments have many sociological and economic problems. However, I am certain that we can explore various alternative ways of solving these problems. By coming together, we can share our knowledge about the problems which plague our city environments and offer each other possible solutions and alternatives.

City development is nowadays a very complicated process which directly affects the development of a nation as a whole. We all wish to live in a city that is comfortable, peaceful and pleasant. All of you came here to help achieve this common goal.

I hope that this conference will prove to be interesting, informative and enjoyable for all of you.

ADDRESS BY PROF. JUSHIL SUH PRESIDENT OF PUSAN NATIONAL UNIVERSITY

I am very pleased and honored to greet you at this Conference of the Committee for International Cooperation in National Research in Demography. As the representative of the host organizations, I would like to extend my special gratitude to all of you, particularly to those who have come a long way from abroad and to the members of the organizing committee, who have designed an excellent program for this conference.

I would like to express my deep appreciation to the City of Pusan, the Pusan Chamber of Commerce and Industry, and to several business firms and individuals for their generous support. I would also like to extend my gratitude to Pusan Munhwa Broadcasting Corporation and to the Social Survey Research Center of Pusan National University. As the President of Pusan National University, I feel very proud that our Social Survey Research Center has been responsible for organizing this international conference. In order to keep pace with the international level of academic research and education, Pusan National University has initiated academic

exchange programs with 13 universities around the world, and the Social Survey Research Center has played an important role in international academic exchanges.

The significance of this conference is well reflected in its theme "Urbanization and Geographical Distribution of Population." Geographical mobility of the population and the consequent urbanization seem to be fundamental sources of social change. Population change may bring about various urban problems and social transformations in a transitional stage, as we are witnessing in Korea. Our country is in turmoil, shifting from the stable preindustrial society to the unstable industrial one. In this process we are faced with many problems, including uneven regional development, functionally overconcentrated primate cities, and political instability. Many urban problems such as housing shortages, traffic jams, water and sewerage problems, environmental pollution and overpopulation in large cities seem to be accelerated by the exodus of rural residents into a few large metropolises. I expect that all of these problems will be thoroughly covered in your discussions. I have no doubt that whatever you discuss in this conference will be greatly beneficial, not only to the academic community, but also to those members of the public concerned with urban problems and community development.

I hope that this conference will be a great success, and that you will have a most enjoyable and rewarding stay in Pusan.

Again, I thank you all for your participation and cooperation.

CONFERENCE REPORT AND PROPOSED RESEARCH PLAN

Alan B. Simmons York University Toronto, Canada

Acknowledgements

All participants are indebted to the outstanding local organization provided by the Social Survey Research Center (SSRC) at Pusan National University and to the warm welcome to Pusan and Korea provided by local hosts and organizations. We would like to thank Professor Dae-Ki Kang, Director of SSRC and the members of Steering and Advisory Committee which worked under his direction.

Special thanks go to the local hosts and sponsors, Mr. Jushil Suh, President of Pusan National University, Mr. Sang Young Ahn, Mayor of Pusan, Mr. Chung Whan Choi, President of the Pusan Chamber of Commerce and Industry, and Mr. Kun Sik Shin, President of Pusan Munhwa Broadcasting Corporation for their generous hospitality. The list of other sponsors is too long to thank each by name; this itself is an indication of the enthusiastic welcome we received. A full list of local organizers, hosts and sponsors of the meeting is provided in Appendix II. We thank them all for a most pleasurable and productive venue.

The CICRED Secretariat deserves a special expression of our appreciation for their contributions to the meeting. Professor Jean Bourgeois-Pichat, Chairman of CICRED, who led the development of this new research programme on urbanization and population distribution. Dr Leon Tabah, Vice Chairman of CICRED, with the very able assistance of Mr. Bui Dang Ha Doan, Ms. Hartati Ayral and Ms. Daniele Lévy, dealt efficiently and diplomatically with all administrative and protocol matters. Professor Tabah made valuable substantive contributions to the meeting

Summary

The Pusan meeting was the first step in a new CICRED research programme on Urbanization and Population Distribution. It brought together 30 researchers from CICRED associated Population Research Centres around the world.

Participants judged the meeting to have been a very useful step in initiating significant new research. There was a widespread feeling that the world is changing in unexpected ways, that new urban and population distribution patterns are emerging which must be analyzed in terms of their determinants and consequences, and that this is an appropriate moment to initiate comparative studies which will add to knowledge in this field.

The meeting began with the presentation of country statements on national urbanization and population distribution trends and research priorities. This was followed by a discussion of overlapping and comparative interests evident among participants.

Several major themes emerged from this review. A number of the country statements commented on the importance of understanding international trade, international investment and international migration patterns in order to understand national trends in urbanization and population distribution. On another dimension, several other statements noted the need to study in greater detail the social and economic functions of urban places and the formation or not of effective urban networks, as well as the policies which would facilitate the formation of effective networks. On still another theme, many of the country statements noted that government efforts to slow large city growth and the drift of rural poor in city slums had not met with success. The reasons for such failures need to be analyzed.

Subsequent discussion led to the formulation of a general conceptual approach and a number of methodological suggestions to guide studies and enhance comparability while not detracting from the unique concerns of each country specific research project. A preliminary calendar of steps to be completed in the research programme was developed.

Background

Given the importance of urbanization and population distribution trends and the new patterns of city growth and internal migration which are emerging in many countries, in 1985 (at its General Assembly in Florence) CICRED approved start up activities for a programme in this field. Alan Simmons agreed to serve as General Coordinator and prepared a preliminary programme statement which was mailed to all CICRED Centres in January 1989. A large number of centres subsequently expressed interest in the topic. Of these, 18 prepared background papers and/or proposals for the Pusan meeting. It is assumed that other centres not represented in Pusan will also participate in the programme. The CICRED General Assembly which met in New Delhi in September 1989 has included this research programme in CICRED's plan for the 1989-93 period.

Rationale for programme

Emerging patterns of urbanization and population distribution in the world constitute a major topic for scientific and policy oriented research. In many countries, new patterns are emerging. In others, a continuation of past trends is creating major dilemmas for social and economic planning. The list of specific problems and concerns includes the following:

- (a) The absolute size of major cities, such as Mexico, Cairo and Calcutta, is without historical precedent.
- (b) Until the very recent past, large cities were typically found in wealthier nations which could provide the social and economic infrastructure to sustain them. Now the largest and most rapidly growing cities are found in poor countries with scarce resources for providing social and economic infrastructure.
- (c) In opposition to Third World trends, the larger cities in most industrially developed nations are growing slowly, stable in size, or even getting smaller.

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- (d) Regional contrasts in levels and trends of urbanization are significant, reflecting different historical, cultural, demographic and social-economic conditions.
- (e) New communications and transportation technologies are having a significant impact on migration patterns and the spatial organization of residence and work-place. The impact of decentralized employment, rural industrialization, and dormitory towns on social-economic well-being have only been partially analyzed.
- (f) In both developed and developing nations, patterns of population redistribution and urbanization have become matters of widespread public policy concern.

The above considerations point to the timeliness of a comparative review of urbanization and population distribution trends in various countries around the world. The objective of the present program is to describe and to analyze the social and economic causes and consequences of currently emerging urbanization and population distribution trends in different countries, and to place these in historical and comparative perspective. The specific objectives are:

- (a) To increase understanding of population distribution and urbanization, including awareness of determinants, new trends, atypical cases, emerging relationships and social economic policy implications, in developed and developing nations around the world.
- (b) To undertake a comparative analysis of country cases, with particular attention to the last decade and very recent patterns.
- (c) To encourage in-depth country specific studies to explore new conceptual and policy models.
- (d) To provide a collaborative framework for continuing comparative studies between research centers working in this field.

Purpose of the Pusan Meeting

In January 1989, CICRED wrote to all member centres advising

them that a new programme of research on urbanization and population redistribution was planned. This mailing included a preliminary statement of the research programme, prepared by the Project Coordinator, Alan Simmons. It also included a questionnaire asking each Centre whether they were interested in participating in the programme. A large number of Centres responded by indicating positive interest.

The Pusan Meeting was organized to clarify objectives, data sources, analytic techniques, collaborative mechanisms and long term dissemination strategies for this programme of research.

The meeting marked the effective beginning of the new programme. Thirty researchers from different countries attended the meeting. Of these, 20 presented written background papers and/or preliminary proposals for future research, while others provided oral reports and comments. As the project will include a number of Centres who were not able to be represented at the Pusan meeting, particular attention was given in the meeting to establish guidelines for the overall programme which could be mailed to interested researchers and permit them to participate in all future research steps.

Agenda of the Pusan Meeting

Subsequent to opening ceremonies and official welcome from local hosts, the meeting first concentrated on the presentation and discussion of Country Statements from participating teams who were represented at the meeting or who had sent papers for this purpose.

Country Statements

Twenty-one papers were presented over the first day and one-half of the meeting. Each paper raised important concerns for the programme of research. Major points raised with respect to each of the study locations reported on are summarized below by order of presentation:

1. Pusan, Korea. Sung Hae Lee, in presenting his case study of Pusan,

Korea, noted that it is the second most populous city in the country, and has experienced a remarkable expansion of population and industrial activity since the end of the Korean War. A more detailed analysis of the historical sequence of this expansion shows that much of the initial population growth was due to flight from rural poverty rather than the attraction of urban jobs. National and local economic and social policies had a strong influence on specific developments. Discussion focused on the specific case and the broader national context.

- 2. Senegal. Aderanti Adepouju was unable to attend the Pusan Meeting; his paper (with Pierre Ngom) was, however discussed. It is a review of policies and programmes intended to retain rural migrants in Senegal. It outlines the salient features of migratory flows in Senegal, identifies dominant areas of origin and destination, and reviews attempts by the government to retain the rural populace through a series of regional development activities. Future research will be required to assess how effective the policies have been.
- 3. Morocco. A. Nouijai described the large increase in urbanization and in the number of large cities in Morocco between 1960 and 1982. While rural-urban migration continues to fuel large city growth, it had a proportionally greater impact during the 1960s than during the 1970s. Many rural migrants now go to smaller urban centres. Previous and ongoing population shifts through migration reflect regional inequalities in population distribution and economic activity which must be addressed to bring about a more equal development. Understanding of these processes is incomplete: more attention must be given to the social economic characteristics of migrants and the complexity of the migration process. Discussion focused on problems of limited data and of restricted access to existing data which will constitute challenges for new studies.
- 4. Indonesia. S. Alatas provided a demographic perspective of urbanization in Indonesia. This analysis focuses on inequalities in social-economic infrastructure (schools, hospitals, housing, etc.) and variation from one region to another in terms of domestic and foreign investment which are associated with migration patterns and shifts in population

distribution. The conclusions suggested by this analysis, while preliminary, are very promising. Discussion concerned possibilities for studying the same issues of social infrastructure in relation to urbanization in other countries as part of the comparative CICRED programme.

- 5. Kerala, India. K. Krishan Kumari presented a general overview of urbanization process in India, noting its early historical origins and recent development policy challenges. The discussion turned to the specific case of Kerala and the advantages of doing a case study of this unique region within the national context.
- 6. Bangladesh. M. Saleheen reported on research with A.H.M. Raihan Sharif and Sheikh Md. Monzurul Hug concerning rural urban migration and urbanization in Bangladesh. Their paper describes general national trends, push-pull factors behind migration, and the particular features of the country (small size, exposure to periodic floods and hurricanes, rapid population growth, weak urban employment opportunities) which lie behind current and future urbanization patterns and, particularly, the large number of poor urban settlements. Discussion turned to policy relevant research questions: What are the future implications of current trends? What kinds of resource commitment and planning could alleviate the situation?
- 7. Vietnam. Tran Van Chien reported on population and urbanization trends in Vietnam. The paper describes the national context, including rapid population growth, and regional variation in urbanization. Significant characteristics of urbanization include the recent "ruralization" of cities, as poor people from the countryside have filtered in. Yet, overall, urbanization levels are low, reflecting poor economic circumstances in urban areas over the post war period. Future policy priorities include improving social-economic infrastructure (housing, health services, etc.) in both rural and urban areas, which will bring urban benefits to rural people and create real urban infrastructure in the currently impoverished cities.
- 8. Philippines. Michael A Costello of the Research Institute for Mindanao Culture, Xavier University, gave a general overview of urba-

nization in the Philippines. The major problems--rapid population growth, slum formation, urban primacy--found in the Philippines are also commonly found in other Third World countries. Yet while slums grow and the population of urban poor expands, cities continue to be overall wealthier places than rural area. Additional research is sorely needed to sort out these two seemingly contradictory trends.

- 9. Hubei Province, China. Shengzu Gu presented a paper written jointly by himself and colleagues on regional variation in migration and fertility in Hubei Province, China. The paper describes the data from a demographic survey and outlines hypotheses for analysis on variation in fertility and migration from one community to another within the Province, as well as on links between migration and fertility. Professor Gu also commented on economic specialization taking place among rural communities in the Province and how this is promoting rural economic growth. Analysis of survey data related these issues and hypotheses is a current priority. The discussion concerned specific aspects of Chinese population and settlement policies, and the importance of viewing urbanization trends in terms of functional dimensions (economic concentration) as well as demographic dimensions (population concentration).
- 10. Urban networks in the United States, China and Korea. Dudley L. Poston described preliminary findings from the approach which he and collaborators in the United States, China, and Korea are using to analyze urban networks and hierarchies in all three countries. The methodology involves assessing urban areas according to their centrality in national, regional or provincial administrative and economic affairs. The presentation sparked a discussion about data requirements and the possibility of expanding the comparison to other countries in the CICRED programme.
- 11. Korea, nation wide. Tai-Hwan Kwon described urban-ward migration in Korea since 1960. The basic data come from censuses, supplemented by data from select studies of migration. The analysis reveals distinct historical waves of movement which vary in size, social-economic and demographic characteristics, and origin/destination pattern, conforming

to different stages and problems of Korean development.

- 12. The Punjab, India. K. P. Singh presented brief overview of urbanization in India which complemented the one presented earlier by Professor Krishna Kumari (see above). In addition to drawing attention to the problems of the rising number of urban poor and the "informal sector" activities which sustain them, this paper comments on the small proportion of resources allocated to urban problems in India's past Five Year Plans. Other participants showed interest in Professor Singh's home state (the Punjab) and distinctive features of urbanization and development there which might constitute a case study within the larger Indian context.
- 13. Pakistan. Razzaque Rukamuddin presented, in absentia (courtesy of a verbal summary by Professor Yun Kim), a statistical summary of urban growth from 1901 to the present in Pakistan. The six tables show rapid urbanization and the emergence of large cities and a significant primacy pattern over the past two decades. However, internal migration is still predominantly rural-rural.
- 14. Uruguay. Mario Lombardi presented an analysis of recent population distribution and urbanization trends in Uruguay. The analysis draws particular attention to the dramatic loss of agricultural export revenues and of economic stagnation generally over the past decade on emigration from Uruguay (which has risen dramatically, with most migrants moving to Argentina and Brazil), urbanization (which has slowed considerably due to the fact that both urban and rural migrants were leaving the country), and short-term labour circulation (which has increased as a household strategy for managing economic instability). Many of these findings are based on incomplete analysis and poor data. They point to the importance of undertaking new studies of how national technological strategy and trade links have important impacts on urbanization and population distribution.
- 15. Mexico. Jose Morelos reviewed trends and policy issues concerning urbanization in Mexico. The analysis draws attention to the enormous problems which current trends create for urban infrastructure and

employment. Previous efforts to deal effectively with urban problems have often had poor results. This may be a result of the fact that these efforts were frequently based on inadequate models which were out-of-step with national economic strategy and development trends. Other participants noted failed policies elsewhere and the need to analyze policy outcomes in greater detail to avoid past mistakes. It was also noted that issues of international migration raised in the Uruguay case also apply to Mexico, since the second largest agglomeration of Mexicans outside Mexico City is San Diego.

- 16. Brazil. Vilmar Faria passed out a number of tables and charts concerning urbanization patterns in Brazil, then commented on a general framework for interpreting these trends. Brazil's place in the international economy, how this has affected agricultural and industrial exports, and related matters of political-economy provide essential elements for understanding urbanization and population distribution trends. This frame of reference, it was agreed, has considerable relevance for understanding trends in other countries.
- 17. Turkey. Suhendan Ekni presented a paper on major issues of urbanization in Turkey, since 1935. Regional patterns of population growth and economic development had a major impact on migration and urbanization over this period. Current concerns include the continuing high rate of urban growth, rising numbers of urban poor, and ways of bringing about greater prosperity to rural regions (to stem the flow) and urban regions (to eliminate slums). Future research will involve analyzing recently collected survey data on the urban poor.
- 18. The Caribbean. Elizabeth Thomas-Hope provided an analysis of links between international migration and the urbanization of the Caribbean people. The paper argues that the position of the Caribbean in the wider international economy has been the central determining factor underlying migration and urbanization trends. The largest urban concentrations of Caribbean peoples are outside the region, in New York, London, Toronto, London, and other metropolitan countries. However, the migrants who have departed retain close links with their families at home; they often migrate and return home cyclically; and in

consequence have significant influence on social and economic life in the Caribbean. Major future research questions include the need to assess the positive versus negative consequences of these patterns for the Caribbean. This will require a more detailed study of migrant characteristics and process.

- 19. Methods. H. V. Muhsam presented a paper on trends, policies and forecasts of urban populations. The approach he proposes could be applied in any country with the basic data available for his model. These ideas led to a discussion of the difference between projections (modeling trends under select assumptions) and forecasts (projections with arguments on which assumptions will most likely apply in the future). All agreed that projecting current trends to the future is an important exercise for increasing the policy relevance and interest of new research in this area.
- 20. United States. John D. Kasarda presented a general conceptual framework for understanding urbanization and population distribution trends in any given country. He also described research which he and colleagues at the Carolina Population Studies Centre are carrying out on both U.S. and world urbanization patterns. The framework, which focuses on social, economic and demographic forces underlying urbanization and on systemic "feed-back", was viewed as very useful for the national studies being undertaken in the current programme. The Carolina group will contribute to the CICRED Programme a case study of urbanization and counter-urbanization trends in the United States. Professor Kasarda gave a brief summary of major trends. These contrast with Third World patterns described in other papers, yet they too appear to reflect underlying social, economic and political processes, and may provide an image of future trends in other countries.

Internationally comparative data on world urbanization available at the Carolina Population Studies Centre may be useful for providing an international context to national urbanization trends in various country studies. Ways of disseminating some of this data were discussed and agreed on (see further details below).

21. Australia. Stewart Fraser provided a statement on the Population

Education activities at La Trobe University, Australia. To date these mostly concern fertility and health issues, with a particular focus on the Asian and Pacific region. He illustrated his presentation with reports on fertility and family planning issues in Vietnam, and further noted the way in which urban institutions and development more broadly are of fundamental importance to understanding fertility levels.

- 22. Egypt. A. Farrag, who was in Pusan as a representative of the CICRED Council, volunteered a brief review of urbanization and population distribution trends in Egypt. Discussion focused on the enormous size of Cairo, the extent to which large parts of it are villagized (a significant portion of transport within the city is by camel and donkey, etc.) and the prospects for new satellite towns and cities.
- 23. Collaborative and network ventures. Written submissions were received from a number of research centres which plan to participate in the programme, but which could not send representatives to the Pusan Meeting. These proposals were too numerous to discuss in full at the meeting. It was however noted that the submissions included several from European and North American based centres and organizations which were of a collaborative or programmatic nature. These included the following:

Michel Poulain of the Catholic University of Louvain indicated that he intends to carry out a Belgian study with the programme and, further, that he is involved in an emerging Network for Urban Research in the European Community and that other researchers in this body may wish to participate in the CICRED programme.

Also courtesy of Professor Poulain, the participants were informed that the Association Internationale des Demographes de Langue Française (AIDELF) will host a seminar in Rabat on the Demographic Aspects of Urbanization, 15-17 May, 1990.

Michel Picouet of the Institute Francaise de Recherche Scientifique pour le Developpement wrote to outline a number of projects on urbanization which are being conducted by his organization in various countries (India, Senegal, Cameroon, etc.) and which could be incorporated in the programme.

Sidney and Alice Goldstein of Brown University have been working closely with Professor Gu with respect to his work in Hubei Province and, along with Professor Gu, have proposed continuation of this collaboration within the context of the CICRED Programme.

It was noted that, in conformity with the priorities and objective of CICRED, the major focus on the present programme is on studies done by national Centres on their own country. In the case of studies involving foreign institutions, priority is given to those which are done in collaboration with local Centres. The collaborative model may apply several of the projects outlined by Professor Picouet and clearly applies to the project activities of Professors Goldstein and Gu.

Proposed Research Plan

The preceding statements from various researchers and research centres reveal a wide range of specific concerns and considerable variation in the kind of data available for future research. It was also noted that the location, timing and financial support for the Pusan Meeting led to a strong representation from Asia, while fewer interested researchers were able to come from other regions; particularly few came from Africa and from Europe. The overall programme will include more researchers and centres from these other regions, hence must remain open in still wider variation in topic interests and data availability.

In light of the above, it was proposed that the research programme be one which balances comparative elements (topics common to all studies) and unique (country or sub-national case) concerns. Comparisons would generally arise by several studies addressing the same research questions, regardless of the fact that they might have to do so with rather different kinds of data and in relation to very different historical, cultural and social-economic contexts. In certain instances it may be possible for several countries to use exactly the same kind of data and analytic approach to answer specific questions for their national context, but this can not be presupposed and will only emerge spontaneously when it is possible and relevant to all concerned.

Common Conceptual Framework

A discussion took place concerning the possibility of developing a framework which would cover most of the questions raised in the country statements. This led to various proposals which may be summarized approximately in the following diagram.

CONTEXTUAL FACTORS AND INTERNATIONAL INFLUENCES

Trade Patterns, International Investment, Culture, History, Immigration, Emigration

THE NATIONAL SYSTEM Development Population Distribution a. Pop. Growth a. Urbanization b. Econ. Dev./Labour Demand b. Urban Hierarchy c. Social Infrastructure c. Migration pattern, etc.

The above framework stresses the interdependency of national population distribution patterns with several dimensions of internal development, such as rate of population growth, economic development patterns affecting the demand for labour in different cities, regions and rural areas, and social infrastructure (schools, hospitals, housing, etc.) in various parts of the country. Population distribution both influences and is influenced by these demographic, economic and social factors. The entire national system develops by forging external linkages and by reacting to international forces generated elsewhere. All elements in the national and international linkage are subject to policies and programmes. In this way, a policy in one area will tend to have influence throughout the system. For example, trade policies may come to influence population distribution patterns through their influence on regional patterns of agriculture and industrial development.

This general conceptual framework allows us to generate a number of specific questions which can be addressed by new research. It is expected that studies within the programme will address as many of the key questions as possible. However, the stress given to different questions may vary according to interest and data availability. The key questions and some general guidelines on how they may be approached in different studies may be summarized as follows:

1. What contextual factors influence population distribution patterns in the country in question?

It is recommended that all studies include a background section which deals with this question qualitatively at least. Some studies may wish to make this a major point of departure by analyzing, for example, the association between national security policies, international trade, international investment and international migration patterns, on the one hand, and population distribution patterns, on the other.

2. What are the major features of population distribution, urbanization and migration within the country?

The focus will generally be on the most recent period, more generally since 1950 (if data are available) and more specifically since 1970. In many countries, 1990 census data may be available in time to be included. Attention should be given to distinctive features of national urbanization patterns, to reversals and to unexpected trends.

3. What are the demographic components of urbanization?

An effort should be made to distinguish the following components of urban growth: that brought about by migration; that brought about by natural population increase (the excess of fertility over mortality), and that brought about by changing agglomeration and administrative organization (as cities expand their territory and absorb adjacent towns).

A further refinement is to distinguish between urban growth brought about by the population growth (through fertility) of rural-urban migrants versus that brought about by the growth of the urban born

population. It may be difficult to carry out this kind of analysis for more than the most recent decade, due to data limitations. In some countries, where international migration has an important impact of city growth, its affect could also be estimated independently

4. How are regional and rural-urban differences in investment and labour demand associated with population distribution and urbanization?

This kind of analysis will be facilitated by the availability of direct data on investments by region and city. More frequently, however, such direct data are difficult to find. The analysis can nevertheless by done by using more commonly available data on regional and city variation in employment/unemployment rates and in average earnings, or other measures of regional differences in wealth and income. Ideally, one would seek to examine statistical associations between indicators of regional and urban economic progress, on the one hand, and levels and rates of urbanization, on the other.

5. How are regional and urban inequalities in social infrastructure associated with regional patterns of population distribution and urbanization?

The same logic as that described in the preceding point would be applicable here. The difference is that one would seek to identify regional variation in schooling, transport, health, housing and other aspects of social infrastructure, and then to determine the association which exists between these, on the one hand, and patterns and trends in population distribution, on the other.

6. How have policy responses to development and population distribution problems evolved and what effect have these policies had on urbanization and regional patterns of population settlement?

It is important to seek to distinguish stated policy objectives (which may or may not exist with respect to urbanization and population distribution, which certainly may be found with respect to developing social and economic infrastructure) from the implementation of controls,

taxes and public investments. Only implemented policies are likely to have any effect, and even these may have no effect when they run counter to other policies and social-economic forces. While the range of possible policy responses is very wide, it was generally agreed that the focus in this programme should be on those concerned with the following kinds of population distribution outcomes:

- a. Rural population retention
- b. Secondary city development and growth
- c. Satellite city and dormitory town development
- d. Major cities as population and economic growth poles

Key Methodological Considerations

Identification of the preceding questions led to considerable discussion on the kinds of data available in different countries and the extent to which strictly comparable measures and analytic techniques could be used in the various national studies. The general conclusion is that data availability varies too widely from one country to another to permit the use of identical measures and analytic procedures in all cases. At the same time, it was recognized that the various studies could achieve greater comparability by striving to use similar methodologies, whenever possible. A number of guidelines on common measures and analysis procedures were discussed. The suggestions included the following:

1. Description of national urbanization and population distribution

Each study should seek to present tables showing the evolution of key features of population distribution over recent decades. Some of the key indicators which could be usefully included in this analysis are described below. The dates shown assume that census or administrative data is available for the end of each decade, but if this is not the case then other appropriate dates may be used.

Table 1a. Absolute size and rank order of major cities and towns at different census dates, 1950, 1960...1990.

Table 1b. Absolute size and rank ordering of provinces and major administrative districts at different census dates.

Table 2. Percent distribution of the national population by size class of place of residence, 1950...1990. The following size classes are suggested for comparability: 4 million or more, 2 to 3.9 million; 1 to 1.9 million; 500,000 to 999,000; 250,000 to 499,000; other urban; rural (defined by national criteria).

Table 3. Percent growth of size classes of place of residence, 1950-59; 1960-69; 1970-79; 1980-89

Table 4. Primacy ratios over time, 1950...1990. The simplest primacy ratio would be the size of the largest city as a proportion of the size of the second largest city.

2. Country specific patterns in international context

Following what is now a common preliminary procedure for comparing national patterns, it was suggested that it would be useful, in each study, to show a graph in which the national percent of labour force in manufacturing industry at various census dates would be plotted against the national percent of population in urban areas (use national definitions) at the same dates. Then, on the same graph, one would plot the same figures for other countries in that region of the world or other countries which are viewed as being of comparative interest.

This analysis should permit a preliminary assessment of whether national urbanization patterns in the country of focus are typical (in relation to industrial development) or unique. It was recognized in the discussion that this approach has limitations and that the preliminary findings in each case should be reviewed to ensure a useful interpretation.

John Kasarda noted that his Centre has a data archive in which national levels of urbanization and various social and economic indicators, at various dates, are already recorded. This data set has the advantage that it attempts to use common definitions. He indicated that he would be able to make available a number of tables for participating countries

which could be used for the analysis suggested here. These data will be requested by the Organizer and distributed in due course by CICRED.

3. Assessing the components of urbanization

Various procedures may be applied to assess the components of urbanization. The data requirements for these techniques vary, hence it was suggested that a range of analytic procedures, from simple to more complex, be considered. Each study should seek to take the analysis to the most complex level that the available data will permit. The minimal objective is to distinguish urban growth due to nature increase among those living in cities over a given time period from the growth due to migration. In the absence of direct data on these components, most studies will have to rely on estimates from census data. The simplest procedure is to use appropriate estimates of urban fertility and mortality in a given time period to estimate the number of births and survivors over a given time period, and hence the "expected" population of urban areas in the absence of migration. Differences between the "expected" and "actual" population at the end of the period are assumed to reflect net-migration, assuming that the definitions of the area covered by urban areas is held constant in the analysis. Changes in the definition of administrative areas may also contribute to This complexity may be assessed in a second step by urbanization. comparing what would be the urban population of a country had earlier definitions been maintained with what actually came to be constituted as urban. Finally, the most complex analysis would seek to use survey data on migrant and non-migrant fertility patterns to distinguish how much of the contribution of migrants to urban growth came from the arrival of the migrants themselves, and how much came from their fertility in urban areas. Many sources are available on ways of carrying out the less complex estimates. Perhaps the most widely available of these is: United Nations, Department of International Economic and Social Affairs, Patterns of Urban and Rural Population Growth, New York: United Nations.

4. Assessing institutional and functional aspects of urban hierarchy

Considerable interest was expressed by a number of participants in pursuing similar analytic approaches to understanding how urbanization patterns reflect the emergence of regional economic specialization, urban-rural networks, and sub-national administrative and social-service structures. The approach being taken by Dudley Poston and collaborators (see above) was viewed as promising. Those researches who wish to explore this possibility further are encouraged to write directly to Professor Poston for more information on data requirements and analysis procedures.

5. Analyzing migration patterns

Throughout the meeting, considerable interest was expressed in incorporating detailed information on migration patterns into the research program. In fact, this topic could become a major focus of interest in a number of country studies. At the same time, it was recognized that migration studies require rather specialized data, most generally from surveys, that the subject is a complex one in itself, and that it may not be possible to cover the topic in much detail in all studies. Thus, a common objective in all studies will be to identify the importance of rural-urban migration for urbanization trends. Beyond this, each country study should seek to incorporate what can readily be taken from other studies or not yet analyzed data sources on recent migration patterns, their direction, duration, composition (by age, sex, occupation, etc.) and motivation.

Work plan and calendar

It was proposed that the programme of work be carried out over 4 years, such that it would come to an end in the fall of 1993 with the publication of final reports. This plan is of course subject to the success of each participating centre in gathering together the necessary resources for their own study. It also assumes that CICRED can support two additional coordination meetings and identify an appropriate publication programme. The steps and proposed dates of completion

for each are summarized below.

Pusan meeting: develop plan	Nov 89
Mailing plan (this report)	Mar 90
Receive comments	May 90
Second meeting: prelim findings	Ap 91.
Mailing of revised guidelines	Jun 91
Receipt of final summary report	Aug 92
Final meeting: review reports	Dec 92
Receipt of final report	Ap 93
Publication of reports	Nov 93

Following the above calendar, the next steps are as follows: Centres represented at Pusan should send their revised country statements to CICRED along with any comments or suggestions on the present report by May 30, 1990 latest. Similarly, Centres not represented at Pusan which plan to participate in the Programme should send their country statements (namely, brief papers on current trends, research priorities and research objectives) to CICRED by May 30, 1990, latest. Correspondence on administrative matters (dates of meetings, etc.) should be directed to CICRED, while correspondence on methodology and framework should be addressed to the Coordinator, Alan Simmons.

APPENDIX I

List of Participants

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APPENDIX II

Organizing Bodies, Sponsors and Hosts

CICRED

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Vice Chairman: Léon Tabah

Director for Scientific Affairs: Bui Dang Ha Doan

Secretary: Hartati Ayral Advisor: Danièle Lévy

Project Coordinator: Alan B. Simmons

Host Center

Social Survey Research Center (SSRC) Pusan National University Pusan, Republic of Korea

Steering Committee

Chairman: Kang Dae-Ki (Director, SSRC)

Members: Ock, Yang Lyun (Professor, SSRC)

Hong, Dong Shik (Assoc. Professor, SSRC) Lyu, Pan Soo (Program Director, Pusan MBC)

Choo, Jung Kil (Vice Program Director, Pusan MBC)

Local Advisory Committee

Members: Ha, Ki Sik (Dean of Academic Affairs, PNU)

Choi, Suk Hwan (Executive Member of Board, Pusan MBC)

Oh, Wan Soo (Vice President, Pusan Chamber of

Commerce and Industry)

APPENDIX II (Continued)

Kim, Il Chul (Dean, College of Social Sciences, Seoul National University) Park, Joon Yong (Professor, PNU)

Local Hosts

Ahn, Sang Young Mayor, Pusan

Choi, Chung Whan President, Pusan Chamber of Commerce and Industry

Shin, Kun Sik President, Pusan MBC

Suh, Jushil President, Pusan National University

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THE DEMOGRAPHERS' IMPACT ON CITY GROWTH AND SOME OTHER PROBLEMS INVOLVED IN FORECASTING CITY POPULATIONS

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1.- INTRODUCTION

Among the numerous "demographic determinants" (Population Distribution and Urbanization, Research Plan Outline, Section 8) of urban-rural migration and city growth, there is one which may be called the demographers' impact. Indeed, already the mere enumeration of the population of a city, but also the study of its growth, its composition and structure as well as, in particular, its prospects for the future may all have effects on its subsequent growth. Such an effect may be direct or indirect. Direct effects are the impact of an enumeration or a projection on the behavior of prospective migrants, developers, investors, etc. And indirect effects are the impact of plans and actions of local and central authorities taken in view of such population data on the decisions of the same prospective migrants and initiators.

Thus, both current data and forecasts of city populations play significant roles on the dynamics of city growth. But with regard to current data there is obviously no feed-back effect involved, while in the field of forecasting such feed-backs must be taken into account. This makes it necessary to look, first of all, somewhat more closely into the techniques of preparing such forecasts. However, before examining relevant aspects of forecasting techniques, let us define more clearly the suspected feed-back effects.

The publication of the results of a population enumeration or of a projection or a forecast of a city population may have an immediate

effect on decisions of individual would-be migrants, initiators and promoters of new enterprises, with regard to the selection of a desirable location. But this effect may be one of attraction as well as one of repulsion. Future rapid population growth may appear attractive to those who care for plentiful labour supply, growing consumers' markets, demand for services, etc. And it may act as a deterrent to those who fear overcrowding, traffic congestion, air pollution, etc. And similarly, but vice versa, slow, nil or negative growth may appear attractive to those who enjoy quiescence, quality of life, maintenance of traditions, etc., while it may repulse the very same who are attracted by rapid population growth.

While such immediate effects of a forecast on city growth will often be marginal, indirect effects can be expected to be more noticeable. Such indirect effects may be produced by plans of action which are established in view of the forecast, and even more so by action taken to implement such plans. Both plans and actions refer to town planning, the development of infrastructures, the construction of buildings for industry, services and housing, as well as many other aspects of urban development. And here again, the effect of planning and action may be either a speeding up or a slowing down of the growth of the city's population, but also that of making actual developments match -- or defeat -- the forecast.

2.- METHODS OF FORECASTING CITY POPULATIONS

Since a city population is essentially a "disaggregated" population (Muhsam, 1976) in the sense that it forms part of a larger population, such as that of the country in which the city is located, it can be projected or forecasted by means of two basically different approaches: the cohort-component method and the ratio method (Muhsam, 1978).

In the former approach, the cohort-component method, the city population is projected as an isolated entity, independently from the projection of the "larger" population to which it belongs, taking into account, in addition to births and deaths occurring in the city population, all other entrants and exits, in particular migrants. Obviously, when it is claimed that, in the cohort-component approach, available

forecasts of the total population of the country are disregarded, this does not mean that in forecasting the number of future in-migrants into the city from other parts of the country, the forecasted growth of these other parts, or the country as a whole, is not taken into account.

In the latter approach, the ratio method, the proportion of the city population out of the total population of the country is projected, and the future city population is estimated by applying this proportion to the projected total population.

It is obvious that these two approaches apply to all kinds of disaggregated projections. In certain cases, for instance in forecasts of school enrollment (Muhsam, 1981), labour force, etc., the two approaches yield identical results, if certain conditions of stability (in the sense of "stable population" theory) are fulfilled with regard to both the past, which serves as base period for the forecast, and the future into which the population is projected. However, in the projection of city populations, the two approaches lead, in general, to different results. To illustrate the nature of this inconsistency, let us assume that both the total population of the country (P) and the city population (p) were observed in the past to grow linearily, i.e.

$$P = A + B t (1)$$

and
$$p = a + b t$$
. (2)

Let us now assume that the cohort-component projection of the city population consists simply in the extrapolation of the observed linear trend into the future. Thus, at any time, t*, the city population is projected to be

$$p^* = a + b t^*.$$

In order to prepare a ration projection, some further assumptions must be made. First, let us assume that the available projection of the total population of the country is also an extrapolation of the observed linear trend, so that it is projected to number, at the time t*

$$P^* = A + B t^*. (3)$$

Furthermore, it will be assumed that the proportion of the city population out of the total population, p/P, was observed twice in the past, namely at the time t=0, when it was $r_0=p_0/P_0=a/A$, and at the time t=1, when it was $r_1=p_1/P_1=(a+b)/(A+B)$. Finally, the ratio projection is prepared, like the cohort-component projection of the city population and the projection of the country population, by means of the simplest possible assumption with regard to the future development of the ratio r, namely, that the linear trend emerging from the two observed ratios r_0 and r_1 is linearly extrapolated into the future. Thus, at any time t^* the ratio r^* is

$$r^* = r_0 + (r_1 - r_0) t^* = (p_0/P_0) + (p_1/P_1 - p_0/P_0) t^*$$

Since in view of (1) and (2) $p_0 = a$, $P_0 = A$, $p_1 = a + b$ and $P_1 = A + B$,

$$r^* = (a/A) + [(a + b) / (A + B) - (a/A)] t^*$$
 (4)

The ratio projection of the city population, p**, is now obtained by multiplying the projected total population of the country (3) with the projected ratio (4), i.e.

$$p^{**} = P^* r^* \quad \text{or}$$

$$= (A + B t^*) \left\{ (a/A) + \left[(a + b) / (A + B) - (a/A) \right] t^* \right\}$$

$$= a + \left\{ A \left[(a + b) / (A + B) \right] + a \left[(B/A) - 1 \right] \right\} t^* + B \left[(a + b) / (A + B) - a/A \right] (t^*)^2 \quad (5)$$

Thus, the ratio projection (5) is certainly fundamentally different from the cohort-component projection, mainly because the trend in the cohort component projection is linear in time and in the ratio projection it is a second degree parabola. Only if the ration \mathbf{r} is constant, i.e. $\mathbf{r} = a/A = (a+b)/(A+B)$, is it easily seen that the two projections become identical. This is, however, not a case which is of interest to the demographer.

This is certainly an important difference between cohort-component and ratio projections of city populations, which escaped the attention of earlier students in the field (U.N., 198). In this connection, it might be mentioned that the conditions under which cohort-component and ratio projections yield identical or inconsistent results has not been studied by earlier students of other disaggregated populations (Muhsam, 1978), and this field deserves more intensive study. However, the most significant difference between ratio and cohort-component projections is the opportunity offered by the latter to account separately and explicitly for each factor which is assumed or suspected to affect the future development of the city population and to make quantitative assessments of its expected impact.

This last remark relates most specifically to the number of future in-migrants into the city. This number may be estimated for instance by aggregating in-migrants from all possible places of origin, such as the surrounding countryside, other cities, remote rural areas, immigrants (i.e. persons coming from abroad). Alternatively, reasons for in-migration may be differentiated, e.g. persons recruited from outside for specific jobs, persons looking for employment, persons coming to the city for education or professional training and remaining after completion of such training, persons joining their families, etc. Obviously, similar considerations apply to out-migrants.

Be the approach to preparing estimates of future city populations as it may, such estimates are mostly prepared for practical purposes such as town planning, developing infrastructures, supplying services, etc. This is in contrast to projections of total populations of a whole country or other large areas, which are often "illustrative" rather than action-directed. Such projections are often prepared in order to illustrate the effect of different patterns of human behavior in such matters as fertility, migration, etc. on future population developments, without implying necessarily that specific action will be taken in view of the projected figures. And even if such projections are used for certain practical purposes, such uses are, in most cases, of the type of development policies or other long-term plans which are not strictly

dependent on the precise forecasted figures, but relate mainly to general levels or trends.

3.- FEEDBACK EFFECTS

In order to appreciate the implications of a projection being immediately action-directed rather than illustrative on the steps taken in preparing such projections, let us look at the following highly simplified example. For this purpose we will assume that estimates of the future population of a city are prepared in view of planning the construction of residential dwellings. In such a case, first the population is forecast, then the required housing is estimated, planned and subsequently built. It is obviously more than likely that any new housing accommodation will soon be fully occupied, in view of what may be called the Parkinson Law of housing: any available housing accommodation will, in general, be occupied, except where supply of housing very largely exceeds demand. As a consequence, the actual population, which fits exactly into the available housing accommodation, will be very close to the forecasted figure.

In this example, the feedback effect of the forecast on the forecasted process ensures that the forecast becomes true: the situation is that of a self-fulfilling prophecy. But before this situation is further analysed and generalized, it should be stressed that the self-fulfilling prophecy is not necessarily the model which applies to this simple situation. We may, in fact, speculate that the forecast was prepared under a set of assumptions which takes into account all the factors which may affect the size of the future population of the city, but relegates the supply of housing to the category of the "ceteris paribus". In this case, the additional housing will certainly relieve the accommodation situation of the forecasted additional population, but part of the housing will attract in-migrants who are not expected under the forecast and are, so to speak, allured by the available housing. In this situation, the prophecy becomes self-defeating.

Thus, action-directed projections, and in particular forecasts of city population, are sometimes self-fulfilling and sometimes self-defeating,

and, in any event, a feedback effect of the forecast occurs on the object of the forecast. In view of this dilemma, the forecaster of a city population is faced with at least four problems which rarely bother other demographic forecasters:

- 1. Under which circumstances should the forecaster reckon with feed-back effects of his forecast on the future development of the development of the city population?
- 2. How does the feedback act and what is its effect?
- 3. Does it make sense to prepare a forecast which is self-fulfilling?
- 4. Is it possible -- and under what conditions -- to prepare a useful forecast, when it is known that any forecast will be selfdefeating?

Even since Heisenberg announced his principle of the uncertainty of quantum physics, it is known that any mere observation necessarily disturbs the situation which is the object of the observation. In the human sciences, this principle is in fact self evident, and preparing a forecast is, from this aspect, certainly more than a mere observation. Thus, the feedback effects of forecasts seem to be ever-present and There seems to be only one possibility of avoiding the unavoidable. feedback: if all data used in preparing the forecast were collected for other purposes, and not only the results of the forecast are kept secret but also the very fact that a forecast is being, or has been, prepared. This last point may appear exaggerated, but the mere fact that a city cares to engage in preparing population forecasts may be taken as an indicator of being well organized, properly administrated and efficiently run and, consequently, make it appear recommendable as a location for new industries, etc. It should be stressed, in this connection, that if we assume that the mere fact that a city engages in population forecasting has an effect on the development of this population, the inverse possibility should not be disregarded. The very fact that a city does not care to prepare population projections may be taken as a proof of rude or negligent management and serves as a deterrent to prospective initiators, promoters, migrants and the central government agencies which are concerned with the location of new industries and other developments.

4.- THE DEMOGRAPHER'S DILEMMA

In any case, the demographic forecaster is faced with three problems:

- (i) The practical problem of forecasting quantitatively the effect of plans and actions on the behavior of the population. We have no proposals to make with regard to the principles involved in such estimates nor with regard to practical steps to be taken in preparing such forecasts. Indeed, demography has little to offer in the theory and practice of forecasting migratory movements beyond extrapolating past observed trends and levels of absolute numbers or rates. probably due to the fact that individual decisions regarding migratory movements are taken largely in view of coincidences affecting the individual rather than society, and in view of often incorrect information about employment possibilities, income and maintenance expenses, available services, etc. There is, furthermore, no reason to assume that the average of the costs and benefits as perceived by would-be migrants approaches, or stands in an unequivocal relation to, the exact statistical data which are available to the demographer for the purpose of forecasting (Fawcett, 1985/86). Indeed, such perceptions of place utility are often biased. In any event, it is not the purpose of the present paper to deal with the problems of forecasting migratory movements.
- (ii) The pragmatic problem as to whether the forecaster, who assumes his forecast or the action planned or taken in view of his forecast to affect the developments which he is trying to forecast, should modify, amend, or revise his forecast in view of this assumption. It seems that one of the possible choices consists of presenting at least two forecasts: a "naive" alternative in which the possibility of a feedback effect is disregarded, and a "sophisticated" alternative in which an attempt is made to take the effects of feedbacks into account.
- (iii) The theoretical problem as to whether it is at all possible to arrive at such a "sophisticated" alternative, since every revision of the

forecast entails a revision in view of the effect of the previous revision. Fortunately, it may be shown (Muhsam, 1985) that, under fairly flexible conditions, the successive revisions involve decreasing amendments, so that a final revised projection is reached. For instance, if the i-th revision of a forecast (y_i) is obtained from the (i - 1)th and the (i - 2)th by means of a formula of the type

$$y_i = y_{i-1} + a(y_{i-1} - y_{i-2})$$

where a < 1, such a limit exists. Indeed, the n-th revision would be

$$y_n = y_{n-1} + a^n(y_1 - y_0)$$

and there is certainly an n (relatively large) beyond which no further revision is meaningful, since a^n is small enough to make the term a^n (y_1 - y_0) negligible as compared to y_{n-1} . It should, however, be stressed that the above revision formula is given here only as an example. As a matter of fact, the mechanism of the feedback effect may easily be of a type where $\lim_{n \to \infty} (y_n - y_{n-1}) \neq 0$. The question as to whether such

a model may be a realistic representation of the actual situation is beyond the scope of our present preoccupations. But any situation where $y_n - y_{n-1}$ does not decrease rapidly for small values of n, should be taken by both the forecaster and the town planner as a warning that developments have a tendency to get out of control. Such a situation is well known from the area of monetary inflation, where any forecast of the rate of future inflation is liable to increase this rate well beyond the forecast. But in the projection of city populations, such situations are probably rare.

Indeed, among the mechanisms of feedback of a forecast on the city population, only one should be assumed to be of practical importance: the impact of actions taken in view of the forecasted figures on the behaviour of the potential migrants, individuals as well as enterprises. And this effect is, indeed, only a minor disturbance to the forecaster, since any action taken in view of the forecast can obviously be taken by city authorities and other users of the forecast after the forecast has been completed and submitted to them. Thus, in practice, the

forecaster can complete his work without being worried by feedback effects, although he may well be aware of their eventual appearance. Thus, together with submitting his projections to the authorities, the consciencious forecaster can warn these authorities that any action taken by them after the completion of the forecast -- whether in view of the forecast or otherwise -- is liable to imply a change in the conditions assumed by the forecaster in preparing his forecast and may necessitate a revision of the forecast. Obviously, as soon as the forecaster realizes that actions will be planned and taken in view of his forecast, he has good reason to expect that any such actions will be revised after any revision which he may find necessary to apply to his original forecast. Under such circumstances, a chain reaction of mutual feedbacks between forecasts and actions taken in view of forecasts will arise; it appears, however, that this chain reaction is not so much part of the process of preparing forecasts as of that of communication, exchange of information, and cooperation between forecasters and the authorities which commissioned the forecast or use it in their planning and implementation activities.

5.- CONCLUSIONS

We are thus faced here with three unsolved problems:

- (i) The institutionalization of the cooperation between planners and demographers which is required in order to arrive at forecasts which are able to serve the practical needs of planners;
- (ii) The demographers' dilemma, namely the difficulty of forecasting in the presence of feedback effects of the forecast on the forecasted developments;
- (iii) What may be called the planners' dilemma, namely the planners' need for demographic estimates and forecasts that they know in advance are liable to contribute to diverting developments into directions which are opposed to their goals.

The first of these problems, which is discussed to some extent in the last part of the section on the "demographers' dilemma", is a mere technicality which may not be very difficult to solve. The demographers' dilemma, which is discussed in the earlier parts of the same section, certainly deserves further study, but there seem to be good prospects for a satisfactory solution. The third problem, which we proposed calling the "planners' dilemma", has not been discussed here at all, and is probably the most difficult of the three: how can the planner avoid undesired feedback effects of the demographic data he so badly needs, or of the actions which he takes as a result of these data. This, however, is the planners' problem, not that of the supplier of the data. Obviously, the former cannot solve the problem without the cooperation of the latter. However, no approach, no method and no procedure could be proposed as to how planners and demographers should proceed in this matter.

If only current population data are at the source of the difficulties, the demographer is obviously unable to make any contribution to alleviate the situation. But forecasts are almost always prepared as sets of alternatives resulting either from different methods (e.g. cohort-component as against ratio approaches) or different sets of assumptions. This leaves the demographer with certain margins of flexibility, which on the one hand enable him to take, among other things, the feedback effects into account and, on the other hand, expose him to pressures by interested parties. This is another aspect of the demographers' dilemma.

In any event, further work is urgently needed in the fields of interaction between demographic data and city growth as well as between demographers and planners.

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THE URBANIZATION PROCESS OF PUSAN CITY, KOREA

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1.- INTRODUCTION

This paper deals with the urbanization process of Pusan city in terms of population growth and population distribution within the city. The paper is part of an effort designed to provide the Pusan city administration with basic data for city development as well as an understanding of urbanization of Korean society in general. An attempt is also made to find factors relevant to migration within the city.

The urbanization process of Pusan city has been analyzed on the basis of population growth during various periods. This includes (a) the change in the population of Pusan city in general; (b) changes in the population of sub-units of the city administration such as gu, chuljangso (branch), and dong; and (c) changes in the distribution of the population within the city in relation to population growth.

The main sources of data for this study are the **Pusan Statistical** Yearbooks. The analysis of population growth and population distribution was originally confined to the period 1966-1974, because at that time there had been little change in Pusan city's boundaries. However, recent population data has been added to present a general overview of the city's population changes.

2.- POST-WAR URBANIZATION TREND

Population growth since 1945

The term urbanization includes (a) urban growth, (b) population increase of a city, and (c) the expansion of urban life styles (Yu, 1978: 11-19; Breese, 1966: 35ff.). Urban growth generally refers to the physical increase in the size of population, population density, and urban areas of the city under consideration. Urban population increase may have a close relationship with urban growth, but they are not the same. A certain city may attract a large population, but this does not necessarily mean that a larger portion of the country's population lives in urbanized areas. Urban life styles here mean what Louis Wirth (1938: 1-24) termed urbanism. This dynamic process of expansion of urban life styles can be called urbanization.

This paper focuses on the urban growth of Pusan city, with special reference to population growth and the population distribution within the city. A brief review of this population growth will be presented in relation to the changes in the urban population experienced by Korean society in general.

A census has been taken in Pusan since 1905. There was apparently a total of 69,428 persons living in Pusan city in 1910, the year of forced Korean annexation by Japan. Thirty-five years later in 1944, a year before the liberation from Japanese colonial rule, Pusan city's population was 329,215, about 3.7 times the population of 1910. At the time of Korean independence from Japan in 1945, according to the Pusan Statistical Yearbook, the population of Pusan was 281,160, as compared to the 329,215 the previous year. This means that about 48,055 persons left Pusan city in 1944-1945. Such a population loss appears to have been due to the repatriation to Japan of the Japanese who had been living in Pusan. As shown in Table 1, a total of 61,082 Japanese, 18.6% of Pusan's population, lived in Pusan in 1944. Almost all of them likely returned to Japan at the end of 1945. At the same time, Koreans returning home from Japan, China and Manchuria seemed to have established residence in Pusan city.

For convenience's sake, the population growth of Pusan city can be examined in five periods. The rationale for this division is that it is closely related to the general social change in Korean society.

Period 1: 1945-1949

This period is called the American military government period. Just after the Liberation, the 38th Parallel divided Korea into two countries. The interdependence between the agricultural south and the industrial north before the Liberation was thus broken, with a devastating effect upon the Korean economy. In spite of being one of the leading cities in the south, Pusan was no exception.

Amidst the social and political turmoil, Pusan found it difficult to maintain the then weak urban industry due to a lack of managers, skilled workers and capital. Pusan's population grew in part due to the return of Koreans from abroad and those who had fled the city for the safer rural areas during the war. In 1945 its population was 281,160, which by 1949 had increased to 470,750, an annual increase of 13.5% (see Table 2).

Period 2: 1950-1954

This period was a time of war and turmoil in the Korean peninsula. The Korean War devastated not only the cities but the rural areas, with the exception of Taegu and Pusan areas. As the government moved its capital to Pusan, a huge number of refugees and Koreans living north of the 38th Parallel migrated to Pusan city, which resulted in a rapid population increase. By 1954 the city had a population of 840,180, a year after the armistice agreement between the North and South. In other words, in the five years between 1949 to 1954, Pusan city grew by 369,430, an annual increase of 13.8%. As a result of the war, Pusan was then a broken and destroyed city.

Period 3: 1955-1959

Thanks to the Armistice agreement and the leadership of President Rhee Syngman, this was a peaceful period for South Korea. With the war at an end, refugees from all parts of South Korea returned to their place of origin, which helped reduce the previously rapid population growth in the cities. At the same time, the central government moved its capital back to Seoul, which lowered Pusan's population increase to about 4.9%. By 1955, however, Pusan had become a metropolis, with a population that had grown to over one million. Continued assistance from abroad, including the U.S.A., was necessary for South Korea's economic recovery, and Pusan was still a city burdened with a large number of refugees.

Period 4: 1960-1969

After the short-lived Democratic Party regime led by Premier Chang Myun, President Park Jung Hee seized political power through a military coup d'etat and initiated the first and second economic development plans. These gradually changed the country's industrial structure. Although they achieved partial industrial development and reinforced the industrial infrastructure, the plans did not succeed in harmonizing urbanization and industrialization.

On the other hand, the city experienced in-migration from rural areas. Although the population growth level did not reach that of Seoul, Pusan City found its population increasing from 1,087,243 in 1959 to 1,675,570 in 1969, an annual increase of 4.9%, in itself low. It meant, however, that the city grew by more than 60,000 persons annually.

The concentration of Pusan city's population did not grow in proper relation to industrialization. The city attracted a large population from its hinterland and the rural areas. People from overpopulated and poverty-stricken areas streamed into Pusan without any definite plans for employment. It is for these reasons that Pusan during this period was plagued by mass unemployment, the expansion of unauthorized shantytowns, urban crime, juvenile deliquency, etc.

Period 5: 1970 - 1987

South Korea experienced unprecedented industrialization during the

1970s. By this time half of the population was living in urban areas. Two features are notable: the appearance of both industrial cities and metropolitan belts. As rural areas and small towns attracted factories and other industry-related businesses in line with the economic development plans, they experienced a commensurate population increase. Seoul became the center of the Seoul metropolitan area that included six satellite cities and five neighboring gus. Pusan became the center of the Pusan metropolitan area that included Ulsan, Masan, Chinhae and Kimhae. The population of these five cities was approximately 2,364,000 in 1970, 3,235,000 in 1975, and 5,067,000 in 1988 (see Table 3).

In 1975, 9.3% of Korea's population was concentrated in the Pusan metropolitan area, and by 1988 this had increased to about 12%. Ulsan especially experienced a sharp increase in population, from 252,000 in 1975 to 535,000 in 1984, and 618,000 in 1988. This rapid increase from 1975 to 1984 was mainly due to the government's industrialization policy in Ulsan.

The population of Pusan city was 1,675,570 in 1969. It increased to 2,697,947 in 1977, and by 1988 it reached 3,750,626. Thus every ten years Pusan has added about one million to its population.

3.- CHANGES IN ADMINISTRATIVE UNITS OF PUSAN

The population growth of Pusan City in the post-war periods was seemingly affected by three factors: (a) natural increase; (b) social increase; and (c) expansion of geographical areas. In the case of Pusan City, the population increase in each period confirms the important role of social increase, although there is no definite evidence. The third factor (population increase through geographical expansion) is as follows: Pusan City expanded in area from 219.7 km² in 1954 to 435.13 km² in 1987. On the other hand, in 1957 there were six gus and 121 dongs. In 1987 there were 10 gus, 1 chuljangso and 217 dongs (Table 4). The areas annexed to Pusan city were mostly rural.

4.- CONCLUSION

Pusan experienced a dramatic population increase in the late 1940s and early 1950s as a result of social upheavals, mostly the Korean War and the return home of Koreans from abroad after the Liberation. Population growth rates lessened in the 1970s and 1980s, although they remained fairly high. Growth rates varied according to the district. Moreover, population change was often more rapid than available job opportunities, expanded transportation and improved housing, which created severe bottlenecks in the development of the Pusan metropolitan area.

TABLE 1

Pusan Population in 1944 by Ethnic Groups*

Nationalities	Population	%
Korean Japanese Other foreigners	267,409 61,082 724	81.2 18.6 2.2
TOTAL	329,215	100,0

^{*}Census by Japanese colonial government in Korea, 1944.

TABLE 2
Population Growth of Pusan by Periods

Year	Population	Increased Population	Annual Increase Rate (%)	
1945	281,160			
1949	470,750	189,590	13.49	
1954	840,180	369,430	13.08	
1959	1,087,243	247,063	4.90	
1969	1,675,570	588,327	4.92	
1977	2,697,947	1,022,377	6.78	
1979	3,034,596	336,649	4.16	
1983	3,395,171	360,575	2.38	
1987	3,654,097	258,926	1.53	

TABLE 3

Growth of Population of Pusan Metropolitan Areas

	Population (thousands)			
City	1970	1975	1984	1988
Pusan	1,876	2,451	3,495	3,751
Masan	191	372	441	484
Chinhae	92	104	124	123
Kimhae	46	56	7 8	91
Ulsan	159	252	535	,618
TOTAL	2,364	3,235	4,673	5,067

TABLE 4
Changes in Administrative Units of Pusan

	Gu	Chuljangso	Dong
219.7	6		121
373.23	6	7	142
346.68	7	3	171
435.13	10	1	217
	373.23 346.68	373.23 6 346.68 7	373.23 6 7 346.68 7 3



COUNTRY

REPORTS

RURAL-URBAN MIGRATION AND URBANIZATION IN BANGLADESH

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1.- INTRODUCTION

Migration has been recognized as a major factor in the modernization process of a country allowing populations to adjust themselves to changing economic conditions. Rural to urban migration played an important role in the European modernization process, and in recent years it has been an integral part in the developing countries, causing rapid urban growth in the world.

Urbanization and industrialization are two of the most important social phenomena of the present time. They have spread beyond national frontiers and have affected the major part of human society. These two terms have frequently been misunderstood to some extent and are used interchangeably. In some parts of the world urbanization and industrialization have gone hand in hand and have developed together, but in other countries they are still very much in the process of developing and one may eventually exceed the other (Breese, 1968).

Urbanization is the dominant demographic trend of the late twentieth century along with the growth of the world population itself. The number of people living in the cities increased from 600 million in 1950 to over 2 billion in 1986. If this growth continues unchanged, more than half of the population of the world will be residing in urban areas shortly after the turn of the century.

Bangladesh is one of the poorest nations in the world. With a population of nearly 110 million crowded into 144,000 square kilometers, it has one of the highest densities in the world, surpassed only by Hong Kong, Singapore and Malta. In fact, if the entire population of the world were placed in Australia, the density per square kilometer would approximately equal that of Bangladesh.

2.- MIGRATION AND URBANIZATION

Migrants everywhere move from low to high income regions. Most studies find that economic factors are most commonly cited as reasons for moving. Mabogunje's systems approach to migration is one of the most comprehensive theories of the social and environmental contexts of migrations. He postulates that migration is controlled by a system of interacting elements, including rural control systems, rural adjustment mechanisms, urban control systems and urban adjustment mechanisms (Mabogunje, 1970). The effect of the rural-urban wage differential is modified by the probability of obtaining a job. Thus, high rates of urban unemployment and underemployment should deter migration. Annable (1972) has shown that high rates of urban underemployment in the urban traditional or informal sector have a negative impact on rural-urban migration in developing countries. But if the rural-urban wage differential is as large as it is in many developing countries, it will more than compensate for any income losses suffered by the immigrants while waiting for a modern sector job. Thus Todaro (1976) shows that the larger the income differentials expected, the more willing migrants are to tolerate high urban unemployment levels. It has been noticed that in the conditions of high rural unemployment the sizeable ruralurban wage gaps, the creation of modern sector jobs will actually induce more migrants than new jobs, thereby raising urban unemployment rates. Empirical studies in the developing countries as well as in Bangladesh have supported this theory showing that a high rate of modern sector job creation stimulates immigration.

The importance of migration relating to urbanization has been observed historically and described generally as the mobility revolution developed by Zelinsky (1971). In brief, Zelinsky argues that all forms of personal mobility experience an evolutionary sequence parallel to that of the vital revolution as countries go through the process of modernization. This sequence consists of five phases, of which the intermediate one is of greatest interest for the study of rural-urban migration (Ledent, 1982). Initially (pre-modern society, characterised by both high fertility and mortality) there is little genuine migration from the rural to urban areas because of the nature and structure of society. second phase (early transitional society, characterised by a decline in mortality while fertility remains high), massive movements take place These movements tend to reduce in the from rural to urban areas. third phase (late transitional society, characterised by a decline in fertility). They are further reduced both in absolute and relative terms in the fourth phase (advanced society with slight to moderate natural increase), with possibly total disappearance in the fifth and last phase (superadvanced society).

For Bangladesh, the early and the intermediate migration phase may be identified. These are linked with the development of economic and political phases. In the early seventies, the economic situation was precarious all over the country, and politically the viability had yet to arrive. This led individuals to think that migration might be a solution to the problem of survival. As a result, during the last decades, in addition to its fast population growth, Bangladesh has been confronting a significant geographic redistribution of its population. This redistribution is resulting in an increasing proportion of its population living in the larger urban areas, with detriment to the rural areas and small urban areas. As a result, an increasing transfer of its supply of productive human resources from the rural sectors of the economy to the typically urban sectors is taking place.

The increasing dominance of the large urban areas, their activities and functions within the national economy, and limited expansion of the agrarian structure uprooted and mobilized a vast rural population to move towards the urban areas. Furthermore, the development of transportation and communication media widened the contact and

reference horizons of the rural people and made the difference between areas more apparent and multiplied the residence options (Saleheen, 1983).

3.- TRENDS IN URBANIZATION

The definition of urban areas in Bangladesh is complex. Following are the three main problems:

- 1. Absence of a clearcut definition of urban areas in censuses.
- 2. Nearest equivalent to an urban place is the locality designated as city, town, urban and 'paurashabha' (municipality) area.
- 3. All paurashabha areas have some characteristics generally regarded as urban, but some of these areas are geographically extensive with a population more rural than urban.

If the paurashabha areas are taken as the criterion of urban places, then the urban population gives a fairly low percentage level of total population. In the 1981 Population Census of Bangladesh, an urban area has the following connotation. The term normally includes places having Paurashabha, a Town Committee or a Cantonment Board. In general an urban area will be a concentration of population of at least 5000 persons in continuous collection of houses where the community sense is well developed and the community maintains public utilities, such as roads, street lighting, water supply and sanitary arrangements. These places are generally non-agricultural and having non-agricultural labour concentration.

Bangladesh has a rural-base economy and is one of the least urbanized countries of the world. Although a low percentage of the population is considered to be urban, the picture is also changing appreciably. Over 22.32 percent of total population lives in the country's 72 urban centres, varying in size from five thousand to nearly five million. Urban land accounts for less than seven percent of the country's total land area. The percentage of total population in urban areas is a misleading indicator of the level and development of

urbanization. The majority of the population is still engaged in agriculture, but a significant level of urbanization has been attained during the last decades (Table 1).

Although Bangladesh, like other developing countries, is still one of the least urbanized regions of the world, it has begun to experience rapid urban growth. The first few decades of the present century did not show any remarkable change (Table 1). In the last decade of the 19th century, 2.18 percent of the country's population lived in urban areas, and it remained almost static in the following decades. A slow but steady urban population growth began after 1931, with a setback in the 1940s due to the second world war. Between 1951 and 1961, the country experienced an approximate 45 percent increase in its urban This increase was mainly the result of the migration of Muslim refugees following the partition of India in 1947, most of whom preferred to settle in urban areas. Accelerated population growth could be seen in the period between 1961 to 1974. By 1974, about nine percent of the population was living in urban areas. During the late 1950s and through the 1960s, policies of industrial development encouraged people to migrate from rural to urban areas. This growth was further stimulated by the administrative importance of a number of medium sized towns. The urban population increase during this period was remarkable, registering about 138 percent, or at an exponential rate of 6.7 per year.

The tempo of urbanization increased rapidly after the liberation of Bangladesh in 1971. Between 1974 and 1981, 15.18 percent of the population was recorded as urban, an increase of 110.90 percent, or at an exponential rate of 9.6 percent per year. The changed status of many urban centres soon after the independence of Bangladesh also attracted a sizeable population influx from rural areas as well as from smaller towns. This was also due to the country's unstable economic and political conditions, in which rural people were pushed out of their settlements and forced to go to urban areas (Choudhury, 1980).

The effect of rural-urban migration is changing the composition of the Bangladesh population, as can be seen from Table 1. The urban population has increased ten-fold during the present century. This can be partly attributed to changes of several rural centres to urban units and the annexation of areas in successive censuses, which resulted in their increase in size. However, the main increase in the urban population resulted from rural-urban migration. Rural to urban migrants and the population of the newly created urban areas constituted 50 percent of the total urban population of Bangladesh in 1974 (Khan, 1982).

The level of urbanization can also be measured by examining the distribution of population among urban size categories. Not all urban areas have been growing at the same rate. The growth of large urban areas was much greater than other urban areas in spite of the fact that natural growth was similar throughout the country. To make the situation even worse, the urban system is characterised by a few primate centres, which dominate the national economy with their ever-widening socio-economic base. The service sector and government administration provide most of the employment opportunities in large urban areas. Other organizations and industrial centres are situated or established in and around these few primate centres and absorb a large proportion of unemployed people as well.

Since 1960, more than the proportional growth of urban areas has spread throughout Bangladesh. During the 1961-1974 and 1974-1981 intercensal periods, urban areas with a population of more than 100,000 grew at a much faster rate than the average urban growth (Table 2). The proportion of people living in urban areas with a population of more than 100,000 was recorded as 57.3 percent in 1974, and 57.5 According to the 1974 and 1981 censuses, the percent in 1981. corresponding growth in urban areas with populations of between 50,000 and 99,999 was 15.5 percent and 12.9 percent respectively. shows the comparison in real growth experienced by urban areas of different sizes. Urban areas are grouped here according to their classification in the 1974 census, and the computation of growth rates has been done by comparing the total population in 1981 of the same class. Table 2 shows that urban areas of group I have grown faster than lesser populated urban areas, but the differences are in no way as large as is generally believed. Only the capital city of Dhaka has an average growth rate of 10.4 percent per year (Table 3). It cannot be

said that other urban areas of group I have been growing much faster than the urban areas of groups II, III and IV.

The main features of Bangladesh urbanization is that large numbers of migrants from rural areas and smaller urban areas have moved to the large urban centers, which can be seen by the increased concentration of the urban population in a few centres (Table 3). The six major cities of Dhaka, Chittagong, Khulna, Narayongonj, Mymensingh and Rajshahi account for 64.15 percent of the country's total urban population. But Dhaka, Chittagong and Khulna have 59.02 percent, and Dhaka Metropolitan Area, the largest entity, has 37.31 percent of the total urban population. The pattern of urbanization in Bangladesh corresponds to the centres of industrial and commercial activities and the general level of economic development.

The general pattern of inter-district migration shows an influx of migrants to the three urbanized districts of Dhaka, Chittagong and Khulna, and minimal net migration to other districts. However, the distribution of employment opportunities resulting from the regional economic model does not follow this pattern. Chittagong and Khulna have had average employment to labour force ratios in the years 1980-1990, and Dhaka the lowest, far below average. Districts with indices of increasing employment rates are Noakhali, Comilla, Rangpur, Pabna, Faridpur, Jamalpur, Sylhet and Kushtia. According to inter-district migration projections compiled by the Bangladesh Ministry of Works in 1985, these districts did not show any evidence of a significant net influx of migrants. However, in some ways this can be considered a positive development. Economically and industrially backward areas, such as the districts of north-western and north-eastern Bangladesh, have a low level of urbanization. These regions must develop at a faster rate to create adequate economic potential and stop the outflow of their population to the overpopulated central areas (Government of Bangladesh, 1985).

4.- THE URBAN PULL

Despite the strength of the rural 'push' factors that nudged the poor toward a decision to migrate to urban areas during this period of Bangladesh history, there were undoubtedly strong urban 'pull' factors at work as well. Major ones are believed to include employment opportunities in the informal sector and relief activities undertaken by governmental and non-governmental organizations in urban areas. Although their absolute strength seems to have been rather weak, they take on added significance when compared with similar factors in rural areas.

Although income data are exceedingly sketchy in Bangladesh, certain wage rate series do exist which tend to confirm the general observation that wages tended to be higher in urban areas than in rural areas. Whereas skilled agricultural workers, a category that necessarily would include the bulk of the rural landless, earned an average of U.S. 80 cents a day, an unskilled construction labourer in Dhaka could earn an average of U.S. \$1. Skilled workers in the construction industry, such as masons, could earn even more working in the larger urban areas. During the post-independent period, even unskilled workers in manufacturing received higher wages than they would have in agriculture with similar skill levels.

At the same time, however, one has to be very careful about overgeneralising these conclusions. The newly-arrived rural migrant in an urban area was likely to have difficulty in obtaining a job, even an unskilled job. His entry into the urban labour market was more likely to have been into the informal rather than the formal employment sector. Although there was the possibility of a unskilled job in construction, it was far more likely that he would end up with a job in a less glamorous field — if he found employment at all. The residual labour sector in Dhaka during that period, and even today, was that of the bicycle rickshaw puller, where wages were even lower than in rural agriculture. As a result, a high proportion of squatters in Dhaka during this period were indeed employed in this low-paid segment of the transportation sector.

The net result of this was that while urban incomes may have been somewhat higher than those in rural areas, the net differential was probably fairly insignificant as a causal variable in the decision to migrate. Nevertheless, when income differentials are combined with cost-of-living differentials, urban areas offered ironically a relative

advantage. Surprisingly, it was the price of food that made life in urban areas most appealing. In 1943, as many as three million people died in the Bengal Famine. As a result of that disaster, the British introduced a food rationing system that was designed to guarantee food supplies to the poorer members of Bengali society. Over the years this social welfare measure has been expanded to include increasingly larger numbers of people.

As a result, all residents of Dhaka, Narayanganj, Chittagong, Khulna and Rajshahi are entitled to a ration card which permits them to purchase certain quantities of food at subsidised prices. The amount of this subsidy can at times result in a significant boost in urban real incomes. For example, as Stepanek (1979) notes, in late 1974 the international prices of wheat and rice were U.S. \$300 and \$600 per ton respectively. Domestic prices in Bangladesh were even higher. Yet, at the same time, the recipients of the rationing system were paying the taka equivalent of no more than \$169 per ton for wheat and \$203 per ton for rice. The net result of this price disparity was not only to upset the cost-of-living balance between the rural and urban areas of Bangladesh, but also to act as an urban pull factor, enticing more destitute rural migrants to flock to the nation's major urban areas.

Dhaka, the capital, is highly urbanized and a true metropolitan centre, a good example of a primate city-dominated urban hierarchy in the developing world, with an urban area of more than three and a half times that of Chittagong, the country's second largest city. As mentioned earlier, metropolitan Dhaka accounts for nearly 37.31 percent of the nation's total urban population. This unique and unparalled growth of the capital and the primate city is mainly due to the migratory flow from rural areas, which in turn depends on increasing surplus births in rural areas, the patterns of land ownership which lead to unemployed peasants, the concentration of industry near the metropolis, and the centralised administrative system. At the same time, the opportunities for employment in urban areas are greatly overestimated by the rural population. The rural-urban influx results in the following stress on the socio-economic environment of urban areas:

a. Expansion of unplanned and uncontrolled urban areas.

- b. Functional changes within the city structure.
- c. Changes in the use of land and growth of slums.
- d. Rapid growth of suburban areas to ease pressures on the inner city.

5.- FUTURE URBANIZATION PROBLEMS

The effect of the national increase in overall population is magnified by the economic forces promoting urban migration. It is the combined effects of the push from the rural areas as agricultural jobs become difficult and the pull of growing industrial, office and service employment in the urban areas. The increasing concentration of new dominant service jobs in the largest metropolitan areas exert more pull. One of the major challenges facing policy makers is how to meet and solve the problems of the equitable distribution of costs and benefits of urban living for maximum economic efficiency and minimum costs.

The economic, social and ecological milieu prevailing in the large urban areas of Bangladesh are particularly responsible for the declining fertility rates, a trend generally characterized in the later stages of the demographic transition. Distorted sex balances and unemployment in urban areas lead to lower family formation rates. Higher socioeconomic expectations are sometimes among those factors leading to smaller family sizes within large urban areas as compared with smaller ones. The decline in fertility in urban areas is more than offset by rapid rural migration. The concentration of people of reproductive age in large urban areas is evident, and this cityward flow of predominantly younger people contributes to the relative stabilization of the population in rural and small urban areas.

The population of Bangladesh will continue to grow rapidly through the end of this and up to the first quarter of the next century, with an estimated likely population of 145.80 million and 219.38 million in the years 2000 and 2025 respectively (UNO, 1987). Urbanization will proceed at a faster rate because rural areas will be incapable of absorbing all future rural populations. The estimated urban population

of Bangladesh in the years 2000 and 2025 will be 26.62 and 78.76 million respectively. There will be higher in-migration to the larger and high cost urban areas, especially Dhaka. Present family planning programmes will not stem the urban influx and, unless proper policies are determined and implemented, the migration of people toward urban areas will remain unchecked and their numbers will continue to rise. From the environmental point of view, therefore, the real problems that Bangladesh will have to face in future years will not only be urban growth but (a) where and how that growth will occur, (b) what resources will be available, (c) what types of facilities can the country offer, and (d) what quality of life will it be able to offer its residents. These problems will run parallel to those of the country's population pressures.

In the next twenty-five years, while the population of Bangladesh is expected to grow by 80 percent or more, the population of Dhaka could soar by more than 300 percent. A fourfold growth compared to the nation as a whole is in itself a major cause for concern. No urban planner or politician has any concrete evidence of the problems and challenges facing a city with a population exceeding 20 million, as there is no city in the world of that size. However, citizens of such huge cities as Mexico City and Sao Paulo are beginning to discover what it is to plan, manage, administer and live in cities with populations of around 15 million, even those with considerably more resources. These urban metropolises are becoming almost impossible to manage and operate. However, some of these cities are taking steps. Do we know where we are headed?

Before we inevitably plunge headlong into the emerging urban black holes, it is high time to take an overview of the situation and ask some basic questions. A few of these could be:

1. What implications will a population of 10 million plus by the year 2010 and 25 million plus by the year 2025 have on a city like Dhaka, which is currently struggling to cope with an existing population in the area of 5 million?

- 2. Can this urban population explosion and urban growth be moderated by any means or direction? If not, is there a way to cope with the apparently inevitable situation?
- 3. What kind of resource commitments and resource planning policies and implementation could alleviate the situation?

To specify some of the basic questions discussed earlier, the following environmental problems could be anticipated as a result of rapid urbanization:

- a. The central business district will penetrate more into the adjacent residential areas and change the function of those areas.
- b. Households will be occupied for a longer period of time without renovation, which will create residential problems.
- c. Pressure will be put on high class residential areas because of less out-migration.
- d. There will be an increase of large scale mass accommodations, i.e. slums.
- e. The green belt will disappear due to urban sprawl.
- f. Traffic and high density population will contribute to increased air pollution.
- g. The supply of drinking water from existing systems will only be available for six hours a day and to only one-third of the residents.
- h. Huge quantities of sewage will be generated, for which the metropolitan authorities will be hopelessly unprepared.
- i. There will be increased public transit and transportation problems.

While we do not have the answers to these questions today, a comprehensive study segmented into major sectors would go a long way

in providing an overall picture and enable us to have some understanding of the true magnitude of the emerging problems. Such a study would need to be undertaken without any further delay. It goes without saying that the longer we stay away from seeking the answers, the more difficult and expensive it will be to find them.

Each major sector, such as rural-urban migration, urbanization, or housing and urban land use, would require a detailed study that would be interlinked to other sectoral studies. In broad terms, the studies would focus on the situation as it would:

- a. Emerge in the normal way, without major changes in the existing policy and current levels of resource commitments;
- b. Change or moderate, with different policies and a fundamental commitment of major resources to avoid slipping into urban black holes.

Rural and Urban Population of Bangladesh 1891 - 1987

TABLE 1

Year	Rural ('000)	Percent	Urban ('000)	Percent	Total ('000)
1891	24131	97.82	537	2.18	24668
1901	24644	97.61	629	2.39	26273
1911	27889	97.70	657	2.30	28546
1921	30152	97.69	716	2.31	30868
1931	35595	96.94	1126	3.06	36690
1941	38440	96.62	1345	3.38	39785
1951	40112	95.66	1820	4.34	41932
1961	48199	94.81	2641	5.19	50841
1974	65206	91.22	6275	8.78	71481
1981	73892	84.82	13228	15.18	87120
1984*	79100	80.70	18900	19.30	98000
1985*	80100	79.70	20400	20.30	100500
1986*	81000	78.71	21900	21.29	102900
1987*	81800	77.68	23500	22.32	105300

Note: *Estimated

Source: Bangladesh Bureau of Statistics, 1989

Annual Growth Rate of Urban Population by Size of Urban Areas 1974 - 1981

TABLE 2

Gro	oup Urban Size	Numl Cen	ber of ters	Total Urban Population (in 000)		Growth Rate % per year
		1974	1981	1974	1981	
I.	100,000 or more	6	15	4125 (72.00)	7363 (75.54)	11.21
II.	50,000 - 99,999	14	18	826 (14.42)	1255 (12.90)	7.42
III.	25,000 - 49,999	23	22	570 (9.95)	813 (8.34)	6.09
IV.	10,000 - 24,999	49	16	201 (3.51)	306 (3.20)	7.46
v.	5,000 - 9,999	16	1	07 (0.12)	09 (0.09)	4.88

Notes: a) 36 urban centres of the 1974 census were not considered as urban centres in the 1981 census.

Source: Bangladesh Bureau of Statistics, 1982.

b) Figures within the parentheses are percentages.

TABLE 3

Inter-Census Population Changes 1961 - 1974 - 1981

Names of the Cities	1961 Population	1974 Adjusted Population*	1981 Population	Annual Percei 1961 - 1974	ntage Change 1974 - 1981
Dhaka	521,034	2,003,729	3,458,602	+ 10.9	+ 10.4
Chittagong	364,205	1,061,484	1,388,476	+ 8.6	+ 4.4
Khulna	127,970	521,704	623,184	+ 11.4	+ 2.8
Narayanganj	162,054	322,921	196,139	+ 5.4	- 5.6
Mymensingh	53,256	76,036	107,863	+ 3.2	+ 6.0
Rajshahi	56,885	132,909	171,600	+ 6.7	+ 4.1
Barisal	69,936	98,127	159,298	+ 2.6	+ 8.9
Saidpur	60,628	90,132	128,085	+ 3.0	+ 6.0
Comilla	54,504	86,446	126,130	+ 3.6	+ 6.6
Jessore	39,304	76,168	149,426	+ 5.2	+ 13.7

Note: *Due to the under-enumeration that occurred in the 1974 census, the population of Dhaka, Chittagong, Khulna and Narayanganj has been inflated by 19.3 percent to conform with those used by the United Nations-sponsored National Physical Planning Project.

Source: Bangladesh Bureau of Statistics, 1982

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CARIBBEAN INTERNATIONAL MOVEMENT IN URBANIZATION

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1.- INTRODUCTION

In most countries, internal migration is recognized as a major element in the process of urbanization. It is more unusual for international migration to be viewed as part of this process. In Caribbean countries the two parallel processes occur simultaneously—internal and international urbanization. How these processes compare and relate to each other are questions which are significant for the theoretical perspectives from which both international migration and urbanization are analysed. In turn, these questions are important for the implications of the processes for urban policy in the Caribbean and in the relevant countries of North America and Western Europe.

In many countries of the Caribbean it is not uncommon to find that there are more nationals abroad than in the country itself. The majority of these Caribbean migrants and their descendants abroad are in the major cities of Western Europe and North America. Virtually all Caribbean people in the United Kingdom, the Netherlands and France are in the major metropolitan centres. A similar situation occurs with respect to the United States and Canada. Over a third of the "new immigrants" in New York City are of Caribbean origin, quite apart from the Puerto Ricans. (Conway, 1989, 35). The Dominican Republic ranks second of the Caribbean migrants in New York after Puerto Ricans. After these are the Jamaicans, Haitians, Trinidadian and Tobagans, Guyanese, Cubans, Barbadians and Grenadians. Miami is second in the concentration of Caribbean migrants, in particular Cubans, Jamaicans and Haitians. Likewise, in Canada, virtually all the long-stay Caribbean migrants are in the major cities of Ontario and Quebec (Piche, Larose and Labelle, 1983).

2.- BACKGROUND: CARIBBEAN INTERNATIONAL MIGRATION FIELDS

The migration fields have changed over time, largely determined by the changing demands for labour by West European or North American capital developments either within or outside the Caribbean region itself. The War brought about a shift in the focus of migrations from a predominantly regional movement to one dominated by flows to Western Europe. In the 1960s, immigration legislation brought about further changes in the direction of Caribbean migrations and the pattern became dominated by movements to the USA and Canada. Intraregional mobility continued virtually throughout the entire period.

Three major periods may be identified in terms of the directions of migrant flow: the period from the mid-nineteenth century to the Second World War, the post-war years until the early 1960s and the period from the mid-1960s to the present. The post-war reconstruction in Western Europe also required labour, much of which was obtained from the Caribbean colonies. From the mid-1950s, the hitherto small numbers of 'colonial subjects' going to their respective 'mother country' increased to flows of massive proportions. Large numbers of skilled, semi-skilled and unskilled workers were employed chiefly in industry, transport and hospital services.

Legislation in the United Kingdom in 1962 and 1965 brought that country's Caribbean migrant inflow to a virtual end. But from the point of view of former British West Indians, this merely resulted in a shift in the movement away from England and towards Canada and the United States. There, changing labour demands had led to alterations in their immigration legislation in precisely the same years - 1962 and 1965 respectively. These changes favoured Caribbean migrants, especially those falling within the professional and skilled labour categories.

The movements to France have continued to the present time because of the special departmental status which the Antilles maintain. In the case of the Netherlands, policies were geared towards integrating the Caribbean migrants into Dutch society rather than restricting entry (Bagley, 1973; Amersfoort, 1982, 1988).

In the course of time, the numbers of new arrivals dwindled without

legislative intervention. Consequently, like the movement of the Netherlands Antilleans to Holland, the net migration of Puerto Ricans to the United States declined as the circulation of migrants established a balance between outward and return flows.

3.- TYPES OF CARIBBEAN INTERNATIONAL MOVEMENT

Labour Migration

The reservoir of labour provided by the Caribbean for North American and West European economic activities has comprised large numbers of skilled and unskilled workers. The distinction between the various categories of worker is not always meaningful, since skilled workers have migrated to take up unskilled jobs where this has facilitiated their procuring the necessary visa and of obtaining employment at the destination.

Where there have been short-term labour requirements of a specific nature, contracts have been negotiated usually through Caribbean governments. Most short-term contracts since the 1960s have been for farm work in the United States and Canada, therefore have been to rural rather than urban areas. One of the exceptions have been the one year contracts available to female domestic workers going to Canada. In the ten years after the institution of the domestic workers programme in 1955, approximately 2,250 Caribbean women entered Canada on contract and took up work in the major cities (Henry, 1968, 83-91).

The majority of Caribbean migrants are not part of the guest worker programmes. They establish their own contacts and usually stay for longer periods at the destination. The proportion of skilled and unskilled, blue collar and white collar workers among the migrants has varied with the labour requirements and associated immigration legislation at the destinations.

The large-scale post-war migration to Western Europe was characterized by the movement of skilled and unskilled blue collar workers. In contrast, the selective immigration policies in the United

States and Canada had the effect of increasing the proportion of high level personnel leaving Caribbean countries (Sackey, 1978; Boodhoo and Baksh, 1981; Harewood, 1983; Thomas-Hope, 1983). From the mid-1960s secondary school leavers and university and college graduates as well as professionals were leaving most Caribbean countries in disproportionately large numbers (Murray, 1982; Harewood, 1983; Palmer, 1983).

The emigration of high level personnel from Guyana constituted about 25 percent of the 5,000 permanent emigrants each year from the mid-1960s to the mid-1970s (Sackey, 1978, 45; Boodhoo and Baksh, 1981, 59). It has been estimated that the total emigration of workers in the 1962-68 period from Trinidad was 17,000. Two-thirds of the migrants were classified as professional and managerial and the remaining as 'other skilled and qualified'. The professional workers were chiefly teachers and nurses with small numbers of doctors, dentists and engineers. This general trend continued from Trinidad in the 1970s, the largest movement being of clerical and administrative workers and teachers, followed by physicians and architects (Harewood, 1983, 25; Rampersad and Pujadas, 1970).

The late 1970s saw the peak of the emigration of high level manpower from Jamaica. Professional, managerial and technical workers, with their families, accounted for 51 percent and 48 percent of the Jamaican migrants to the USA in 1987 and 1988 respectively, and 52 percent and 48 percent in the case of migrants to Canada. Domestic workers formed the second largest stated occupational category (after workers in manufacturing and mechanical trades), migrating from Jamaica to Canada in the early 1970s. This occupational group accounted for eleven percent and thirteen percent in the total entries from Jamaica in 1972 and 1973 respectively (Government of Jamaica, 1979, 15.9, 15.10).

The migration of Haitian professionals has been exceptionally high ever since the beginning of the Duvalier regime in 1957, and it has been estimated that approximately 80 percent of Haitian professionals currently live abroad (Roucheleau, 1984, 23).

In the case of Puerto Ricans, those entering the USA are not documented as migrants because of their legal right (since 1917) to enter the USA unimpeded, and consequently there are no data on occupations of Puerto Rican migrants. Students as well as dependents also enter the labour market at the destinations in occupational categories which are not monitored in connection with the migration, thus never enter the migration statistics. However, it has been estimated that by 1980 the number of persons of Puerto Rican ancestry or birth living in the United States had exceeded two million. This is in comparison with a total population of some four million living in Puerto Rico. Thus the number of Puerto Ricans in the United States was greater than one third of the total Puerto Rican population in the 1970 Census and nearly 40 percent of the total 1980 population. Some 20 percent of the Puerto Rican population lives in New York state alone (Johnson, 1982).

Entrepreneurial Migration

In addition to the many different types of wage labour migrants involved in the formal economy are those who travel not so much as the means of serving capital but as petty capitalists, among whom will be found those who are also engaged in informal economic activities. An example of this type of migration is the perennial movement of a variety of different entrepreneurs.

Vendors of food and fruit have traditionally travelled between islands of the Eastern Caribbean and, more recently, informal traders in dry goods who ply between areas of restricted currency and those where the United States dollar is local tender, many also doing business on the USA mainland, chiefly in Miami (Thomas-Hope, 1986). A middle class variant of this group of circulating migrants includes persons engaged in a range of business activities involving both their Caribbean home country and the USA. The organization of their domestic arrangements to maintain their major home base either in one or the other country, or both, is variable.

In addition to the legal activities of those operating in the regular migration circuit are also the illegal activities of those trading in narcotics and in organized prostitution, the latter often involving the transport of young people between islands in close proximity.

Non-Labour Migration

Not all Caribbean migrants go to their destination with the prime intention of selling their labour. A few movements within or from the region have been those of political refugees. The first sets of political refugees both in the Cuban and in the Haitian cases were professional, managerial and technical workers. The most recent of the 'boat people' from Haiti have been poor, rural and black as compared to the earlier movements of professional, urban and mulatto groups.

In addition to those migrants recorded as destined for the permanent work force, an equal or greater number each year are classified as dependents or students. Many of the dependents have professional or clerical skills, and students are among the group who, at a later stage in their migration, become permanent, 'high level manpower' residents.

Colonial peoples have always gone to the metropolises for educational purposes, especially to pursue professions for which high quality training was not readily available in the Caribbean. The tradition has continued to the present day to the extent that even where the available opportunities exist, students still have aspirations for going abroad and seek the opportunities for doing so.

Before the Second World War, the numbers involved in this movement were small and restricted to the privileged few who went to Europe to study for the professions, in particular medicine and law. Later, the numbers of students going abroad increased dramatically with a widening of the range of people and of educational pursuits followed. In addition to careers in medicine and law, a wide variety of other professional, para-professional and technical courses were taken by Caribbean students abroad. Destinations eventually became dominated by Canada (for students from the British Caribbean and Haiti, chiefly to French-speaking Quebec Province), and to the USA from Puerto Rico, the Dominican Republic and more recently the British and French

Caribbean as well. Many students return to the Caribbean, but many also remain at their destinations and become absorbed into the highly skilled and professional labour markets of North America and Western Europe.

For many students, the intention still remains, as it did originally, to return home after the acquisition of the desired or designated educational qualifications and to secure, without any doubt, positions of the highest status. However, students represent the group of migrants which account for a high level of potential skill and professional leakage from Caribbean societies. With metropolitan qualifications they compete in the international professional labour markets and, as a result, a large percentage never return to their home country on a permanent basis.

A high proportion of Caribbean leaders have at one time studied abroad and on their return entered politics (Taylor, 1976; Basch, 1987). Artists, writers and other intellectuals form another group whose members - almost without exception - have migrated at one time or another, often living for lengthy periods in a major West European or North American city.

4.- INTERNATIONAL URBANIZATION AND CIRCULATION

In a myriad of ways, Caribbean people are oriented towards the outside world to enhance, rather than to provide an alternative, to the opportunities of the national environment.

Paradoxically, the reverse situation occurs among Caribbean people who are already abroad. They, like migrant groups in most contexts, need the sense of contact with their home society and they usually retain the image, whether as myth or reality, of the return. It is a long time, if ever, after migrating that Caribbean people would think of taking a holiday anywhere else than in their Caribbean home country. As far as they can, most Caribbean people abroad preserve their Caribbean social and cultural milieux. Their friends, social contacts, support groups and marriage partners are sought among others from their own Caribbean country; their homes are adorned with a decor that retains a Caribbean ambience, their culinary habits remain essentially

Caribbean in flavour. Political allegiance, activity and fund raising are focussed upon partisan affairs and rivalries back home. It is as important to those abroad as it is to those who remain in the Caribbean that political decisions and elections should be agreeable to them, for these are the factors which help determine the timing and nature of their subsequent or perceived return. Thus workers change their location of work, artists of various kinds transfer to a wider, international audience and cultural frame, but few Caribbean migrants of the first generation ever alter completely the orientation of their lives or the subject of their art away from the Caribbean.

The extent of counter-flows has been consistently underestimated, chiefly due to the difficulty of recording them for official statistics. Nevertheless, empirical studies have shown that not only have they been highly prevalent throughout the history of Caribbean migration but also, in various ways, they have been an integral part of the migration process (Philpott, 1973; Thomas-Hope, 1985; Basch, Wiltshire-Brodber, Brodber and Toney, 1987). Indeed, the linkages maintained by the migrants between their households at source and destination are not only integral to the pattern of movement, but deeply rooted in the culture. Migrants, even in absentia, are part of the ceremonial of the household in the Caribbean, providing the finances for feasts whether or not the celebration is for an occasion occurring in the Caribbean household or at the destination abroad (Philpott, 1973).

Furthermore, circulation is not solely manifest in the return of the individual migrant. Circulation is maintained through the flow of remittances of capital and a wide range of goods sometimes transmitted by the migrants themselves or at other times by intermediaries, usually members of the immediate family or wider kinship network. This is associated with a return orientation or mentality supported by the sending of remittances (Frucht, 1968; Dirks, 1972; Philpott, 1973; Hill, 1977; Richardson, 1983; Brana-Shute and Brana-Shute, 1982). But migrants return with varying degrees of regularity, for differing periods of time and, whether or not they ever return permanently, the entire process is maintained by their migration orientation or the return mentality (Rubenstein, 1982; Thomas-Hope, 1985). Contrary to general opinion, the final return in a migrant's lifetime is not confined to the

period after retirement, even though many do return permanently at this stage of their lives. A number of migrants return to re-enter the labour force either as waged or self-employed (Griffith, 1983; Gmelch, 1984; Thomas-Hope and Nutter, 1989).

This raises important conceptual issues relating to migration which is a process incorporating a range of movements varying in distance, duration, periodicity and purpose. Conventional conceptualizations of migration suggest that long-term migration, as opposed to short-term visits, would bring about complete displacement of the migrant from his place of origin. The evidence shows that this is not the case and that international migration is characterized by a network of interactions.

The pattern of circulation which brings about transnational interactions between origin and destination, and thus between donor society and recipient society, is usually evident where short-term, cyclical flows of labour occur across international boundaries. They are less evident and rarely identified, but often just as strong, in cases where mobility involves long periods of stay abroad. Yet even during a protracted absence from the home country most Caribbean migrants remain, in various ways, part of their Caribbean household and at any one point in time are at a particular stage in the overall process of circulation.

Not only does the migrant keep alive the notion of an eventual return but the members of the household in the Caribbean perceive the absent member to be very much a part of the activity and continuity of the household. Caribbean households remain structurally linked to their absent members through the support system established, and as described in the Haitian context, are as much a part of the household as are the invisible but ever present Voodoo ancesters (LaGuerre, 1978, 448). In return, the migrant can, if necessary, or should he so wish, retain his place in the household with the option to return and obtain the benefits of that household and its inheritance for an indefinite period, sometimes the rest of the migrant's life.

During the process of circulation, whatever the specific time span in any particular case, the displacement of the migrant is only partial,

though the degree and nature of displacement varies throughout the migration cycle and from one migrant to another. The displacement of the work place invariably occurs in the case of transient movements without the displacement of any other aspect of the migrant's activity. A major home base is maintained simultaneously with a secondary base, and either the one or the other may be located in the Caribbean.

The pattern of displacement is dynamic and changes as the migrant's activities alter and either he or she increases the emphasis on the home base or reduces the commitments there allowing an increase in the commitments at the destination. The balance between the two alters throughout the migration cycle and though the precise nature of the transition is not clear and varies with innumerable factors in the process, it maintains the source and destination places in a dynamic relationship. This is a very important and hitherto little recognized aspect of migration which is significant for the perpetuation of the process through the continuing, though ever-altering nature of feedback (Thomas-Hope, 1988).

This dynamic aspect of migration has implications for the distribution of people and their activities. Throughout the household life cycle individuals relate differently to the outside world either as active migrants, the recipients of migration feedback or the returnees in the cycle. There is no single pattern of household change in migration status, but there is always change taking place at different rates and not confined to a single household generation.

Nor is the nature and extent of spatial and social displacement of the migrant static throughout the migration cycle. Where total displacement does occur, it usually takes place at a later stage in the process, not in the decision at the point of initial departure. Depending on the purpose and duration of the absence abroad, the displacement of the individual's work activities, domestic, social and leisure activities, may occur to varying extent in either the country of migration source or destination. The interaction between place of origin and destination thus remains linked in a dynamic set of relationships changing both throughout the individual's migration cycle and extended beyond, to have implications for the future pattern of migration in the household.

Overall, the greatest impact of migration upon the household or wider family is in its ability to extend the parameters of opportunity beyond national limitations. Society endures even where the population of small Caribbean islands at times has been heavily depleted, or when permanent or long-stay emigration predominated over brief departures. Montserrat, for example, lost up to ten percent of its population each year for several years during the 1950s. Over the past thirty years some nine percent of Haiti's population and 25 percent of the population of Barbados has migrated (United States Department of Justice, cited in Pastor, 1985, 11). But Caribbean society and its institutions have been so shaped by migration that it sustains the pressures as well as being strengthened by the benefits which migration brings. The transnational, urban dimension of the household and the family has permitted society to preserve its viability despite continued, sometimes large-scale, migration and possibly even because of it.

5.- RESEARCH QUESTIONS ON THE IMPLICATIONS OF CARIB-BEAN INTERNATIONAL URBANIZATION: PERSPECTIVES ON THEORY AND POLICY

Caribbean international urbanization differs most strikingly from internal national urbanization in its relatively high level of selectivity. However, the high level of interaction with the home country presents a situation which is not dissimilar from the usual pattern of outflow and feedback which occurs between rural and urban places at the national level. Certainly, the trans-national aspect raises a number of questions.

Does the selectivity of international urbanization create a net drain on the resources which might have been channelled into a national urban centre? Is there a disproportionate number of the least advantaged in the Caribbean who migrate to and expand the national urban centres? Conversely, if the networks established by international urbanization are effective in generating net feedback of human and/or material resources, what are the short- and long-term effects of this urban process? Other questions concern the nature of the process of international urbanization. For example, are new international urbanites "marginal" economically, socially and politically in the wider urban system?

To conceptualize the immigrants in the metropolitan urban system as newcomers in that particular urban system, rather than as ethnic minorities, is to alter the focus from traditional negative views of immigration in North American and West European cities to an approach which could be positive in terms of related urban policies. Pertinent questions then concern the variability of the international urbanites with respect to the urban system.

What is the variation in their background? What is the nature of the social process associated with trans-national urbanization? immigrants concerned with survival and the accumulation of capital and/or skills to be used on the return to the home country, or do the migrants attempt to be part of the process of upward mobility and the securing of a more central position in the new society? In other words, are they marginal to mainstream urban processes or are they involved in economic sub-systems, invariably of an informal nature, social networks and political orientations which are distinct from the urban mainstream? What is the relationship between these informal subsystems and the formal system? What are the positive and negative implications of the pattern of urban processes of which the international urbanites are part? What is the nature of inter-generational change? Do the urban-born generations participate more fully in mainstream urban processes, or is the tendency towards the intensification of subcultures and the increased potential for alienation?

6.- CONCLUSION

The questions raised reflect the theoretical and policy issues which are common to both international migration and the process of urbanization. In conceptualizing both processes within a single analytical framework and in identifying common themes and variations within them is to move a step forward in the pursuit of wider theoretical principles concerning the movement of people and the processes involved in those movements.

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REGIONAL VARIATION OF MIGRATION AND FERTILITY IN HUBEI PROVINCE, PEOPLE'S REPUBLIC OF CHINA

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This paper examines migration patterns among inhabitants in cities, towns and villages, and the relationship between fertility and migration in the different localities. Data for this research come from a survey in Hubei Province in China in 1988. Located in south central China, Hubei had a total population of over 48 million in 1987. In terms of demographic characteristics and socio-economic conditions, Hubei is rather typical of China.

The sample survey began in April and was completed in December, 1988. A total of 52 research sites (villages, towns and urban districts) encompassing 4,390 households containing 18,725 individuals were sampled, and in-depth interviews were obtained from 7,702 respondents.

Multiple selection stages were used, in order to save time and survey costs. The first stage units were counties, cities and towns. Then districts, towns and villages were selected from cities and counties for the second stage. In urban areas, sample households were randomly chosen from the listing, while in rural counties and townships a certain proportion of households were selected according to size, after which one or two persons over 15 years of age were chosen from each household.

Three questionnaires -- a community questionnaire, which collected

aggregated information about population change and economic development, a household questionnaire, which obtained data concerning migration, fertility and household characteristics, and an individual questionnaire, which collected detailed information about individual migrants -- were used in the survey.

Four categories of migration status were defined: non-migrants, permanent in-migrants, temporary migrants, and commuters. Non-migrants included persons born in their current place of residence who had never moved, and return migrants. Permanent in-migrants were persons born elsewhere who had changed their registration to their current place of residence. Temporary migrants were registered in a place other than the place of interview but who considered the place of interview as their current residence. Commuters were also registered in an area other than the place of interview but they considered their current residence to be their place of registration; they typically lived within a short distance of the place of interview and returned to their residence daily or frequently.

Six main demographic types of localities (see Table 1) can be distinguished in our research, utilizing the population size and the distance from urban centers.

For urban areas:

- A primate city which was the provincial capital and with over three million inhabitants. It had the highest per capita income and education level.
- Cities between 100,000 and 500,000 inhabitants. They had a lower per capita income and educational level than the provincial capital. They were typical medium-sized cities.
- 3. Primate towns which were the county capital. They were the economic, political and cultural center for rural areas.
- 4. Small towns with between 2,000 and 5,000 inhabitants, with a certain proportion of the population engaged in non-agricultural activities

and employed in such non-agricultural functions as commerce, industry, education, culture, and administration.

For rural areas, two categories were identified:

- 5. Villages which were near towns, considered outskirts.
- 6. Villages far away from towns, considered outlying districts.

We will first of all examine the impact of urban policies on the migration patterns among the six localities.

Comparisons among the migration status of inhabitants in cities, towns and villages indicated that the highest percentage of non-migrants were in the lowest locality -- that is, villagers tended to have less mobility than the inhabitants of towns and cities (see Table 2). Among those who resided in outlying villages, 86.7 percent of the population was non-migrant, against 42.4 percent of the population in the capital city. In rural villages, 79.4 percent of inhabitants in the outskirts was non-migrant, against 86.7 percent of the population of outlying districts. Comparison within urban categories shows that respondents in towns had more mobility than those who lived in cities. This situation reflects the impact of China's urban policy, which strictly limits the size of the larger cities in order to develop those of medium size and encourage the growth of small towns. The Chinese government implemented this policy through the system of registration that controls permanent migration.

The impact of this urban policy can also be seen from the distribution of permanent in-migration by time period in the urban areas (see Table 3).

Comparison of data on in-migrants in towns against those in cities showed the highest proportion (37.4 percent) of in-migrants living in primate towns, the lowest rate (9.0 percent) living in outlying districts, and the proportion of those living in cities lying in between these two extremes.

The impact of China's urban policy can also be confirmed by the fact that from 31 to 44 percent of the in-migration into medium-sized cities and towns occurred after 1983, compared with 11 percent in provincial capitals and 32 percent in outlying districts.

Secondly, we would also like to take a look at the differentials between permanent migration and temporary migration.

Differentiating between male and female migrants seemed to indicate that the number of females tended to predominate in permanent migration, while the number of males tended to predominate in temporary migration (see Table 4). This difference reflected the fact that the two kinds of migrations had different causes: temporary migration was more a response to employment, while permanent migration was more a response to marriage.

Thirdly, we wanted to test a very popular hypothesis about the relationship between fertility and migration. One hypothesis suggested that in-migrants were more likely to have a higher fertility rate than non-migrants in urban areas because the in-migrants in those areas almost always had a rural background.

Comparison of the six categories (see Table 5) showed that, compared to non-migrants, permanent in-migrants had a somewhat higher fertility rate (the average number of children ever born per childbearing age woman), with few exceptions.

Another hypothesis suggested that temporary migrants in urban areas were more likely to have higher fertility rates than non-migrants in rural China. This was explained by the asssumption that peasants who resided in their place of registration would be more restricted in their fertility behavior by the family planning programs than those who moved away from their place of registration.

For those aged 20-29, no differences were apparent in the provincial capital between temporary migrants, commuters and non-migrants. The average number of children ever born to these childbearing temporary migrants living in urban areas (the first four localities) was 0.64,

compared with 1.041 for non-migrants in rural villages (the last two categories). Among women aged 30-34, the fertility rate of temporary migrants was also lower than that of non-migrants in rural villages.

Obviously, no evidence could be obtained which shows that temporary mobility has a pro-natalist influence.

1. Type of Locality and Sample allocation Hubei Province, People's Republic of CHINA, 1988

Locality	or dis	tance	2.per capita income (RMB)	3.Average of years of education (For Age>=15)	4.Number of household	5.Number population
CITY						
A.	3 mill:	ions	1100	7.18	620	2981
B. Town	100-200	thousands	830	5.95	415	1787
c.	10-20	thousands	710	6.74	526	2171
D. VILLAGE	2-5	thousands	540	5.31	414	1690
E.	2 kilomet from	ters distance town	490	5.06	1353	5909 , <i>,</i>
F.	5 kilom from	eters distance town	400	4.49	1062	4187
Total		-	-	5.65	4390	18725

Notes:A=Primate city ;B=100 thousand plus city C=Primate town ;D=1 thousand plus town ;E=Village close to Big town

F=Village far away from big town

2.Migration Status by locality

Hubei Province, People's Republic of CHINA, 1988

Locality	1.Percentage of in-migrants	2.Percentage of temporary migrants	3.Percentage of commuters	4.Percentage of non-migrants
CITY		··		
A.Primate				
city	15.6	16.6	25.4	42.4
B.100 thousand				
plus city TOWN	13.3	18.6	24.3	43.8
C.Primate				
town	37.4	7.9	15.5	39.2
D.1 thousand plus town VILLAGE	10.8	8.1	44.8	36.3
E.Village close				
to Big town	12.3	6.9	1.5	79.4
F.Village far a	way 9.0	3.5	0.7	86.7
Total case	2800	1689	2406	11830
Total pct	15.0	9.0	12.8	63.2

3.Distribution of permanent in-migrations by locality and Time Period Hubei Province, People's Republic of CHINA,1988

Locality	before 1960	1960-1979	1970-1978	1978-1982	after 1983
CITY		· · · · · · · · · · · · · · · · · · ·	•		
A.Primate					
city	40.9	15.9	24.3	8.0	11.0
B.100 thousand					
plus city TOWN	15.9	9.7	20.6	22.7	31.1
C:Primate					
town	10.5	10.8	21.4	18.2	38.9
D.1 thousand					
plus town VILLAGE	11.0	15.8	12.6	16.9	43.7
E.Village close			•		
to Big town	10.5	11.9	15.6	19.4	42.6
F.Village far away	7				
from big town	10.8	13.0	24.7	19.4	32.1
Total case	451	349	565	484	951
Total pct	16.1	12.5	20.0	17.3	34.0

4 .Sex Ratio by locality and Migration Status in Hubei Province, People's Republic of CHINA, 1988

Locality	1.non-migrants	2.in-migrants	3.temporary migrants	4.commuter
CITY				
A.Primate				,
city	103.7	101.2	121.2	87.3
8.100 thousand plus city TOWN	112.3	85.9	171.0	73.0
C.Primate town	98.0	97.2	103.7	94.9
D.1 thousand plus town /ILLAGE	131.5	69.5	124.7	112.8
E.Village close to Big town	118.8	49.3	106.6	143.3
F.Village far away from big town	107.9	41.6	110.1	287.6

5.Average number of children ever born per childbearing women (Age 20-54) by age group, locality and migrations status Hubei Province, People's Republic of CHINA, 1988

		1.Permanent in-migrants	2.Temporary	3.Commuters	4.Non-migrants
Age Group 1.20-29	Locality	· · · · · · · · · · · · · · · · · · ·			
	Α.	0.65(34)	0.40(81)	0.40(126)	0.40(180)
	в.	0.79(19)	1.15(39)	0.97(39)	0.70(67)
	c.	0.61(98)	0.48(23)	0.98(56)	0.52(82)
	D.	1.25(32)	0.83(18)	1.01(79)	0.80(49)
	E.	1.43(187)	1.17(82)	0.64(14)	0.96(413)
	F.	1.51(101)	0.89(37)	- '- '	1.14(341)
2.30-34					
	Α.	1.06(17)	1.57(14)	0.65(29)	0.88(59)
	В.	1.43(23)	1.96(26)	1.41(12)	1.12(25)
	C.	1.42(57)	1.89(9)	1.83(12)	1.14(37)
	D.	2.30(27)	1.17(12)	1.84(25)	2,00(10)
	E.	2.19(75)	2.16(31)	1.00(4)	2.20(113)
	F.	2.07(70)	1.60(5)		2.05(141)
2.35-44					
2.30-44		1 74 / 24\	1 04 / 171	1.80 (25)	1 70 (72)
	A. B.	1.74 (34)	1.94 (17) 2.77 (26)	, ,	1.70 (73) 2.53 (34)
		2.49 (43)			
	c.	2.42 (86)	2.33 (6)	2.87 (15)	2.29 (35)
	D.	2.70 (23)	2.56 (9)	2.43 (51)	2.77 (22)
	E.	2.89 (101)	3.00 (36)	2.00 (3)	3.02 (213)
0	F.	2.64 (53)	2.13 (8)	1.00 (2)	2.50 (151)
3.45-54	_				
	A.	3.06 (51)	4.23 (30)	4.38 (52)	2.79 (63)
	в.	3.96 (23)	4.09 (11)	3.06 (18)	4.23 (30)
	c.	3.00 (51)	3.50 (4)	4.15 (13)	3.93 (30)
	D.	4.50 (10)	2.25 (4)	4.07 (29)	4.14 (21)
	E.	4.21 (52)	3.86 (14)	2.00 (4)	3.80 (147)
	F.	4.70 (20)	2.00 (2)	2.00 (1)	3.79 (100)

Notes:A=Primate city $\,$;B=100 thousand plus city C=Primate town ;D=1 thousand plus town $\,$;E=Village close to Big town F=Village far away from big town

THE URBAN HIERARCHY OF CHINA

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1.- INTRODUCTION

China is a country with one of the longest urban traditions of any country in the world. Cities are believed to have made their first appearance in China more than two thousand years ago. By the year 100, A.D., the city of Luoyang reached a population size of 650,000, a number equal at the time to that of Rome (United Nations, 1980: 6). Moreover, the present city of Xi'an, the capital of Shaanxi Province, which was known in ancient times as Changan, attained a population of one million residents in the year 700 A.D., the first million-plus city on record in all of Asia (Chandler and Fox, 1974: 291). For most of the thousand years between 800 and 1800, China was unsurpassed in both the number and size distribution of its cities.

However, since about 1800, urbanization in China has not paralleled the scale achieved in the West during the same time period. While cities in the West have grown rapidly during the nineteenth century, this has not been the case in China. To illustrate, urban residents in China only accounted for six percent of the country's population in 1893 (Skinner, 1977). And even though the world's first million-plus city was a Chinese city appearing more than twelve centuries ago, China had

only two cities in 1922 with populations exceeding one million in size (Shanghai and Guangzhou).

In recent decades, however, there has been a trend in China toward an increasing concentration of the urban population in large cities. In 1983 there were 46 million-plus cities in China, while the entire world in 1980 contained 234 million-plus cities (United Nations, 1981). The Chinese residents of these 46 million-plus cities accounted for almost one-half of all urban residents in the country (Wang, 1986).

However, the majority of China's people do not live in cities, large or small. In 1984 only about 32 percent of China's population, or about 330 million persons, lived in cities. This low percentage of urban residents notwithstanding, the urban population of China is larger than the total population of all other countries in the world, save two—India and the USSR.

The lack of adequate statistical materials has been a rather detrimental factor hindering the study of urban structure in China. Although some historical and descriptive studies of particular Chinese cities have been conducted (cf., Murphey, 1974; Kapp, 1974; Chan, 1981), these have provided "very little guidance (about the structure) ... of either very large Chinese cities or the urban system as a whole" (Chen, 1988: 227). But with the release in the past few years of several volumes of statistical and urban yearbooks (State Statistical Bureau, 1983b, 1984, 1985), as well as the results of the 1982 population census (State Statistical Bureau, 1983a), many scholars have turned their attention to investigations of the structure and dynamics of China's cities (Goldstein, 1985; Chen, 1988; Poston, 1987; Poston and Gu, 1988, 1989). As Coale has observed in a broader, although equally applicable context, "the welcome flood of accurate demographic data from China provides an unusually detailed depiction of an extraordinary population" (1984: 71).

The objective of this paper is to use these newly available urban data and to examine the ecological structure of the urban system of China's 295 cities. We are especially interested in ascertaining the

patterns and dominance of these 295 cities. We turn now to an examination and specification of the theoretical and empirical literature guiding our research inquiry.

2.- METROPOLITAN AND URBAN DOMINANCE AND INTEGRATION

The relationships of cities with their hinterlands and with other cities within an urban system or hierarchy may be analyzed either quantitatively (in terms of population size) or qualitatively (in terms of functional roles). Although city population size is often assumed to be a surrogate or proxy indicator for functional dominance (the larger the city, the greater its functional dominance), the empirical correspondence of the two is far from perfect. Vance and Sutker have noted that there is much more to metropolitan and urban dominance than large size. "Any city with a large population is usually referred to as a metropolis, but it may be well to point out that, while all metropolises are large cities, not all large cities are metropolises. Population size is a concomitant; function is the keynote" (Vance and Sutker, 1957: 103-104; see also Bean, Poston and Winsborough, 1972).

Human ecologists have long recognized that a territorial division of labor among cities of an urban system is generated by an increase in the number and size of cities. The differentiation of functions among these cities inevitably leads to a hierarchical structure within the system. Early analyses of urban functions, however, tended to focus primarily on the relationships between the nodal cities and their immediate hinterlands, and not on the relationships between and among the nodal cities (Gras, 1922; McKenzie, 1933; Bogue, 1950).

The pioneering study of the metropolitan hierarchy in the West is *Metropolis and Region* by Duncan and his colleagues (1960). In this examination of U.S. metropolitan areas with populations of at least 300,000 in 1950, the authors developed a seven-fold quasi-hierarchical classification of the cities with respect to their manufacturing, financial and commercial functions; they showed "concretely how cities are differentiated in terms of metropolitan function and regional relationship" (Duncan et al., 1960: 260). This seminal ecological analysis has been followed by a number of replications and extensions (cf., Bean, Poston

and Winsborough, 1972; Wanner, 1977; South and Poston, 1980, 1982; Eberstein and Frisbie, 1982).

Particularly important for the purposes of this paper are the ecological studies of the metropolitan and urban areas of the southern region of the U.S. conducted by Vance and Sutker (1957) and by Galle and Stern (1981) (see also Duncan and Lieberson, 1970). These analyses are grounded in the theoretical rationale just noted, and further illustrate the methodological approach we will follow in our investigation of urban dominance among Chinese cities.

The Vance-Sutker and Galle-Stern studies focused on the organizational features of U.S. southern cities. These cities were seen as the agents for organizing their hinterland resources, for providing intermediate product processing and trans-shipment points for goods flowing to other areas, and for developing and maintaining their regions' financial flows (Galle and Stern, 1981). The urban centers differed from one another according to the degree to which they exhibited these attributes of organizational control and integration. The more these attributes were present in a city, the higher the rank of the city in the urban hierarchy.

This vertical dimension of urban differentiation is best conceptualized by viewing the wholesaling, transportation, administrative and financial features of the city (Vance and Sutker, 1957; Duncan et al., 1960; Galle and Stern, 1981, Meyer, 1984, 1986; Marshall and Stahura, 1986). The greater the absolute concentration of these activities in the city, the greater its possession of power for regulating and coordinating interaction with other cities. The presence in a city of wholesaling, financial and administrative activities represents the degree to which the city exercises authority and power relations over other cities.

To delineate the patterns of metropolitanization in the South, Vance and Sutker gathered data reflecting both the degree of dominance in the city, and the underpinnings of the city for building its market and amassing wealth. They measured the degree of dominance with three indices: (1) wholesale sales, (2) business service receipts, and (3)

number of branch offices. They gauged the extent of the city's underpinnings with three indices: (4) retail sales, (5) bank clearings, and (6) value added by manufacturing. Galle and Stern did not have data available on bank clearings or on branch offices; they substituted the number of manufacturing establishments for the latter index. Both Vance and Sutker and Galle and Stern gave the first three indices twice the weight of the latter indices owing to their decidedly greater importance in the delineation of metropolitan dominance. This methodology is relatively simple and straightforward and has shown a remarkable robustness in the specification of the U.S. urban system in the South (Galle and Stern, 1981).

Three recent analyses of the urban system of China also deserve our attention in their review. Chen (1988) has examined the ecological characteristics of the 16 largest cities in China as of 1982. He found that these very large Chinese cities "have the features of large western urban centers at earlier stages of urbanization" (1988: 247). However, although the Chinese cities he studied "have higher standards of living and more urban amenities than the rest of the nation, ... they share many of the serious problems of very large or primate cities in the Third World" (1988: 247), such as crowding and industrial pollution.

Poston and Gu (1988, 1989) analyzed the hierarchical structure of the twenty cities in China with populations in 1984 of at least two million. They found the hierarchy of China's giant cities to be characterized by three super and national metropolises: Shanghai, Beijing and Tianjin; their study also showed the remaining seventeen metropolises to have decreasing amounts of dominance and control, from the 4th ranked Guangzhou to the 20th ranked and the smallest giant city of China, Fushun. The twenty cities were analyzed in terms of the organization of the resources of their hinterlands and their levels of dominance and control. The study delineated the spheres of ecological influence and control that tend to transcend political and provincial boundaries. In the words of McKenzie (1933), these types of analyses give a "clear picture of metropolitan organization ... for some ... metropolises are regional in character, some are interregional, and one or two are international in their influence" (1933: 245).

In another analysis, Poston (1987) investigated the hierarchy of the cities of the Dongbei (Northeastern) region of China. In 1984 there were 35 cities in this region. Employing a similar procedure to that used in the above analysis of the giant cities, Poston's analysis of the Dongbei cities demonstrated that the region contained one interregional city, Shenyang, and three with regional control, Harbin, Dalian and Changchun; however, at the low end of the hierarchy of the Dongbei region were eight strictly urban centers, i.e., cities with control solely over their adjacent hinterlands.

In an important sense, this paper is an attempt to extend to the 295 cities of China the earlier analyses of Vance and Sutker (1957), Galle and Stern (1981), Poston (1987), and Poston and Gu (1988, 1989).

3.- DATA AND METHODS

This study draws its data from the 1985 City Yearbook of China (State Statistical Bureau, 1985). The Chinese definition of a city includes the actual city and its surrounding urban and rural hinterlands. In China, many of the larger cities include an extensive population component in the outlying rural areas, and the number of these rural counties varies among the cities from none to many. Beijing has nine rural counties, for instance, while Nanjing and Changchun each has five. Chen (1988) has noted that these rural parts of the larger cities "bear some resemblance to the rural fringe (of western metropolises) -- that subzone of the rural-urban fringe contiguous with the urban fringe -and have a lower density of occupied dwellings than the median density of the total rural-urban fringe, a higher proportion of farm than nonfarm and vacant land, and a lower rate of increase in population density, land use conversion, and commuting" (1988: 231; see also, Pryor, 1968: 206). Analysists of Chinese cities have thus restricted their studies to the strictly urban parts of the cities (Goldstein, 1985; Chen, 1988). This part of the city is structurally similar to the urbanized area of U.S. metropolitan areas. We follow this approach in our study.

For each of the 295 Chinese cities, we gathered the same general kinds of dominance and integration data as those used by Vance and Sutker, Galle and Stern, and Poston and Gu in their analyses of U.S. Southern, and Chinese, cities. We did not replicate perfectly their measures, although the data we employ are very similar. Recall that these earlier studies used two kinds of measure: 1) those reflecting the dominance of the city over other cities, and 2) those reflecting the underpinnings of the city in terms of building its market and amassing wealth (Galle and Stern, 1981).

To tap the degree of industrial dominance of the city, we gathered for each of the 295 Chinese cities the following two kinds of industrial data: 1) the number of industrial enterprises (INDUNIT); and 2) the value (in Rmb.) of industrial output (INDVALUE). The organization of transportation and communication facilities is another major indicator of a city's degree of dominance, and this was measured with the following three kinds of data: 3) the total number of passengers into and out of the city via air, highway and railroad (PASSENGER); 4) the total volume of freight (in kg.) shipped into and out of the city via air, highway, railroad and water (FREIGHT); and 5) the total value of postal services (in Rmb.) (POSTALVALUE).

To represent the underpinnings of the city for developing its market and amassing wealth, the second category, for each city we gathered data on 6) the value (in Rmb.) of retail sales (RETAILVALUE); 7) the number of retail units (RETAILUNIT); and 8) the number of service units (SERVICEUNIT). The means and standard deviations of these eight variables are provided in Table 1.

While some of the items are self-explanatory, some discussion is required, particularly with regard to industrial enterprises. These are enterprises devoted to light and to heavy industry. Light industry produces consumer goods, and heavy industry produces the means of production, e.g., "extraction of petroleum, coal, metal (and so forth, as well as) ... the smelting and processing of metals, coke making and coke chemistry" and so forth (State Statistical Bureau, 1984: 564). Retail units include state, collective, and private enterprises performing retail functions, such as grocery and department stores, grain and rice stores, and so forth. Service units include state, collective and private enterprises performing service functions, such as barber shops, repair service shops, medical clinics, and so forth.

Our investigation of the patterns of dominance and integration of the 295 cities of China follows the procedures used by Vance and Sutker, Galle and Stern, and Poston and Gu. We first constructed z-scores for each city for each of the eight measures, so that the relative positions of each city on each measure would be comparable. We then weighted the first five measures, those directly reflecting urban dominance, by two, because they, more so than the other three measures, particularly emphasize urban dominance, control and integration. Finally, we summed the weighted z-scores for the eight measures for each city to provide a composite index of urban dominance. The composite index of urban dominance (DOMINANCE) is obtained for each city with the following formula:

DOMINANCE = Z (INDUNIT)*2 + Z (INDVALUE)*2 + Z (PASSENGER)*2 + Z (FREIGHT)*2 + Z (POSTALVALUE)*2 + Z (RETAILVALUE) + Z (RETAILUNIT) + Z (SERVICEUNIT), where INDUNIT is the number of industrial enterprises in the city; INDVALUE is the value (in Rmb.) of the city's gross industrial output from industry; PASSENGER is the total number of passengers entering and leaving the city; FREIGHT is the total volume of freight (in kg.) shipped into and out of the city; POSTALVALUE is the total value (in Rmb.) of postal services used in the city; RETAILVALUE is the total value (in Rmb.) of retail sales in the city; RETAILUNIT is the number of retail units in the city; SERVICEUNIT is the number of service units in the city. All the data have been gathered with respect to the urban component of the city. We turn now to the results of our investigation.

4.- ANALYSIS AND FINDINGS

Urban Dominance Rankings

Table 2 ranks the 295 Chinese cities in China on the basis of the value of their urban dominance scores. From this ranking, we were able to classify the 295 cities into nine categories which together constitute the urban hierarchy of China. The nine categories, the number of cities in each of the categories, and the range of values of the composite z-scores within each category, are listed in Table 3.

The first category contains only one city, Shanghai; this city is defined as a Super Metropolis, meaning that it has overwhelming influence and dominance over the cities of China; empirically, this is indicated by its very large composite z-score of 98.10, by far the highest score of any city in China. Shanghai's dominance score is approximately 30 points higher than that of Beijing, the city with the next highest score. According to our methodology, Shanghai stands very much above the next city of Beijing and substantially above the remaining 293 cities. Shanghai is a Super Metropolis, comparable in influence to New York, London and Tokyo and other Super Metropolises around the world.

The second category also contains only one city, Beijing. We have labelled this city a National Metropolitan Center, meaning that the city has influence and dominance at the national level, just below that of Shanghai, China's Super Metropolis. Beijing's composite z-score is 68.23. It has been the capital city in China since 1949. Significant industrial and commercial development has taken place in Beijing. Compared with Shanghai, a city port originally developed commercially and industrially since the 1840s, Beijing lags behind in terms of manufacturing, transportation and services. Nevertheless, Beijing stands far above the other major cities in China, and is similar in terms of its influence and control to cities such as Los Angeles, Washington, D.C., and Philadelphia.

We have labelled cities in the third category as Regional Metropolitan Centers. Cities in this category do not have influence and control as overarching as do Shanghai and Beijing, but they still exert significant dominance across provincial boundaries. There are five cities in this category: Chongqing, Tianjin, Guangzhou, Wuhan and Chengdu, accounting for about two percent of the 295 cities. Their composite z-scores range from 30.85 to 45.40. Among these five cities, Chongqing and Chengdu are in Sichuan province, part of the Southwestern region of China; they are the two major industrial and commercial cities in the Xinan (Southwest) region and also play important roles in terms of regional transportation and services. Their influence and control lie far beyond the provincial border of Sichuan. Tianjin is a city port in the eastern part of the Huabei (North China) region and has experienced tremendous development and growth since it was put under the direct

control of the central government in the late 1940s. In terms of influence and control in the Huabei region, Tianjin is second only to Beijing. Wuhan is a river port city which lies at the confluence of the Yangtse River and the Han River in the Huazhong (Central) region. Wuhan is known for its steel production and heavy industry, and for its key role in linking the East and the West via the major railroad line in China. Its influence in the region is predominant. Guangzhou is a city port at the mouth of the Pearl River and is a major industrial and trade center in Southeast China. It is famous for its manufacturing and processing industry, services and transportation.

The fourth category is defined as Subdominant Regional Metropolitan Centers, indicating that cities in this category have influence and control across provincial boundaries but are not as influential as the There are eighteen cities in this Regional Metropolitan Centers. category, accounting for 6 percent of the total group of 295 cities. Their composite z-scores range from 14.14 to 26.19. One amazing finding is that, of the eighteen cities in this category, eight are located in the Yangtse Delta area. These are Nantong, Hangzhou, Yangzhou, Ningbo, Wenzhou, Suzhou, Nanjing and Wuxi, most of which are newly industrialized cities. Another interesting fact is that one-half of these 18 cities are located in the central part of Southeastern China. Of the remaining nine cities, three are in the Shandong Peninsula, three in the Huai River area of east China, one in the Northwest (Xi'an), one in the North (Tangshan), and one in the Northeast (Shenyang). Generally, the major cities in the South appear to be more developed in terms of regional dominance and control than the cities in the North.

The fifth category is defined as Provincial Metropolitan Centers, meaning that cities in this category have predominant influence and control very much confined within provincial boundaries. There are seventeen cities in this category, accounting for 6 percent of the total 295 cities. Their composite z-scores range from 6.28 to 12.50. Many of the cities in this category are capital cities of the Northern provinces, such as Zhengzhou, Harbin, Jinan, Taiyuan, Changchun; others are relatively smaller cities of the South, such as Zhanjiang, Jiaxing, Zhenjiang, and Shaoxing.

The sixth category is defined as Urban Centers with Provincial Influence, indicating that cities in this category have influence and control within their provincial boundaries but are not as predominant as those of the Provincial Metropolitan Centers. There are 42 cities in this category, accounting for 14 percent of all the cities. Their composite z-scores range from 0.14 to 5.95. It can be noted that with but three exceptions, all of the provincial capital cities of China are at least urban centers with provincial influence.

The seventh category is defined as Urban Centers with Limited Provincial Influence, indicating that cities in this category have very limited provincial influence, and for that matter, less than that of the Urban Centers with Provincial Influence. There are 60 cities in this category, accounting for one-fifth of all the cities. Their composite z-scores range from -3.99 to -0.23. Only three provincial capital cities, Yinchuan, Urumuqi, and Huhehot, all in the economically underdeveloped Xibei (Northwest) region, are in this category.

From this observation and the discussion above, we come to one of the more fascinating, but not that unsurprising, findings of the present research. The development of cities in terms of their dominance and control in the urban hierarchy is closely associated with the level of development of the region where these cities are located. A provincial capital city in a less developed area will necessarily be less developed in terms of dominance, integration and control than a relatively smaller or medium-sized city in a more developed region. For example, Urumuqi, Huhehot and Yinchuan are the provincial capitals of the Xinjiang, Inner Mongolia and Ningxia provinces respectively. Compared with even smaller cities both in terms of population size and administrative ranking in the southeastern regions, such as Wuxi in Jiangsu, and Ningbo in Zhejiang, they do not fare well in the ecological rankings. They are ranked far below Wuxi and Ningbo. As such, it appears to be clear that the conventional ranking of a city according to its role in the political and administrative hierarchy will often tend to underestimate or distort the ecologically precise picture of the urban hierarchical structure in a country as large and as diverse as China. This result further suggests that a smaller city in a more developed province may have greater ecological influence and control across its

provincial borders than does the provincial capital within the provincial border. For example, Nantong, a Subdominant Regional Metropolitan Center in Jiangsu province, appears to have more influence in Anhui province than Hefei, the capital of Anhui province, an Urban Center with Provincial influence. In the context of regional integration and control, ecological variables would appear to play more important roles than the political and administrative ones.

The eighth category is defined as Urban Centers with Limited Sub-provisional Influence, which means that cities in this category have sub-provincial influence, such as influence at the precinct level or influence across or within counties. There are 40 cities in this category, accounting for 14 percent of all the cities. Their composite z-scores range from -4.83 to -4.02.

The ninth category is defined as Urban Centers, indicating that cities in this category have little if any influence over other cities. In a sense, they are self-sufficient. There are 111 cities in this category, all of which are small cities, and they account for about 38 percent of all 295 cities. Their composite z-scores range from -6.97 to -4.86. These cities organize the many mutually interdependent sustenance and related economic and commercial activities of their adjacent towns and hinterlands. But for all practical purposes, their spheres of ecological dominance and control are restricted to their adjacent areas and seldom beyond.

Dominance and Population Size

Conventional wisdom suggests that a city's ranking with regard to the size of its population is the major indicator of the importance of the city in the urban hierarchy. We have taken another position in this paper, namely, that the relationships of a city with its hinterlands and with other cities, i.e., its degree of dominance, are the better indicator of its position in the hierarchy. Although city population size is often assumed to be a surrogate or proxy indicator for functional dominance (the larger the city, the greater its functional dominance), the empirical correspondence of the two is far from perfect. As mentioned earlier, Vance and Sutker have noted that there is much more to urban

dominance than large size. "Any city with a large population is usually referred to as a metropolis, but it may be well to point out that, while all metropolises are large cities, not all large cities are metropolises. Population size is a concomitant; function is the keynote" (1957: 103-104).

To examine the association between dominance and population size, we took the dominance scores in Table 2 (these are the sums of the z-scores of eight measures -- see the above equation) and divided them by eight to obtain an average urban dominance z-score for each city. We then converted the population size (of the urban component) of each city into z-scores. The degree of correspondence between the two among the cities of China, not surprisingly, is far from perfect.

In Figure 1, the 295 cities have been ranked according to their population size z-scores; these scores run a relatively smooth line from the left to the right. Also plotted in Figure 1 are the urban dominance z-scores for the 295 cities; these dominance scores fluctuate somewhat considerably about, and are frequently quite a bit higher than, the population size z-scores. The rankings of cities based on ecological function do not necessarily converge with the rankings based on population size; neither set of rankings perfectly reflects the other.

Zero-order correlations between population size and dominance scores are presented in Table 4. Among all 295 cities, the relationship is high and positive; $\mathbf{r}=0.81$. An inspection of the scatterplot (Figure 2), however, indicates that this very high association is caused mainly by two outliers, i.e., Shanghai and Beijing; these are two cities with very large populations and very high dominance scores. When we remove them from the analysis, the correlation coefficient is reduced to 0.69. When we further eliminate the cities in the next category, i.e., the five Regional Metropolitan Centers (thereby reducing the sample to 288 cities), the coefficient is further reduced to 0.54.

Next, when we calculate correlations for cities within each of the individual dominance categories described by us in the previous section, all the zero-order correlation coefficients are very small. Among the categories of cities, the correlations range from a very low .01 to a

modest .46, indicating once again that the functional rankings of cities do not correspond very well at all with the rankings of cities based on population size.

Thus, we conclude that the overall high correlation of .81 between dominance and population size for the 295 cities is seriously inflated by outliers such as Shanghai, Beijing and others. Although population size is an influential variable when describing the roles cities play in the urban hierarchy, by itself it is insufficient and incapable of capturing the degreee of dominance and influence that cities impose upon their hinterlands and other cities.

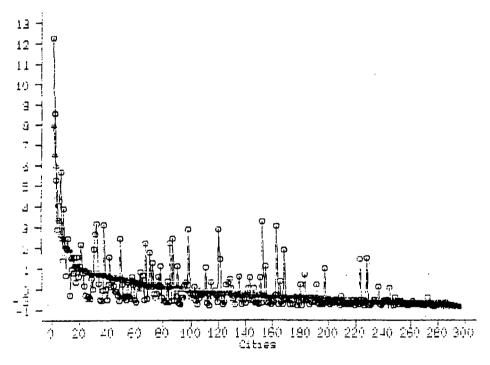
5.- CONCLUSION

In this paper we have examined the patterns of dominance and subdominance of the 295 cities of China. Within a human ecological perspective, the territorial division of labor of these cities was studied. The cities were analyzed in terms of the organization of their hinterlands and their levels of metropolitan dominance and control. This investigation of the urban hierarchy of China has permitted us to delineate the spheres of ecological influence and control of the cities that transcend political, i.e., provincial and county boundaries.

Our analysis provides a picture of China's urban hierarchy as of the year 1985. However, it is important to note that in recent years many of China's cities have undergone considerable changes and transformations in terms of their numbers of inhabitants and their functional roles. Since these changes will likely be sustained as China continues its quest toward economic development and modernization, we are inclined to predict that in the next few decades there will be additional realignments in the patterns of dominance and subdominance among the cities of China. Accordingly, it will be interesting to conduct another study of the urban hierarchy of China around the turn of the century. Whereas studies of the urban hierarchy in the United States have tended to point to a certain degree of inertia over time, the extensive urban, industrial and economic transformations currently being experienced in China will be a dominant characteristic of its urban system in the next few decades.

Figure 1. Comparison of Urban Dominance Z-Scores and

Population Size Z-Scores For Each of 295 Cities of China, 1985



O Urban Dominance Z Score

△ Population Size Z Score

Figure 2.

Scatter-diagram of Urban Dominance Z-Scores and Population Size Z-Scores:
295 Cities of China, 1985

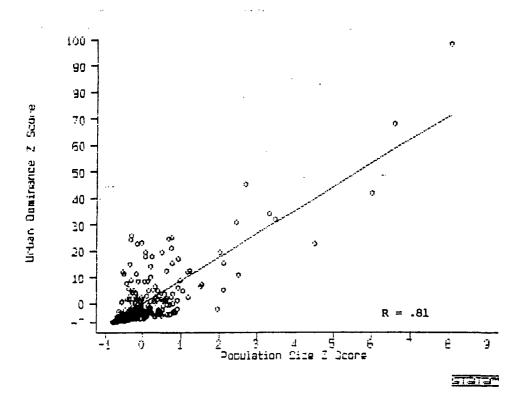


Table 1
Summary Statistics of the Eight Variables: 295 Chinese Cities, 1985

	Variables	Mean	St. Dev.
1.	Indunit	832.21	1321.92
2.	Indvalue	200637.40	526710.10
٤.	Passenger	1338.53	1858.60
4.	Freight	906.20	1729.49
5.	Postalvalue	581.43	1420.02
٥.	Retailvalue	71833.65	127375.70
1.	Retailunit	10315.94	15845.52
8.	Serviceunit	2256.26	3585.53

Table 2
Urban Dominance Z Scores and City Population Size:
295 Cities of China, 1985

City Province		Population (in 10,000)	Z score	Rank
1. Super Met	ropolitan Cente	er.		
SHANGHAI	Shanghai	688.13	98.10	1
2. National i	Metropolitan Co	enter	,	
BEIJING	Beijing	575.46	68.22	2
3. Regional !	detropolitan Co	enters		
Chongqing	Sichuan	273.37	45.39	3
TIANJIN	Tianjin	531.21	42.09	4
GUANGZHOU	Guangdong	322.16	34.1	5
WUHAN	Hubei	333.75	32.25	6
CHENGDU	Sichuan	253.96	30.84	7
4. Sub-domina	ant Regional Me	etropolitan Cei	nters	
Nantong	Jiangsu	40.27	26.18	8
HANGZHOU	Zhejiang	122.29	25.02	9
FUZHOU	Fujian	116.48	24.62	10
Yangzhou	Jiangsu	38.22	24.48	11
Ningbo	Zhejiang	61.56	23.21	12
Wenzhou	Zhejiang	.51.91	22.95	13
SHENYANG	Liaoning	413.48	22.94	14
Qingdao	Shandong	122.95	21.31	15
Weifang	Shandong	103.32	19.64	16
Suzhou	Jiangsu	69.55	19.47	17
NANJING	Jiangsu	220.75	19.39	18
Wuxi	Jiangsu	82.51	17.85	19
Yantai	Shandong	69.94	17.72	20
Tangshan	Hebei	136.61	17.10	21
XIAN	Shanxi	227.65	15.59	22
Yancheng	Jiangsu	123.69	15.5	23
Huaiyin	Jiangsu	37.36	14.81	24
Xuzhou	Jiangsu	80.64	14.13	25
5. Provincial	Metropolitan	Centers		
Dalian	Liaoning	158.78	12.50	26
CHANGSHA	Hunan	112.39	12.36	27

Note: If city name is capitalized, it is the capital city of its Province.

City	Province	Population (in 10,000)	Z score	Rank
ZHENGZHOU	Henan	155.16	12.19	28
Jiangmen	Guangdong	22.48	11.97	29
Changzhou	Jiangsu	51.26	11.49	. 30
Shaoxing	Zhejiang	24.41	11.34	31
HARBIN	Heilongjiang	259.21	10.9	32
Daging	Heilongjiang	80.21	10.05	3 3
JINAN	Shandong	139.46	8.99	34
Zhenjiang	Jiangsu	39.73	8.71	35
Jiaxing	Zhejiang	68.12	8.61	36
Shantou	Guangdong	74.64	8.58	37
Hengyang	Hunan	55.13	8.48	38
Fuoshang	Guangdong	29.98	7.85	39
TAIYUAN	Shaanxi	183.81	7.25	40
Zhanjiang	Guangdong	89.95	6.50	41
CHANGCHUN	Jilin	180.92	6.27	4 2
6. Urban Cente	rs with Province	ial Influence		
KUNMING	Yunnan	135.53	5.95	43
Shaoguan	Guangdong	34.36	5.63	14
HEFEI	Anhui	85.31	5.24	4 5
Zibo	Shandong	228.05	5.08	46
Ji'ning	Shandong	75.75	4.87	47
Lianyungan	Jiangsu	44.61	4.65	48
LANZHOU	Gansu	145.51	4.64	49
Huzhou	Zhejiang	96.01	4.60	50
Xiangfan	Hubei	40.74	4.33	51
Maoming	Guangdong	42.46	4.13	52
Zhuzhou	Hunan	48.78	3.93	53
Anshan	Liaoning	125.86	3.69	54
NANCHANG	Jiangxi	108.88	3.46	55 56
Jiujiang	Jiangxi	37.81	3.22	
Deyang	Sichuan	72.45	2.81	57
Datong	Shaanxi	98.1	2.69	58
Anyang	Henan	53.4	2.55	59
Kaifeng	Henan	61.92	2.49	60
Zaozhuang	Shandong	157.03	2.41	61
Wuhu	Anhui	49.17	2.33	62
Fushun	Liaoning	122 89.97	2.30	63
Zikong	Sichuan	89.97 112.78	2.23 1.78	64 65
SHIJIAZHUANG	Hebei Henan	102.39	1.78	66
Luoyang Baoji		35.21	1.59	: 67
RACII	Shanxi			
_	Sharri	69 43	1 50	R U
Xianyang Handan	Shanxi Hebei	62.43 95.43	1.58 1.55	68 69

City	Province	Population (in 10,000)	Z score	Rank
Luzhou	Sichuan	31.43	1.44	70
Xiangtan	Hunan	50.17	1.44	71
GUIYANG	Guizhou	135.27	1.04	72
Baotou	Neimongu	106.36	1.00	73
Jilin	Jilin	111.41	.96	74
Bengbu	Anhui	59.71	.74	75
Benxi	Liaoning	81.05	.68	76
Pingdingshan	Henan	80.39	.64	77
Sanming	Fujian	21.06	.55	78
Chifeng	Neimongu	86.53	.51	79
NANNING	Guangxi	90.29	.51	80
Qinhuangtao	Hebei	42.53	. 44	81
Shenzhen	Guangdong	19.14	.41	82
Shaoyang	Hunan	41.65	.32	83
Yangquan	Shaanxi	47.41	.14	84
7. Urban Cente	ers with Limite	d Provincial	Influence	
Qiqihar	Heilongjiang	124.6	-,23	85
URUMUQI	Xinjiang	114.73	30	86
Xinxiang	Henan	52.67	36	87
Liuzhou	Guangxi	61.79	43	88
Xiaogan	Hubei	119.12	52	89
Jinzhou	Liaoning	74.87	79	90
Huainan	Anhui	106.3	83	91
Puyang	Henan	105.95	98	92
Huangshi	Hubei	43.52	-1.38	93
Zhangjiak	Hebei	60.79	-1.39	94
Xiaman	Fujian	53.26	-1.47	95
Dandong	Liaoning	56.05	-1.48	96
Jiaozuo	Henan	49.5	-1.63	97
Jiamusi	Heilongjiang	54.65	-1.73	98
HUHEHOT	Neimongu	77.8	-1.78	99
Jixi	Heilongjiang	79.89	-1.85	100
Baoding	Hebei	52.28	-2.20	101
Liupanshu	Guizhou	216.64	-2.20	102
YINCHUAN	Ningxia	38.33	-2.22	103
Lingyi	Shandong	135.1	-2.26	104
Mudanjia	Heilongjiang	60.33	-2.32	105
Quanzhou	Fujian	42.69	-2.39	106
Zhongshan	Guangdong	104.72	-2.41	107
Liao-yang	Liaoning	56.53	-2.41	108
Changzhi	Shaanxi	45.14	-2.43	109
XINING	Qinghai	57.64	-2.54	110
Putian	Fujian	27.02	-2.56	111

(Table 2 Continued)

City	Province	Population (in 10,000)	Z score	Rank
Yueyang	Hunan	39.81	-2.57	112
Leshan	Sichuan	97.01	-2.69	113
Changshu	Jiangsu	99.61	-2.78	114
Hunjiang	Jilin	68.49	-2.80	115
Suizhou	Hubei	127.89	-2.96	116
Ma'anshan	Anhui	35.85	-3.03	117
Yibin	Sichuan	63.09	-3.13	118
Dukou .	Sichuan	52.89	-3.14	119
Zhuhai	Guangdong	14.44	-3.14	120
Fuxin	Liaoning	65.32	-3.14	121
Jincheng	Shaanxi	60.67	-3.15	122
Guilin	Guangxi	44.69	-3.17	123
Jinhua	Zhejiang	79.61	-3.29	124
Jingdezhe	Jiangxi	55.93	-3.29	125
Qujing	Yunnan	74.61	-3.29	126
Jinmen	Hubei	101.15	-3.32	127
Linzhou	Hunan	18.67	-3.26	128
Chengde	Hebei	32.58	-3.38	129
Yichun	Heilongjiang	81.43	-3.47	130
Pingxiang	Jiangxi	127.04	-3.50	131
Tai'an	Shandong	130.99	-3.51	132
Zhangzhou	Fujian	30.45	-3.57	133
Hegang	Heilongjiang	57.74	-3.63	134
Dongying	Shandong	51.2	-3.69	135
Peiling	Sichuan	96.48	-3,72	136
Yingkou	Liaoning	46.54	-3.74	137
Tieling	Liaoning	44.17	-3.79	138
Yichang	Hubei	38.95	-3.79	139
Huaibei	Anhui	46.37	-3.80	140
Tongchuan	Shanxi	36.87	-3.86	141
Huaihua	Hunan	41.86	-3.91	142
Mianyang	Sichuan	83.49	-3.93	143
Longyan	Fujian	36.85	-3.98	144
8. Urban Ce	nters with Limite	d Sub-provinc	cial Influe	ence
Cangzhou	Hebei	28.7	-4.02	145
Tianshui	Gansu	19.67	-4.05	146
Xuchang	Henan	23.68	-4.07	147
Anging	Anhui	42.82	4 . 1	148
Tonghua	Jilin	36.34	-4.14	149
Yiyang	Hunan	35.93	-4.14	150
Zunyi	Guizhou	34.72	-4.15	151
Ganzhou	Jiangxi	33.87	-4.19	152

(Table 2 Continued)

City	Province	Population (in 10,000)	Z score	Rank
Changde	Hunan	21.36	-4.19	153
Daxian	Sichuan	20.04	-4.20	154
Baicheng	Jilin	27.8	-4.24	155
Ezhou	Hubei	92.29	-4.29	156
Yulin	Guangxi	120.32	-4.29	157
Xintai	Shandong	114.32	-4.29	158
Heze	Shandong	99.42	-4.30	159
Wuzhou	Guangxi	25.65	-4.32	160
Xingtai	Hebei	34.29	-4.34	161
Shuangyashan	Heilongjiang	42.08	-4.37	162
Xinyu	Jiangxi	59.62	-4.37	163
Chao-zhou	Guangdong	120.28	-4.37	164
Hebi	Henan	31.91	-4.44	165
Shashi	Hubei	24.68	-4.45	166
Weinan	Shanxi	69.01	-4.50	167
Quzhou	Zhejiang	69.9	-4.52	168
Chachu	Anhui	73.67	-4.65	169
Dezhou	Shandong	26.95	-4.66	170
Siping	Jilin	35.33	-4.66	171
Meixian	Guangdong	73.16	-4.67	172
Zhaoqing	Guangdong	18.01	-4.67	173
Laiwu	Shandong	103.58	-4.71	174
Tongling	Anhui	20.41	-4.71	175
Gejiu	Yunnan	33.77	-4.72	176
Shiyan	Hubei	31.5	-4.72	177
Chuzhou	Anhui	36.06	-4.75	178
Jining.	Neimongu	15.84	-4.76	179
Liaoyuan	Jilin	37.56	-4.77	180
Anshun	Guizhou	21.18	-4.79	181
Nanyang	Henan	28.23	-4.81	182
Xinyang	Henan	22.66	-4.81	183
Wanxian	Sichuan	27.66	-4.82	184
9. Urban Cente	rs	·		
Yingtan	Jiangxi	11.18	-4.85	185
Ka <u>i</u> yuan	Yunnan	21.33	-4.89	186
Tumen	Jilin	9.85	-4.90	187
Zixing	Hunan	32.19	-4.91	188
Haikou	Guangdong	27.86	-4.91	189
Shangqiu	Henan	19.29	-4.93	190
Neijiang	Sichuan	28.91	-4.96	191
Suihua	Heilongjiang	72.87	-4.96	192
Hanzhong	Shanxi	41.21	-4.98	193

City	Province	Population (in 10,000)	Z score	Rank
Linfen	Shaanxi	52.13	-5.01	194
Langfang	Hebei	50.95	-5.01	195
Jishou	Hunan	18.9	-5.05	196
Dali	Yunnan	38.91	-5.08	197
Liaoochen	Shandong	71.4	-5.08	198
Fuyang -	Anhuī	18.6	-5.10	199
Qinzhou	Guangxi	90.32	-5.11	200
Kelamayi	Xinjiang	18.01	-5.13	201
Zhoukou	Henan	21.4	-5.16	202
Xinzhou	Shaanxi	39.51	-5.18	203
Yakeshi	Neimongu	38.72	-5.18	204
Yong'an	Fujian	26.25	-5,22	205
Yuncheng	Shaanxi	42.82	-5.23	206
Yanji	Jilin	20.69	-5.24	207
Nanping	Fujian	41.52	-5.26	208
Qitaihe	Heilongjiang	29.29	-5.27	209
Xianning	Hubei	39.06	-5.27	210
Shizushan	Ningxia	30.3	-5.28	211
Shangrao	Jiangxi	14.06	-5.30	212
Sanya	Guangdong	31.35	-5.32	213
Nanchong	Sichuan	23.17	-5.34	214
Shihezi	Xinjiang	54.99	-5.34	215
Yiichun	Jiangxi	16.62	-5.39	216
Yuci	Shaanxi	41.54	-5.43	217
Hailaer	Neimongu	17.31	-5.44	218
Wuhai	Neimongu	25.75	-5.45	219
Hengshui	Hebei	27.99	-5.48	220
Liu'an	Anhui	15.6	-5.50	221
Ya'an	Sichuan	27.39	-5.52	222
Baoshan	Yunnan	68.11	-5.54	223
Leihe	Henan	15.47	-5.62	224
Laohekou	Hubei	40.39	-5.63	225
Tongliao	Neimongu	24.73	-5.63	226
Jiaojiang	Zhejiang	15.8	-5.64	227
Linging	Shandong	59.48	-5.68	228
Ji'an	Jiangxi	18.03	-5.74	229
Binzhou	Shandong	17.29	-5.74	230
Zhalantun	Neimongu	38.94	-5.75	231
Pingliang	Gansu	36.32	-5.79	232
Houma	Shaanxi	15.67	-5.80	233
Hami	Xinjiang	26.58	-5.80	234
Zhumadian	Henan	14.49	-5.81	235
Linhe	Neimongu	35.98	-5.81	236
Duyun	Guizhou	38.2	-5.82	237

City	Province	Population (in 10,000)	Z score	Rank
Beian	Heilongjiang	44.15	-5.84	238
Loudi	Hunan	24.6	-5.85	239
Taizhou	Jiangsu	16.13	-5.85	240
Yongzhou	Hunan	51.15	-5.86	241
Baice	Guangxi	26.66	-5.87	242
Shaowu	Fujian	26.09	-5.87	243
Weihai	Shandong	21.64	-5.89	244
Yuxi	Yunnan	28.66	-5.89	245
Chaoyang	Liaoning	30.83	-5.90	246
Tuenxi	Anhui	10.32	-5.91	247
Hancheng	Shanxi	30.13	-5.93	248
Lengshuijiang	Hunan	26.51	-5.93	249
Hechi	Guangxi	26.1	-5.94	250
Enshi	Hubei	67.34	-5.95	251
Sanmenxia	Henan	14.62	-5.95	252
Botou	Hebei	45.32	5.00	253
Danjiangkou	Hubei	40.94	-5.97	254
Xichang	Sichuan	15.72	-6.01	255
Huizhou	Guangdong	17.14	-6.01	256
Jinshi	Hunan	8.82	-6.06	257 258
Yumen	Gansu Yunnan	15.81 37.44	-6.07 -6.07	259
Chuxiong Manzhouli	Neimongu	11.18	-6.08	260
Manzhouli Kaili	Guizhou	33.4	-6.08	261
Suuzhou	Anhui	20.8	-6.09	262
Wulanhot	Neimongu	18.55	-6.10	263
wulannot Beihai	Guangxi	17,16	-6.11	264
Yining	Xinjiang	22.89	-6.11 -6.15	265
Jinchang	Gansu	11.84	-6.15	266
Zhaotong	Yunnan	53.8	-6.19	267
Fuuzhou	Jiangxi	16.99	-6.2	268
ruuzhou Yima	Henan	7,74	-6.23	269
Wuzhong	Ningxia	22.21	-6.24	270
Lengshuitan	Hunan	35.53	-6.28	271
Changji	Xinjiang	22.45	-6.34	272
Kashi	Xinjiang	18.71	-6.37	273
Akesu	Xinjiang	34.91	-6.38	274
Kurle	Xinjiang	20.77	-6.40	275
Huangshan	Anhui	14.69	-6.42	276
Yan'an	Shanxi	25.41	-6.42	277
Dongsheng	Neimongu	11.71	-6.48	278
Linxia	Gansu	14.77	-6.48	279
Dongchuan	Yunnan	27.25	-6.52	280

(Table 2 Continued)

City	Province	Population (in 10,000)	Z score	Rank
Heihe	Heilongjiang	13.35	-6.52	281
Hetian	Xinjiang	12.09	-6.56	282
Jiayuguan	Gansu	8.76	-6.56	283
Xilinghot	Neimongu	10.02	-6.58	284
Hongjiang	Hunan	6.76	-6.64	285
Pingxiang	Guangxi	8	-6.66	28€
Qingtongxia	Ningxia	19.04	-6.70	287
Aletai	Xinjiang	14.17	-6.73	288
Tacheng	Xinjiang	11.88	-6.79	289
Kuitun	Xinjiang	5.33	-6.84	290
Erlianhot	Neimongu	.68	-6.88	291
Heshan	Guangxi	10.75	-6.90	292
Germu	Qinghai	5.67	-6.90	293
Jingangsh	Jiangxi	4.89	6 . 95	294
Suifenhe	Heilongjiang	2.09	-6.97	295

Table 3

Urban Dominance Categories: 295 cities of China, 1985

	Categories	Number of Cities	Percent of All Cities	Z Score Range
1.	Super Metropositan Center	1	0.34	98.10
2.	National Metropolitan Center	1	0.34	68.23
3.	Regional Metropolitan Centers	5	1.69	30.85-45.40
4.	Sub-dominant Regional Metropolitan Centers	18	6.10	14.14-26.19
5.	Provincial Metropolitan Centers	17	5.76	6.28-12.5
6.	Urban Centers with Provincial Influence	42	14.23	0.14-5.95
7.	Urban Centers with Limited Provincial Influence	60	20.33	3.99-0.23
8.	Urban Centers with Limited Sub-provincial Influence	40	13,56	4.83-4.02
9.	Urban Centers	111	37.65	6.97-4.87
	_	295	100.00	

Groups	Correlation Coefficient	Number of Cities
All Cities	. 81	295
293 Cities	.69	293
288 Cities	.54	288
Regional Metropolitan Centers	. 36	5
Sub-dominant Regional Metropolitan Centers	. 02	18
Provincial Metropolitan Centers	.01	17
Urban Centers With Limited Provincial Influence	. 27	42
Urban Centers with Limited Sub-probvincial Influence	. 09	60
Urban Centers	. 46	111

^{*} Excludes Shanghai and Beijing.

^{**} Excludes Shanghai, Beijing, and the five regional metropolitan centers of Chonqding, Tianjin, Guangzhou, Wuhan and Chengdu

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SOME ISSUES OF URBANISATION IN INDIA

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1.- INTRODUCTION

Urbanisation is as old as civilisation itself. The excavations at Mohenjo Daro and Harappa throw some light on the highly developed urbanised civilisation that existed in ancient India. In fact, the cities of ancient India truly reflected the achievement of each civilisation as it developed, rose to a pinnacle, and then declined. The city was made to serve the economic, social, cultural and political interests of the society. The agrarian society demanded that the city or town should serve as a market place and a cultural centre as well as the centre of the power structure or authority. The feudal society looked upon the city as a bastion of defence, protecting its population and their activities in trade, crafts, arts and architecture. Subsequently, the kings and emperors made the cities the centres of administration and culture, collection of revenue, location of armies, and places of production of textiles, pottery, arts and crafts, etc. Thus, in each period of history, the urban centres have responded to the needs of society and the challenges of the time. 1

Each historical period generated its own social, economic and political forces. The nature and pattern of urbanisation in India were influenced by colonialism and imperialism. In pre-industrial India, administration, defence, trade, commerce and religion represented the key urbanising elements and gave rise to settlements such as Shahjahanabad or old Delhi, Ahmedabad and Hyderabad (administration), Chittorgarh, Daulatbad and Bihar (defence), Jaunpur, Fatehpur, Surat

(trade and commerce), and Amritsar, Ajmer, Tirupati and Puri (religion).² But with the development of science and technology, religion ceased to be an effective force as an urbanising element. The introduction of modern banking and finance and the development of transport facilities were the other factors which gave rise to the establishment of new urban settlements.

Since independence, the economy of the country has markedly improved. The technological improvements in industrial production, transportation, and communication systems have concentrated the major production function in a few selected areas. The abolition of princely states, the emergence of linguistic states, the democratisation of the political system and the adoption of a federal constitution led to a change in the political set-up of the country. These factors have strengthened the urbanising tendencies. ³

The linguistic reorganisation of the States of India led to the creation of new capital cities. In each state, the reorganisation of the districts and taluk headquarters has given them an urban status. Except in the case of capital cities, this resulted in a poor degree of urbanisation based on low order, non-dynamic tertiary functions. But combined with other factors, it was capable of generating urbanisation of a high order. Following the industrial revolution and the advance of technology, the process of urbanisation has undergone a series of sequential changes such as concentration, metropolitanisation, suburbanisation and the rise of new towns and the revival of the central city and the concentration in it.

A dynamic and balanced urban development originally started from agriculturally well developed areas. Industries were started with the aid of agricultural raw materials available in these regions. In this case, the rural-urban linkages were strong through a chain of market towns. On the other hand, industries which had started not using local resources had only national and international markets, and local areas and peripheries did not benefit from such types of urbanisation.

The development of big cities is a result of the combination of functions like high order market, industrial and transport development and other service functions. These are the primate cities which attracted a high proportion of investments in infrastructure, industries, educational and medical services and in banking as well as commerce. Satellite towns also develop in their peripheries. The income differentials between the big cities and the surrounding areas cause influx to these cities. Spatially, the economy of India is organised by the four metropolitan centres, viz. Calcutta, Bombay, Delhi and Madras. ⁴

2.- DISTORTION IN THE URBAN SYSTEM IN INDIA 5

The settlement system of a country depends on the economic development and its ability to integrate the agrarian sector with the urban and industrial sectors. The existence of dualism in the economic structure in India and a break in the historical continuity of its evolving settlement system due to political factors led to wide intra-regional disparities in levels of development. The urban system in India is distorted due to 1) a significant clustering of large-sized settlements in pockets of development, and 2) the disproportionate distribution of such settlements.

Indian urban systems, dominated by those large cities with a population exceeding 100,000, have a weak economic base because of the domination of low-order tertiary activities. This has weakened the entire settlement system in India and has helped the growth of individual urban centres. The large-sized settlements are highly clustered and are located in close proximity to each other. The transport development policies of the central and state governments strengthen linkages between large cities instead of linking big cities with their immediate hinterlands.

3.- A BRIEF HISTORY OF URBANISATION IN INDIA: EARLY TIMES TO THE PRESENT

During the Maurya and Gupta periods (up to 600 A.D.), there were fine towns with a sound functional and rational zoning of land use. Distinction between village, town and city was only in terms of political power and cultural activities. The period between 600 and 1600 A.D. saw the rise and fall of many empires and kingdoms. The earlier towns

and cities gradually decayed. City development was limited to centres of power and wealth during the pre-colonial period (1600-1800 A.D.).

"The process of urbanisation in colonial India was beset with the problems which are characteristic of what is known as pseudo-urbanisation which in turn is a reflection of underdevelopment. Urbanisation in this period was a very weak process and hence in no way acted as an instrument of social and economic transformation. The decline of indigenous industry, impoverishment of the peasantry, the opening of the resources of the country to western markets, the economic drain and changes in the traditional trade routes and trade functions led to important changes in spatial organisation. The urban centres lost a substantial share of the production activities and the geographical specialisation they had achieved during the medieval period by which they had become trading centres assuming collective and distributive functions. Consequently, general urban decay set in and the spatial organisation of the economy rested in weak urban structure."

World War II gave a spurt to industrialisation leading to rapid urbanisation. The crowded areas with subsistence agricultural economies continued to suffer from stagnation in urbanisation. World War II, the post-war industrial unrest, and the partition of the subcontinent in 1947 made the history of urbanisation an eventful period during 1941-1951.

Princely India and British India -- the areas that existed prior to Independence -- had their own settlement systems, with very little interaction between them. From 1941-1951 a large part of the country underwent a process of relatively fast urbanisation. The Indian experience after Independence (1951-1961) was one of great decentralisation of urbanisation. The process was under the impact of mutually counteracting forces. Rural to urban migration as a result of the development in cities as well as rural to rural migration played important roles in accelerating the pace of urbanisation.

India's urban population increased from 78.9 million in 1961 to 109.1 million in 1971. An absolute increase of 30.2 million from 1961-1971 was the biggest urban gain for any decade since 1901. Natural increase was estimated to have contributed almost two-thirds of the

urban growth during this period, and only one-third was due to migration. Push factors in rural areas -- the small agricultural landholdings, the growing popularity of education among farming families, the lack of employment opportunities combined with the pull exerted by urban areas, and employment opportunities due to industrialisation and expansion of administrative machinery -- were the basic reasons for rural to urban migration. There was further enhancement in rural to urban migration during this period, mainly from small towns to cities, which created a wide gap in the growth rates of the two. Cities grew at the expense of small towns. The fast growth of medium sized towns due to industrial, administrative and market functions was indeed a notable feature of this decade. Most of the metropolitan cities and their peripheral zones also experienced rapid urbanisation.

The process of urbanisation recorded a further spurt from 1971-1981. The crucial role was played by rural to urban migration. 28 million people were estimated to have migrated from rural to urban areas. Moreover, the adoption of 858 settlements as new towns in the 1981 Census added nearly 5 lakhs people to the urban population. Thus, urbanisation during this period became a cumulative product of rural-urban migration, natural increase, the emergence of new towns, the extension of the territorial jurisdiction of many existing towns, and overall development processes.

The narrowing down of the growth rate of different size categories of towns was a noteworthy feature of this decade. The regional disparities were also reduced. Initiation of development activities in tribal regions generated some urbanisation in those areas. Thus, an interplay of diverse social forces shaped the pattern of urbanisation in India.

Urbanisation in India has certain peculiar features. Patterns of urbanisation vary between the regions. Not all regions have equal land area, neither do they have the same number of towns. The distribution of urban centres is far from even. The cities are not of uniform size. The smaller towns are less attractive for rural to urban migrants and so agglomeration is high in Class I to III towns. "There have been

significant changes in the ranks between the large towns over the past thirty years. But the rate of growth of population in these towns bears no relationship with the size of their initial population.

The social force of metropolitanisation was not strong enough to influence the growth of first towns. Migration from the countryside to metropolitan cities was responsible for the increasing growth of metropolitan cities." The Indian urban process has been distinctive for its ability to wither away the base of the urban system. Class V and VI towns were not growing rapidly, and thus the process was not rooted within the transformation of the rural society. Actually, the function of most small towns is essentially that of serving the rural surroundings as market and service centers.

Another peculiarity of urbanisation in India is the rise in the proportion of population classified as urban. "It has sometimes been argued that urbanisation in India has been unusually rapid during the recent decades. Much has often been said about the alleged faster growth of big cities as compared with small towns. The implicit idea is that such a pattern is undesirable and suggestions have often been made on how this pattern can be checked and reversed." 8

As Ashish Bose 9 has pointed out, the process of urbanisation in India is essentially a process of migration to the city. The largest cities have attracted the largest number of migrants from the rural areas, which resulted in an important feature of India's urbanisation viz. overurbanization. Other distinguishing features are rapid population growth which stimulates movement to cities, decline in agricultural land area and per capita rural income, and decline in the cost of transportation and communication. "A healthy feature of urbanisation in India is the growth of steel cities, other industrial centres, ports, and new capital Some other routine features of urbanisation in India are the political violence, antagonisms between 'sons of the soil' and the 'outsiders,' student unrest, extreme housing shortage, breakdown of public transport, water supply and electricity and indifference to urban Urban development has often clubbed with works, environment. housing, supply, health, family planning, etc." 10

4.- URBAN PROBLEMS

The growth of metropolitan cities in India has been haphazard and largely unplanned. ¹¹ These cities have their characteristic problems such as explosive increases in population, gross inadequacy of infrastructural facilities and services, overcrowding and traffic jams, crumbling old city centres, neighbourhood degradation, expansion of slums, insanitary backgrounds and public places.

The housing problem is chronic in the urban areas. The severity of these problems is reflected in the mushrooming growth of slums. ¹² The 'push' of the poverty in the countryside usually results in an influx of the rural population into the cities. A large number of these migrants, unable to find a job or a better job, live in the mushrooming slums. The conditions of life in these urban slums and squatter settlements with regard to basic amenities such as electric light, water, sanitation, and adequate roads, are worse.

An imbalance is created in the urban and regional system by a metropolis or central cities in its region or state. Development trends in metropolitan areas confirm to core-peripheral dichotomy. Largely because of the elitist metropolitan model of development adopted by the Five Year Plans in India, with the concentration of investment and resources in the industrial or modern sector, there is a dual economy with dichotomous relationships between the urban and rural sectors. So encouragement should be given to the growth of satellite towns, while the growth of large metropolitan towns should also be encouraged.

5.- URBANISATION IN KERALA

The recent trends of urbanisation in developing countries point towards the alarming growth of megacities and other metropolitan areas. This is true in the Indian context as well. When one considers the State (Province) as a unit, Maharashtra figures as the most urbanised and Himachal Pradesh the least. The level of urbanisation in Kerala is worth mentioning. Kerala has become a demographic exception in the sense that the so-called demographic transition is already in vogue in spite of the absence of a threshold level of development. Along with

the concommitance of favourable fertility and mortality changes, one would obviously tend to include a comparatively higher level of urbanisation in the State. But, paradoxically, the level of urbanisation in Kerala (18.78%) is much below the All India average (23.71%). One has to be very cautious in making generalisations on this.

As mentioned earlier, regarding the exception socio-economic features of Kerala, the State has a unique pattern of human settlements. Living in clusters and leaving a considerable length of geographical land unoccupied for settlements, as can be seen in most of the other States of India including the neighouring States, is not the case in the State of Kerala. One can find a chain of rural and urban settlements all over Kerala. Only the civil boundaries can determine the rural-urban differential settlements. Also observable is a rural-urban contimium all over the State, with the exception of the hilly regions. In this context it is worth noting that Kerala is a ribbon-like coastal State.

The above-mentioned phenomenon implies another issue, i.e. that of urban-rural migration. The almost parallel availability of socio-cultural amenities in the city as well as peripheral villages will facilitate this type of migration. (The census data are not sufficient to measure this; special surveys regarding migration would become necessary). The socio-cultural facilities include communication, roads, health-service delivery, schools, recreational facilities, etc. This in turn suggests that there is an urgent need of increasing the urban boundaries of the major cities as well as the towns in a State like Kerala. Many of the city peripheral villages may not satisfy all the definitional requirements, especially in terms of population size. Still, these peripheral habitats can be included in the extended city area.

A further implication of the so-called rural-urban contimium in Kerala is seen in the relatively less significant rural-urban differentials in a host of socio-economic, cultural and demographic parameters. For example, the rural-urban differential in fertility, mortality, literacy, per capita income, etc. are not very considerable.

Another feature of the urbanisation process in Kerala is the growth of slums. The slums of Kerala are not strictly comparable with the

slums of the megacities of India. It is not often the result of the ruralurban exodus. The tremendous overcrowding in the squatter settlements observed in other parts of India is not seen in Kerala. Similarly, the morbidity and mortality pattern, sanitary and hygienic conditions, etc. are better.

In Kerala, the urbanisation has not been accompanied by industrialisation. There are various reasons for this (neglected State, high level of trade unionism, etc.). The job market has not been steady. Given this fact, an ever-increasing number of educated youths (due to a high literacy rate) cannot be accommodated in the employment sector, neither in the secondary nor the tertiary sector. Kerala requires some sound urban planning and an areal as well as population redistribution.

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URBANIZATION IN INDIA

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Introduction

The process of urbanization in India has not been similar to that which occurred in developed countries at comparable stages of industrialization. In developed countries, industrialization took place over centuries, during which population growth was minimal, incomes higher, and the diffusion of innovation relatively slow compared to what is happening in India today. Moreover, urbanization in developed countries was characterised by a substantial decline in agricultural labour forces, either relatively or both relatively and absolutely. In India the pattern and nature of urbanization was influenced by colonialism and imperialism. Here the population growth is high and, though the proportion of the urban population has more than doubled in the last eight decades or so, there has been no relative decline in the agricultural labour force. In absolute terms, the agricultural labour force has increased substantially.

However, despite the rapid growth of urbanization in India, it is still low compared to the rest of the world. According to the 1981 Census, India had 23.7 percent of its population living in urban areas and, according to the expert committee report, the urban population in India will be more than 33 crores in the year 2001. It further stated that by 2001 India's total population will exceed 100 crores and the urban population will be roughly 35 percent of the total. In 1921, only 11.3 percent of the country's population lived in urban areas, but by 1981 it had increased to 23.7 percent. Thus during this period the urban

population residing in urban areas has increased almost six-fold.

Since 1931, the rate of urban growth has been on the increase, except for the decade 1951-1961. It decreased at this time because of the 1961 reclassification of about 800 towns due to stricter applications of the criterion for urban places. However, it started to increase again after 1961, and this increase was particularly dramatic in the decade 1971-1981. In 1971 there were 109 million people (19.9 percent) living in urban areas, but by 1981 there were 159.7 million, an increase of about 50 million. In fact, the increase itself is larger than the total urban population of many nations.

In terms of the percent increase of the urban population, the country as a whole has experienced a very high rate of urban growth. During the decade 1951-1961, the rate of urban growth was 26.4 percent, as compared to 21.68 percent for the total population and 20.7 percent for the rural population. Between 1961-1971 the rate of urban population growth was 38.22 percent, as against that of total population growth of 24.8 percent and 21.86 percent for the rural population. Between 1971-1981 the urban growth rate was 46.38 percent, as against 25 percent for the total population and 19.68 (declining) for the rural population. Thus the speed at which the urban population is growing in India is faster than the growth rates of its total population and its rural population.

However, the level of urbanization as measured by the proportion of urban population may not sound much when we say that one fourth of India's population is urban, but it is much more significant to understand that India has an urban population of 159.7 million.

There are significant internal variations in the urban population among different states and union territories. At one end of the spectrum we have Arunachal Pradesh and Himachal Pradesh, with 6.6 and 7.6 percent urban population respectively, and at the other end Maharashtra and Tamil Nadu, with 35 and 33 percent urban population respectively. The union territory of Chandigarh is 93.6 percent urban; while another union territory of Dadar and Nagar Haveli is only 6.7 percent urban.

The growth rate of urbanization also varies in these states. For instance, relatively poor states (Andhra Pradesh, Bihar, M.P., Orissa and U.P.) experienced rapid urban growth between 1971-1981, while among the richer states only Haryana experienced comparable growth. The old industrially developed states of West Bengal, Tamil Nadu, Maharashtra and Gujrat have the lowest rates of urban growth. Thus, on the whole, the west of India is more urbanized than the east, and the south of India more urbanized than the north.

The 1981 census shows urban growth in six classifications, and the table below gives the classification of cities in 1981:

Urban Population by Size Class, 1981

Class		Proportion of Urban Population	No. of urban Centers
I	100,000 & above	60.37	216
п	50,000 - 99,999	11.65	270
Ш	20,000 - 49,999	14.35	739
IV	10,000 - 19,999	9.52	1048
v	5,000 - 9,999	3.61	742
VI	Below 5,000	0.56	230
	Total	100.00	3245

Source: Census of India, 1981

Although the average size of an urban centre was in the neighbourhood of 50,000 in 1981, over 60 percent of the country's urban population

lived in Class I cities with a population of more than 100,000. On the whole, Class I to III cities accounted for 86.3 percent of the total urban population. Urban areas below 20,000 accounted for the remaining 13.7 percent of the urban population. It may be mentioned that in 1971 Class I cities accounted for 55.8 percent of the urban population, as compared to 60.5 percent in 1981. This shows that the country's urban population was highly concentrated in large cities which were growing rapidly at the cost of small urban centres -- in 1971 there were 48 Class I cities with populations of more than 100,000 -- and by 1981 this number had increased to 218. Of these, 12 cities had a population of one million and more in 1981, and by 2001 this number will increase to 40.

There are three components of urban growth, namely the natural increase in population in urban areas, net migration to urban areas, and the impact of reclassification. Rural-urban migration is said to be an important component of urban population growth. According to estimates made by the National Institute of Urban Affairs (NIUA) in its 1988 report on the state of India's urbanization during the decade 1971-1981, migration accounted for a little over 40 percent, natural increase for somewhat over 41 percent, and reclassification for about 19 percent. Thus, the interesting fact about urban growth in India is that there is almost an even balance between natural increase in the population of urban centres and growth through migration. accounts for approximately 40 percent of the increase. natural increase in large cities tends to remain within these cities, the migration stream tends to be from village to town to large city. There is little evidence of a reverse flow of any substantial magnitude from large cities towards rural areas, except the turnover migration generated by the problem of unemployment and under-employment in urban areas.

India has had a long history of urbanization that goes back to 2500 B.C., when a number of urban communities flourished in the Indus Valley (Bala, 1981). Specifically, Indian urbanization is of a subsistence nature, which implies that migrants from rural areas are attracted to urban areas not for the urban environment but for employment. In other words, they are pushed from rural areas but not pulled by the urban way of life.

Indian urbanization has a poly-metropolitan apex in which cities with a million inhabitants dominate the entire urban scheme, as they account for one-third of India's total population. There are as many as twelve cities in India that claim a million city status.

The population of large cities is exploding, while that of the small towns is stagnating. In 1901, 48.8 percent of the country's urban population lived in towns with a population of less than 20,000, but by 1981 only 13.7 percent of the country's urban population lived in towns of that size.

And finally, Indian towns are growing more on the basis of tertiary sector rather than on the basis of secondary sector.

Urbanization is an economic necessity and is a positive factor in national economic development. Cities are the centres of innovation, and these ideas emanate from the city to the countryside. Cities contribute in large measure to the process of modernization so vital to national development. In fact, no country in the world has been able to modernise itself without a strong urban base. Most great cities, it is said, have been based on an urban foundation.

However, the Indian situation is somewhat more complicated, in the sense that India may emerge by the year 2001 as the country with the largest urban population in the world, and the paradox would be that despite the huge increase in its urban population, India would still be demographically rural, with a majority of its population living in its more than half a million villages.

India's urban growth is both a blessing and a burden. The process of urbanization in India has contributed to a great extent to the vital process of modernization. It has given various benefits to rural areas and has provided jobs for surplus agricultural workers, which has resulted in higher incomes for rural migrants. It has also resulted in the creation of new cities like Bhilai, Faridabad and Bhubaneshwar and new capitals like Chandigarh, but in the process it has created insurmountable problems.

In India, urbanization thus far has resulted more from the push factor of depleting rural income rather than the pull factor of assured jobs. The disturbing aspect is that cities are not generating jobs fast enough to keep pace with the flow of rural migration, as can be seen from increasing unemployment, low per capita income and the sizeable segment of the population categorized as urban poor. It has created problems of a decaying urban environment, slum and squatter settlements, housing shortages, a low level of urban services and infrastructure, and a poor quality of life, and has resulted in political violence and antagonism between the 'sons of the soil' and the outsiders. Problems such as migration, congestion and the growth of slums are multiplying day by day in proportion to the growth of the country's total Some of the most pressing problems generated by the process of urbanization are highlighted below -- for example, urban poverty, housing and slums, development of and greater expansion of the informal sector, environmental pollution and transportation.

It is estimated that the number of million-plus cities will go up from 12 in 1981 to 25 in 1991 and 36 in 2001. According to these estimates, Calcutta, Bombay and Delhi will each have more than 70 million inhabitants in 2001. The population of million-plus cities would go up from 42 million in 1981 to 73 million in 1991 and 112 million in 2001, constituting 26 percent of the urban population in 1981, 32 percent in 1991, and 39 percent in 2001, therefore increasing the burden of an growing population in metropolitan centres. The high level of urban concentration in big cities has created two different classes of population: one that is highly educated and affluent, and the other that consists of a lumpen class that is uneducated, under-privileged and deprived, frequently living in shanty dwellings away from their families, and with a general absence of the amenities of city life. This dichotomy breeds two distinct classes of people in metropolitan cities -- the haves and the have-nots (Puri, 1987).

Urban Poverty

According to the National Commission on Urbanisation, approximately 27.7 percent of the urban population fell below the poverty line in 1987-1988, which means that more than one out of every four urban

citizens lives below subsistence level. A 1986 NIUA study on 'Who the poor are' revealed that 68 percent of their sample among the poor were women and children. The situation is further complicated by the fact that a significant proportion of the urban poor are members of the scheduled castes or tribes of minorities, which renders them doubly disadvantaged.

Dandekar and Rath (1971), on the basis of their analysis of National Sample Survey data for the period 1960-1961 to 1968-1969, concluded that urban poverty has increased. They observed that during the past decade, the per capita private consumer expenditure increased by less than half a percent per annum. Moreover, the small gains have not been equitably distributed among all sections of the population. condition of the bottom 20 percent rural poor has remained more or less stagnant. The condition of the bottom 20 percent urban poor has definitely deteriorated, and for another 20 percent of the urban population it has remained more or less stagnant. Thus, while the character of rural poverty has remained the same as before, the character of urban poverty has deepened further. This is the consequence of the continuous migration of the rural poor into the urban areas in search of a livelihood, their failure to find adequate means to support themselves there, and the resulting growth of roadside and slum life in cities.

It is true that rural and urban poverty are inextricably interlinked, but this does not mean that urban poverty is merely a spillover of rural poverty. It is an independent phenomenon. It is also true that the poor suffer deprivation wherever they are, but there are certain problems peculiar to the urban poor. They tend to be heterogenous, which makes their problems more difficult. According to the National Commission on Urbanisation, urban poverty manifests itself in the form of proliferation of slums, fast growth in the informal sector, heavy pressure on civic services, and a high rate of educational and health contingencies.

Urban Housing and Slums

It is generally understood that the settlement pattern in urban India is determined on the basis of socio-economic status, caste and religion, etc. Studies indicate that the problems of housing and shelter continue to persist.

A report prepared by NBO for the National Commission on Urbanisation revealed that about 45 percent of the entire urban population lives in the type of housing that is found in squatter colonies. Four million people, which again works out to be 45 percent of the population, live in slums in Bombay. Delhi has a similar percentage of its population living in squatter colonies, and another 25 percent in unauthorised colonies. According to Buch (1987), almost all of urban India is not only already blighted by slums but it is likely to continue to be so in the coming decade. Sayed Shafi (1987) says that the provision of decent housing or what is now euphemistically called "shelter" is one of the basic necessities for the civilized existence of any people. In this respect, India's record after four decades of independence has been dismal. There are today vast numbers of families who are totally without shelter, while a great many others live in substandard, dilapidated dwellings in virtual slum conditions. There is also a growing number of families living in slums, as well as the tens of thousands of men, women and children who spend their nights sleeping on the pavements, which is their only shelter.

Informal Sector

The presence of the informal sector in a substantial measure is a characteristic feature of the urbanization in India. The growth of population in urban areas through natural causes and migration from rural areas as well as the small towns continues unabated at approximately 4 percent per year, but the capacity of the urban areas to create jobs in the formal sector is not keeping pace. As a consequence, a non-formal sector has been growing rapidly. It includes such activities as waste collection and recycling, cart and lorry transport, low cost catering services, repair and maintenance services, street vending, etc. The size of this sector varies for different centres, although according to an 1978 ORG study about two-thirds of the urban poor are engaged in the informal sector. A 1974 study in Bombay has put the size of the

informal sector at no less than 45 percent of total employment. It is probably larger now.

There is also increasing casualization of labour and a persistence of under-employment in urban areas. In 1986 the percentage of casual labour increased from 13.2 percent to 14.75 percent in the case of males, and from 25.59 to 27.27 percent between 1977-1983 in the case of females. Child labour accounts for about 8 percent of employed males and 7 percent of employed females.

In addition to the above-mentioned factors there is tremendous pressure put on civic amenities. The poor population is unable to meet the costs of expanding these services. The per capita water consumption was reported to be between 16-23 litres per day in slum areas in Bangalore, with the number of persons per tap varying between 40-428 in the same city. According to the report of the task force of the planning commission on the financing of urban development, 31.2 percent of the urban population was not covered by sanitation services. A DDA study of 28,700 squatter households (1986) showed that a but of approximately 2.5 x 3 metres accommodated about four persons. About 50 percent of the dwellers were using open spaces for defecation.

Regarding public transportation, it has been noticed that the magnitude of passengers and goods traffic in urban areas has multiplied manifold during the period of planned economic development. There have been no definite policy lines on balanced urban transportation. It was only in 1984 that a committee of experts on metropolitan transportation was established by the Planning Commission to identify alternative modes of mass transportation in cities with a population of one million or more.

Finally, our urban centres are the greatest generators of air, water, soil, and noise pollution. The Environment (protection) Act of 1986, the Water (prevention and control of pollution) Act of 1974, and the Air (prevention and control of pollution) Act of 1981 are the three main pieces of legislation which provide environmental protection, but in the view of the National Commission on Urbanisation they have become paper tigers, as the rules of the Environmental Protection Act

have not yet been finalised and the machinery is weak for their enforcement.

Thus, after nearly four decades of planned economic development, urban development continues to languish in isolation. In the Five Year Plans so far urban development has been treated as an item of social expenditure, with the result that it accounts for a very small fraction of the total plan budget. Moreover, whatever urban policy emerges out of the Five Year Plans is dominated by housing needs, and very little attention has been paid to the economics of urban development.

There is no explicit urban policy at the national level, and consequently the approach to urban development has been piecemeal and desultory, according to the task force of the planning commission on housing and urban development.

In October 1985 the Government of India created a commission to develop a national policy on urbanization. The commission was ordered to study the demographic, employment, physical, fiscal, shelter, aesthetical and cultural interfacings of urban development, and to suggest ways to carry out future urban development programmes and to determine strategies of urbanization in the country. The commission submitted its report in August 1988 and made certain recommendations, but nothing concrete has been done so far.

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THE TRENDS AND PATTERNS OF URBANWARD MIGRATION IN KOREA, 1960-1985

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1.- HISTORICAL SKETCH OF URBANIZATION

According to Korea's first modern census, conducted in 1925, 4.4% of the population lived in cities with a population of 20,000 or more. At that time the total number of cities was 12, including five cities located in what is now North Korean territory. Sixty years later, there are 50 cities with a population of 50,000 or more in South Korea alone, and the proportion of the urban population has grown to 65.4%. When taking into account urban areas with 20,000 people or more, the proportion rises to about 75%. In sum, Korean society has been completely transformed in the past sixty years from a traditional rural society to a modern urban society (see **Table 1**).

Historically, Korea's urbanization has progressed in three stages. The first urban development took place during the Japanese colonial period of 1910-1945. After years of stagnation, the urban population grew gradually from about 3% to 13% in the 35 years of colonialism. The nature of urban growth in this period was almost exclusively shaped by the colonial policies of Japan in exploiting Korean agriculture and economy. This initial takeoff was marked by a massive influx of Japanese after the annexation of Korea by Japan in 1910. At that point, the Korean urban population began to increase in the midst of a large rural exodus of destitute Korean farmers to Japan and Manchuria, which was a result of a deliberate agricultural policy of the colonial regime. After 1930, in the latter part of the colonial period, urban growth was greatly facilitated by the industrialization policy of Korea as a base of war supplies. (For these colonial policies, see Kim,

The second stage of urbanization took place between 1945-1960. This period witnessed the liberation of Korea from Japanese rule, the Korean War, and the division of the country into South and North Korea, which was marked by extreme political turmoil, social unrest, and economic difficulty. Such political change created various unexpected movements of population on the Korean peninsula. The liberation caused a sudden surge in population in cities throughout the country. Immediately following the liberation, a huge repatriation of Koreans from Japan and Manchuria took place, and most of the repatriated settled down in an urban area near their original home village. The Korean War and the division of the country created large flows of refugees moving from North to South Korea, which again contributed substantially to South Korea's urban population growth. (See Kwon, T.H., 1977: 176-180; ESCAP, 1980: 14-17). In this period, the proportion of the urban population in South Korea grew from 13% to 28%, and the number of cities from 15 to 27.

Since 1960, Korea has experienced a rapid societal transformation. Together with economic growth and social development, urbanization constitutes one of the major features of the transformation. Unlike the previous stages, external political factors have rarely played a role in the urbanization process since 1960. Urbanization has been shaped entirely by various internal conditions. The most important component of the urban population growth has been the 'urbanward migration' of rural villages, as illustrated in Table 2. However, great diversities have been observed in that urbanization process. In the 1960s, an increasing population pressure coupled with a deteriorating rural economy was the most important reason for a massive flight of the population from villages to cities, particularly to Seoul. In the 1970s, industrialization began to play a major role in urbanization. Between 1970-1975, an absolute decline in Korea's rural population took place for the first time in the twentieth century, and the proportion of the urban population passed the 50% mark in the mid-1970s. Currently, Korean society is urban dominant, but urban areas continue to attract the rural population.

2.- TRENDS OF RURAL-TO-URBAN MIGRATION

Korean society prior to 1960 can be readily defined as typically traditional. Most people lived in a limited areal boundary and had contact with a limited number of people. Their world was extremely confined. This traditional wall, however, began to be demolished by the socio-political chaos and the concomitant large population movements during the decade of 1945-1955. Various disturbances, particularly the Korean War (1950-1953), weakened the traditional systems of family, kinship and community. During this period, people were forced into exposure with people from other areas, which extended their perception of the world and increased their adaptability to change. In sum, migratory propensity among villagers had grown considerably.

In the years 1945-1960, Korea also experienced a series of surges in population growth. In spite of the 1950-1953 Korean War, the population increased from about 16 million to 25 million in this fifteen year period. Between 1955-1960, the country witnessed a record high of 2.9% annual population growth without a population influx from North Korea or abroad. This added voluminous population increase in a short span greatly augmented population pressures on the already densely populated country. With little economic growth and technological advancement, Korea suffered from both population and economic pressures. The initial response was to limit family size in urban areas and the flight to the large cities of rural villagers, whose perception of the outer world had been greatly changed. Thus, a large flow of urbanward migration occurred in the 1960s.

As shown in Table 3, a net 5% of the rural population is estimated to have moved during the first half of the 1960s, and this accounted for about 10% of the urban population in 1965. Population movement from rural to urban areas was greatly accelerated during the latter half of the 1960s. Rural areas lost about 14% of their population by migration, and the gain in urban areas was almost 20%. One of the major features of this urbanward migration in the 1960s was the inmigration to one city -- Seoul, the capital city and the national centre of the country. The proportion of the net urbanward migrants who established residence in Seoul was estimated as 70% and 61% for the period 1960-

1965 and 1965-1970 respectively. Seoul's population gain due to migration in these periods were 19% and 28% each. (Kwon, T.H., 1975: 62-63). From these figures, it can be calculated that about 41% of Seoul's population in 1970 was due to inmigration from mostly rural areas during the 1960s.

The volume of urbanward migration was reduced somewhat in the first half of the 1970s, but soared up again in the latter half, which suggests a substantive change in the migration pattern in the mid-1970s. This trend may well be interpreted to indicate that the migration of destitute farmers was reduced to a small percentage in the 1970s, but rather urban development, particularly the conurbanization of Seoul, and industrialization became the major determinants of rural to urban migration in the 1970s. With this development, the destinations of migrants were diversified and the patterns of urban growth were altered. The population movement to Seoul shrunk considerably, and the growth of Pusan and other cities was pronounced, as illustrated in Table 4 and Table 5. However, rapid population growth was observed in newly developing industrial cities and the new cities surrounding Seoul. level of migration to either non-industrial cities or cities outside of the Seoul megalopolis was insignificant.

At the beginning of the 1980s, the amount of rural to urban migration was markedly reduced. Total net migration was estimated to be 2,570,000 between 1975-1980, but it decreased to 1,680,000 between 1980-1985. The already shrunken rural population was the major cause of this reduction in migration size. Taking only the rural areas into consideration, the flow of outmigration was still significant, and the rate of net outmigration was not lowered much (see Table 3).

In the first half of the 1980s, the proportion of net rural-to-urban migrants entering Seoul itself was further reduced, and Pusan's growth due to migration became negligible. Instead, other large or medium-sized cities experienced considerable growth. The concentration of migrants in the Seoul megalopolis, however, was further strengthened. As in the 1970s, industrial cities grew continuously. Another important feature of urban growth in the early 1980s was migration to cities that were designated as research and educational centres by the central

government. Government policy to develop these cities, located in the middle section of the country, had the additional aim of dispersing or controlling the population of Seoul. However, this policy appears to have failed to alter the trend of migration on the national level. The growth is primarily attributed to movement within a region¹ (See Table 4 and Table 5).

3.- AGE PATTERNS OF MIGRATION

It is generally accepted that migration is largely concentrated in young adults of working age at the initial stage of the massive population movement from rural to urban areas. Such a tendency is also confirmed by the age patterns of rural-to-urban migration in the period 1960-1965. Overall, the highest rate of net migration is seen between the ages of 15 and 19, and the next highest between 10 and 14. As presented in Figure 1, the rate of net inmigration in urban areas for the age group 15-19 was about 20-25 percent. This rate drops substantially and shows a marked gender difference after age 20. For males, it falls to near zero at ages 20-24, rises sharply again at 25-29, and declines thereafter with the increase in age. Between ages 45-54, a tendency of counter migration can be seen, although to a minor degree. A drop in the migration rate was also noticed in females, but to a much smaller extent. The level of migration declines continuously between the ages of 30 and 44, and rises very steadily after age 45. The volume of migration was almost doubled between 1965-1970, and the rate of migration also increased sharply for all ages. But it hardly affected the age patterns of migration in the latter half of the 1960s, as can be seen clearly in Figure 1.

The peak between ages 15-19 can be explained by two factors. The first factor is related to the proposition on "population pressure" in rural areas mentioned above. In the face of severe economic hardship, the pressure is expected to have been laid primarily on the non-economically active population, that is, on children and the very elderly. Among the two groups, any sizeable migration of elderly people is difficult to imagine at the initial stage of massive rural-to-urban migration in Korean culture. On the contrary, the movement of children or a young labour force would have somewhat lessened the economic burden on

individual rural households. In addition, cities had attracted a cheap labour force in the 1960s of children and young women, since urban industrial growth was largely dependent upon labour exploitation.

The second factor in the high-teen migration was the aspiration of Koreans for their children's education. It has been well documented that the high value that Koreans place on education is rooted in the traditional principles of familism and universalism based on Confucian teachings. Aspired by the general notion that education is the primary means of success, many poor families tend to educate their children as much as possible in the hope that this will bring the family an opportunity to escape from poverty. Many migration surveys confirm that children's education was one of the most prominent reasons for rural-to-urban migration in the 1960s. However, its importance differs between boys and girls because of a strong gender preference in Korean society. Girls moved to cities mostly to get employment, while, in the case of boys, a high school or college education constituted the major motivation for moving to cities.

The low level of movement between ages 20-24 may be explained by the system of compulsory military service for men and the marriage custom for women (Kwon, T.H., 1977: 236). There was a tendency for young migrants to return to their families in the villages before military conscription, and military conscription itself has the effect of return migration for rural-to-urban migrants because it usually means the change of address to their parental home. Women migrants had preferred returning home before marriage, and there was also a strong social bias against women factory employees at that time.

A relatively high level of migration of women compared to men at ages 50 and upward appears to have been associated with the sharp gender difference of mortality in older people and the Korean family system. A growing number of old couples now remain on their own in rural areas after their children's move to the city. But with the death of her husband, a widow will usually move to the city to join her son's family, because of sons' obligations to fulfill the duty of filial piety to their parents, and the women's obligation to submit to their husband and then to their first son after they are widowed.

The age structure of rural-to-urban net migrants in the 1970s did not differ much with that in the 1960s. For both men and women, the highest peak was seen in ages 15-19. One notable difference in the age pattern of migration between the decades is seen in ages 20-24. Overall, migrants were concentrated in age between 10-34 for men and 10-29 for women. After that the rate of migration dropped rapidly until age 59, and surged again slightly after 60 in the case of men. demarcation age for women was 50, as had been the case in the 1960s. The very low level of net migration between ages 20-24 for men in the 1970s was also attributed to the compulsory military service of about three years. The burst of teenage migration can be explained primarily by the growing urban-rural disparities in the job market for youngsters, educational opportunities, and other attractions. The massive migration in the 1960s would have worked favourably for teenage migration in the following years by creating urban connections for them and clearing the negative images of teenage migrant workers in the place of origin. With the marriage market in rural villages shrinking due to a continuous outward flow of teenage boys, the tendency for women of marriageable ages to return home disappeared as well.

The age pattern of migration changed only slightly between 1980-1985. As shown in Figure 1, the relative size of urbanward migration was most pronounced in the 15-19 and 25-29 age groups for men and in the 15-19 and 20-24 for women. In the first half of the 1980s, the weight of migration at ages 65 and upward relative to the total volume of net migration increased substantially for both men and women. On the other hand, the relative mobility dropped substantively at ages 0-14 for both sexes, at ages 30-34 for men and 25-29 for women. Considering that these age groups are adjacent to the peak migration ages, age selectivity in urbanward migration can be viewed to have been strengthened between 1980-1985. The rising mobility after the age of 60 is an indication that a growing number of old couples move to cities to live with their son's family after retiring from farming.² Because of a substantial rise in life expectancy since 1960, the movement of elderly couples has been increasingly visible in more recent years. other hand, the family migration of young couples has been greatly reduced with the dwindling of young families in rural areas due to a heavy exodus of teenagers in previous periods.

Such age patterns of urbanward migration are not repeated in individual cities. The age selectivity of an individual city is largely determined by the characteristics of the city. But a crude relationship between the age selectivity and the total size of net migration in individual cities can be observed. The greater the rate of migration, the less the selectivity.³

4.- SEX COMPOSITION

In the above, we have found that there was strong sex selectivity in rural-to-urban migration at ages 20 and upward for all five-year intercensal periods since 1960. When examining the migrants as a whole, the rate of net migration was slightly higher for women than that for men during 1960-1965, and the tendency was reversed during 1965-1970. The dominance of women reappeared in the first half of the 1970s and disappeared again in the later 1970s. The women's dominance was repeated during 1980-1985.

As is clear from Figure 2, the gender selectivity of migration has revealed a consistent pattern of change since 1960 for most age groups. In children aged 5-9, boys have shown a higher mobility than girls since 1965, and the gap has widened. In the ages between 10-14, girls showed a higher rate of migration until the mid-1970s. difference in the migration rate between boys and girls has changed in favour of males in this age group as well. Young children aged 5-9 would have moved mostly with their parents. Accordingly, the sex selectivity in this age group can be interpreted to indicate that parents with young boys at pre-school or early primary school ages had a stronger tendency to move to cities than those with girls, and that this tendency has been reinforced. It may be regarded as a combined effect of the high value Koreans put on 'good education' and the prevalence of strong son preference in Korean society. Parents often move residence in Korea simply to provide a better educational environment The thinking also prevails that competition for for their children. college examination starts at primary school, and people worry more about their son's education than about their daughter's. In view of these observations, it may be reasonable to assume that parents with young boys in rural areas are more likely to move to urban areas that

offer better schooling for their children. Widening educational disparities between urban and rural areas would have strengthened this tendency. The increasing male selectivity at ages 10-14 can largely be explained in the same context. The female enrollment rate at middle schools rose from 33% to 92% between 1966 and 1980 (EPB, v.y.), and most rural districts have middle schools in the area. In the light of a much lower educational aspiration for daughters, many rural families seem to be satisfied with sending their middle school aged girls to the district schools, as indicated in Table 6. Further, the demand for a female child labour force in cities has disappeared in the process of rapid industrialization, and this might have been an additional factor in reducing the trend of urbanward migration of girls between the ages of 10-14.

The sex selectivity of migration between ages 15-19 has contrasted with that for the previous age group. The migratory tendency was higher among men during 1960-1965. The tendency was reversed in 1965-1970, and the dominance of women has since increased. phenomenon can also be likened to the expansion of educational opportunities for girls. With these growing opportunities, the proportion of girls who attend high school has risen sharply throughout the As discussed in the above and illustrated in Table 6, migration for schooling was predominant among boys in primary and middle school ages. But the movement for a high school education for girls became increasingly important, as most high schools were located in urban areas. This explains in part the increasing dominance of female migration between ages 15-19. In sum, the growing educational opportunities had a different effect on the migration of rural children in terms of sex. However, there is still a large gap between boys and girls in the proportion of middle school graduates who do not continue on to high school. Girls in rural villages usually seek jobs in urban areas, and this is also thought to have greatly contributed to the increasing dominance of girls in rural-to-urban migration between ages 15-19. An analysis of reasons for rural-to-urban migration confirms that education and employment are the equally important determinant of migration for women aged 15-19 (Koo, S.Y., 1986: 217).

The mobility of men aged 20-24 was very low. The main reason for

this was the compulsory military service for this age group, as described After having been held back in their early twenties, the urbanward movement of men resumed and surpassed that of women between the ages of 25-29. The difference in the level of migration has recently widened. This trend of gender difference in the pattern of urbanward migration between ages 15-29 was related to the increasing concentration of migration at early working or reproductive ages in The age concentration of migration was greater for recent vears. women than men. In the case of rural women, the movement to urban areas largely ceases by the age of 24, while the timing of migration for men spread over to age 29. The dominance of men in urbanward migration was also found between the ages 30-34, though the degree of migration was reduced significantly. The gender difference showed no consistent pattern after the age of 35. But the census age structure confirmed that there has been a rough trend of increasing women's mobility with ageing compared to that of men in the age span from 35 to 64. After the age of 65, the mobility of men has approached that of women, which accompanied the growing of old age migration in recent years. The observation for the ages 35-64 can be explained largely by the suddenly widening mortality gap between men (Kwon, T.H., 1977: 26-44; Goldman, 1980) and women after the age of 40 and the increasing tendency of widowed rural women to move to the cities. The growing mobility of men aged 65 and up might have been related to the accelerated depletion of young people in rural areas, which often resulted in no sons living with their parents in the village to take care of them after their retirement from farming.

5.- TYPES OF MIGRATION AND SOCIO-ECONOMIC SELECTIVITY

It is generally known that single migration is dominant at the initial stages of massive rural-to-urban migration. Korean data confirm such an observation. From the 1983 Korean National Migration Survey (KNMS), conducted jointly by the National Bureau of Statistics and the Korean Institute for Population and Health, the changing distribution of rural-to-urban migrants aged 14 or more at the time of migration can be traced since 1964.⁵ As illustrated in **Table 7**, single migration accounted for 56% of the total migration during the five year period 1964-1968, when the initial massive rural-to-urban migration took place.

The proportion of those who migrated with the whole family was 40%, and the remaining 4% consisted of those who moved with only a part of the family. The proportion of single migrants declined gradually to a level below 50% from 1978-1983. On the other hand, the share of partial family migration rose to 10 percent.

Early studies on rural-to-urban migration in Korea strongly suggest an association between the type of migration and the migrants' socioeconomic background. In the late 1960s, Moon Seung-Kyo conducted a rural survey on the characteristics of children who had migrated to cities (1972). They were mostly single migrants who left their family behind in the village. Their family status was divided roughly into two categories: wealthy farmers and poor tenant farmers. Children from wealthy families went to the cities for their education, while children from poor families migrated to the cities in search of work to help support their family in the village. The proportion of education-bound migrant children should have extended substantially to middle class families with the expansion of educational opportunities throughout the country since 1960. But this does not necessarily mean that the relationship between the reason for migration and the class status of the migrants has weakened. According to the 1983 KNMS, the proportion of those whose first movement was rural-to-urban migration for educational purposes was reported to be 25.3% (Yoon, J.J., 1986: 123). This figure is significantly higher than the equivalent proportion for all migrants (19.2%), indicating that education has been an important factor in rural-to-urban migration in Korea. If migrants at school ages are separated, the proportion will exceed 40%, as implied by an analysis of reasons for migration among those whose last movement was rural-tourban based on the KNMS (Koo, S.Y., 1986: 217).

Concerning family migration in the late 1960s and the early 1970s, Seok Hyun-Ho's research (1972) provides many insights. He examined the status of families who migrated to cities in their place of origin through a case study of six rural villages near Seoul. The survey disclosed that most early migrant families occupied a marginal position in their village in terms of both social background and economic status. The extended application of this finding to the nation as a whole cannot be justified, but it does not contradict the common perception that

prevailed at that time. In other words, the study may well suggest that early rural-to-urban family migrants consisted primarily of poor farmers and people who belonged to a marginal class in their place of origin.

Early migration of children from wealthy families for educational purposes appears to have prompted the movement of the parents to cities in later years. It has been seen in Korea that people with a rural background but with a city high school or college education will rarely return to their place of origin. Rather, they try to settle down permanently in a city with help, if possible, from their parents who remain in the rural area. Such a tendency is tentatively confirmed by the 1983 KNMS. Based on the survey data, Yoon Jong-Joo examined the proportion of migrants who received financial support from their place of origin after their last migration by the type of last migration flow (1986: 165-166). His analysis reveals that the proportion was the largest among the rural-to-urban migrants, 17.4%, and that if the migrants had a high school education or more the economic aid came mostly from their parents. In other words, the children were able to settle in urban areas at the expense of their rural parents. In addition, wealthy farmers often had no son in the village to take care of them in their old age. These situational forces are known to have facilitated the movement of wealthy farmers to the cities. This has given rise to a continuous proportional increase of middle class farmers in rural areas since the late 1960s (Park, J.M., 1987: 87-92). In sum, family migration was dominant among the lower class in the early period of the massive rural-to-urban migration, but the mobility of upper class families increased substantively in the later period.

6.- CONCLUSION

In this paper, we have attempted to examine the major demographic and social features of rural-to-urban migration in Korea since 1960. For this, a set of estimates on internal migration from censuses was used extensively and some selected studies on migration were adopted as additional sources of information. In explaining observed patterns, particular attention was paid to socio-cultural factors. The findings are summarized in the following.

Massive rural-to-urban migration in Korea began in the early 1960s and peaked between 1965-1970. The second peak in urbanward migration was seen between 1975-1980. This trend coincided with the changing societal conditions in the country, and strongly suggested a relationship between the two. It appears that the initial flow of urbanward migration was created in the traditional poverty trap which was caused, in turn, by the augmentation of the population pressure on the land and the deterioration of the rural economy since 1945. The second wave of migration took place while the rural population pressure began to reduce and the rural economy started to grow, indicating that urban development, aided primarily by the rapid national economic growth, was the key force in the exodus of rural people to cities. In sum, the major force of urbanward migration changed from the 'push factors' in rural villages to the 'pull factors' in the urban centers.

Migration was concentrated amongst those in their early working and reproductive ages, and this degree of concentration has been even greater since the 1960s. Distinctive age patterns of migration have been observed between men and women, and the differences are readily ascribed to various social institutions, social change, the pattern of mortality difference, and the traditional family system. For men, the ages between 20-24 are of limited mobility, due largely to military conscription for approximately three years. For women, a similar pattern was seen in the 1960s in accordance with marriage customs at the time, but that has disappeared since the early 1970s. The patterns and differences of mobility between the ages of 5-14 are found to have been associated with the traditional high value placed upon education, the expansion of educational opportunities, the strong son preference embedded in the traditional culture, and changing market conditions for child labour. On the other hand, the age pattern and its gender difference for older workers and the elderly were governed primarily by the traditional family values of Korean society and the increasing mortality difference between men and women after the age of 40. In sum, unlike the overall trend of migration, the demographic patterns of migration appear to have been governed by the traditional norms and values.

The initial stage of heavy urbanward migration was dominated by

the single migration of youngsters. Although this dominance has persisted, an increasing trend of elderly migration has been observed in more recent years. The background of single migrants was primarily divided into those from wealthy families and those from poor tenant families. The former moved mainly for education, the latter for jobs. The early family migrants occupied marginal statuses in their place of origin, both socially and economically. However, upper class families have recently joined the migration flow. This has taken the form of deterred family migration, in that parents who remained in the villages after their children migrated to cities have themselves left home, after their retirement from farming, to join their children in the cities.

The importance of the family structure and value system must therefore be taken into account when analyzing the patterns of urbanward migration in Korea.

NOTES

- 1. Net migration estimates for individual cities by age and sex are available from Kwon, T.H., 1975, 1978 and 1988.
- 2. According to the 1983 Korean National Migration Survey, among those currently aged 60-64 and whose latest migration was to join someone in the place of origin, 87.5% were reported to have joined one of their children (or spouse). See Yoon, J.J., 1986: 149.
- 3. For detailed information, see Kwon, T.H., 1975, 1978 and 1988.
- 4. The proportion of girls attending high school among those of high school age rose from 19.6% to 63.3% between 1966 and 1980. See EPB, various years.
- 5. For more details on this survey, see NBOS and KIPH, 1985.

Figure 1
Age Specific Net Immigration Rates in Urban Areas for Males and Females, 1960 - 85

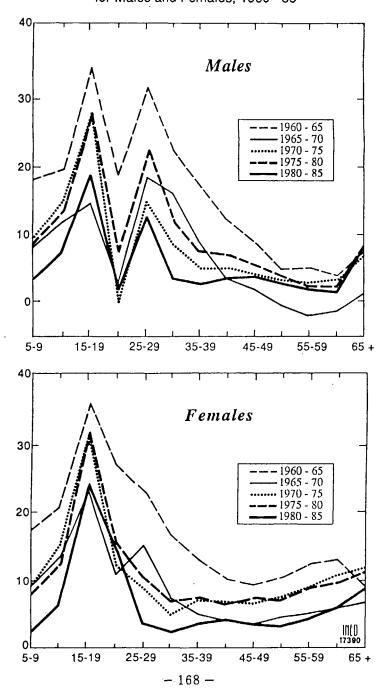


Figure 2
Ratios of Net Immigration Rates for Males to Those for Females in Urban Areas by age groups, 1960 - 85

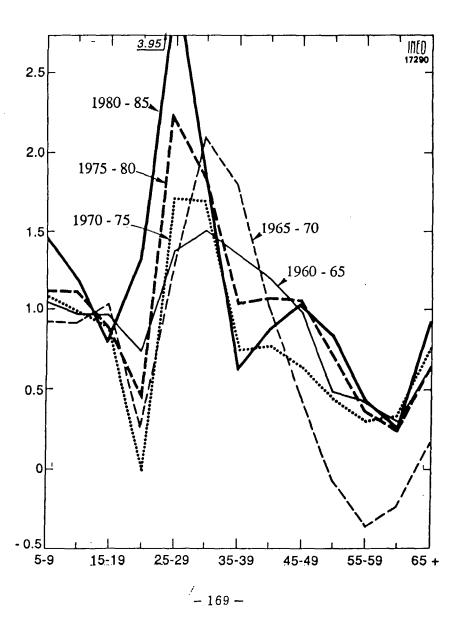


Table 1 : Trend of Urban Growth, 1925-30

(Unit: thousand / %)

Year	Total popu.	Annual growth rate	o f	Urban popu.	% urban	Annual urban g.r.
A: For	1925-44, Al	ll Korea i	including	Japanese	and forei	gners
1925	19523	-	12	850	4.4	-
1930	21058	1.51	14	1190	5.6	6.72
1935	22899	1.68	17	1602	7.0	6.01
1940	24326	1.21	20	2818	11.6	11.25
1944	25918	1.77	21	3412	13.2	5.33
B : For	1925-44, Al	ll Korea,	Koreans o	only		
1925	19020	-	12	608	3.2	-
1930	20438	1.44	14	889	4.4	7.60
1935	22208	1.66	17	1245	5.6	6.73
1940	23547	1.17	20	2377	10.1	12.94
1944	25120	1.80	21	2933	11.7	6.84
C : For	1945-85, So	outh Korea	and Kore	eans only		
1945	16136*	-	15	2081	12.9	-
1949	20167	5.95	15	3458	17.1	13.54
1955	21502	1.01	25	5263	24.5	6.63
1960	24989	2.86	27	6997	28.0	5.42
1966	29160	2.65	32	9780	33.5	5.74
1970	31435	1.88	32	12929	41.1	6.98
1975	34679	1.96	35	16770	48.4	5.20
1980	37407	1.49	40	21409	57.2	4.80
1985	40420	1.55	50	26418	65.4	4.20

^{*} Estimated by the author.

Sources: Korean census reports for 1925 through 1985.

Kwon T-H others, 1975 : 7.

Table 2 : Decomposition of Urban Population Growth, 1960-85 (Unit : thousand / %)

:_1	Total	Ratio	Ratio of pop.growth to total pop.*				
period	popu growth	migration #	natural growth	boundary change	total growth		
1960-65 1965-75 1970-75 1975-80 1980-85	2338 3594 3841 4640 5009	11.1 21.0 11.8 12.6 7.3	8.2 6.8 8.8 7.1 7.4	7.6 2.3 2.0 4.2	26.9 27.8 22.9 21.7 19.0		

^{*} Calculated by using the population at the end of each period as denominator

Sources: Korean census reports for 1960 through 1985; Kwon T-H, 1975, 1978 & 1988.

Table 3: Per Cent Gain or Loss due to Urbanward Migration in Urban and Rural Areas, 1960-85

Areas	1960-65	1965-70	1975-75	1975-80	1980-85
Urban	10.2	20.0	11.2	12.0	7.0
Rural	-5.0	-13.6	-10.5	-16.1	-13.3

Sources: Kwon T-H, 1973, 1978 & 1988.

Table 4 : Annual Rate of ;Population Growth by city Size, 1960-85 (Unit : thousand / %)

Population		Annual	population	growth	
from 1975 census	1960-65	1965-70	1975-75	1975-80	1980-85
Seoul (6879) Pusan (2450) Daegu (1309)	6.53 2.90 5.10	9.37 6.87 6.12	4.37 5.32 3.82	3.82 4.98 3.98	2.84 2.13 4.70
Other cities 500-999 100-499 less than 100 Eup areas	5.18 3.01 2.80 2.03	5.20 4.85 3.02 2.01	4.06 6.92 2.68 1.0	4.97 5.42 2.56	4.98 4.42 2.91
Myun areas	1.47	-1.69	-0.8	-1.77*	-1.26*

* Eup areas included. Sources: Yoo E-Y, 1978: 75, Figures for 1975-80 calculated by the author.

^{*} Included the births after migration occurred to migrants and the migrants to newly defined urban areas.

Table 5: Percentages of Net Inmigrants to Selected Cities or
Areas among Total Net Inmigrants to All Cities,
1960-85

Areas	1960-65	1965-70	1975-75	1975-80	1980-85
		A. Selec	ted cities		
Seoul	70.3	60.8	35.9	32.4	29.6
Pusan	3.8	12.9	17.6	15.6	2.9
Daegu '	10.2	7.3	5.3	6.6	14.5
-	15.7	19.0	41.2	45.4	53.0
	В.	Broad Seoul	and Pusan	Areas	
Seoul	75.3	66.8	57.0	52.4	61.9
Pusan	1.9	13.9	22.2	24.1	9.3
Others	22.9	19.3	20.8	23.5	288.8

Sources : Same as Table 2.

Table 6: Sex Ratios* of Rural Residents Five Years Ago among Students in Urban Areas by Level of Schooling, 1970-85.

	1970	1975	1980	1985
Parimary	122.7	123.0	120.3	117.2
Middle	174.8	150.1	134.2	121.0
High	242.6	195.8	138.6	92.2

* Calculated as (males/females)x100.

Sources: Korean census reports for 1975 through 1985.

Table 7: Type of Rural-to-Urban Migration after Age 14, 1964-83.

(Unit: %)

Туре	1964-68	1969-73	1974-78	1979-83
Single M. Family M. Partial Family (N =	56.1	52.7	50.5	49.6
	39.7	42.5	41.3	40.3
	4.2	4.8	8.2	10.1
	237	294	378	387)

Source: NBOS & KIPH, The 1983 KNMS data tape.

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SPATIALISATION DE LA POPULATION AU

MAROC ET DEVELOPPEMENT REGIONAL

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I.- Evolution et spatialisation de la population

a) Densité de la population

Près de 34 personnes seulement vivent sur un km» au Maroc en 1988. Cette densité était encore plus basse en 1982. Toutefois, les densités ne sont réellement parlantes qu'aux niveaux géographiques fins. Ainsi de grandes inégalités dans l'occupation de l'espace existent : 2,56% ¹ de la superficie du pays abrite près de 32% des habitants. La Wilaya de Casablanca et celle de Rabat-Salé supportent de très fortes populations ; soit respectivement 1858 et 1055 personnes au km» en 1988. Elles sont suivies par la province de Tanger, où la densité de la population est de 438 habitants au Km». La densité atteint des valeurs moyennes, entre 150 et 181, à Kénitra, Fès et Meknès. La présence humaine la plus faible, atteignant moins de 15 personnes au km» dans les provinces frontalières de l'Est et celle du Sahara au Sud.

Cette disparité du peuplement entre les diverses provinces du pays s'explique par des facteurs historiques et d'autres naturels (climat, relief, richesse du sol, activités maritimes, développement économique etc...)

Il s'agit des Wilays de Casablanca et de Rabat-Salé et des provinces de Tanger, de Kénitra, de Fès et de Meknès.

b) Accroissement de la population totale du Maroc

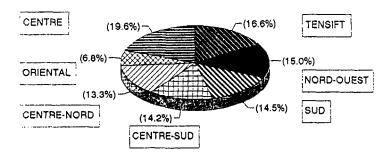
En 1960, le Maroc était peuplé de 11626470 habitants. en 1971 et 1982, on dénombrait respectivement 15379252 et 20419555 habitants. Cette évolution entre ces trois dates est due essentiellement à l'accroissement net de la population.

Les taux d'accroissement annuel intercensitaire sont de 2,55% entre 1960 et 1971 et de 2,58% entre 1971 et 1982, reflétant surtout l'excédent des naissances sur les décès. Le solde migratoire négatif du Maroc avec l'Etranger estimé à 2 %0 au cours de la décade précédente a peu influencé la balance démographique.

c) Répartition de la population rurale

En 1982, le milieu rural représentait 57,2% de la population totale du Maroc, évaluée à 2041955 personnes. Onze ans auparavant en 1971, cette proportion était de 64,9% et atteignait 70,9% en 1960. Actuellement, elle est de 54%.

Population rurale (%) par région économique : 1982



Par région économique, le Centre où près de 21% de la population rurale du Maroc est concentrée-soit la proportion la plus élevée-est le plus urbanisé, puisque 44% de sa population habitait la campagne. Cette situation s'explique par le taux d'urbanisation élevé de la Wilaya de Casablanca où la population rurale n'est que de 7% de l'ensemble (contre 93% d'urbains).

Le Nord-Ouest est la deuxième région économique la plus urbanisée ; les ruraux ne représentent que 48,3%. Ici aussi, cette proportion relativement basse est due à la Wilaya de Rabat-Salé et de la province de Tanger où les ruraux ne représentent respectivement que 12,4% et 28,4%.

A l'autre extrême, se trouvent les régions économiques du Sud et de Tensift les moins urbanisées. Leur population urbaine constitue 25,1% et 29,5% des effectifs de leurs habitants. A eux seules, ces régions économiques abritent 1/3 des ruraux du Maroc.

Les régions économiques du Centre-Nord, du Centre Sud et de l'Oriental sont dans une situation intermédiaire. Les ruraux y représentent respectivement 68,7% et 57,3%.

Mais quand est-il de l'évolution de la population urbaine?

d) Répartition et dynamique de la population urbaine.

De 1960 à 1971 et de 1971 à 1982, la population urbaine du Maroc est passée de 3,4 à 5,4 millions puis à 8,7 millions d'habitants respectivement. En termes relatifs, elle ne représentait que 29% de la population totale en 1960, et 35% en 1971, mais en 1982, cette proportion a atteint près de 43%.

Cette évolution de la population urbaine a été le résultat d' un rythme d'urbanisation qui s'est maintenu à un niveau qui n'a pratiquement pas baissé entre 1960-1971 et 1971-1982. Soit un taux d'accroissement de la population urbaine de prés de 37% au cours de ces deux périodes intercensitaires. Parallèlement, le Maroc a connu une modification importante de son armature urbaine. Le nombre des grandes

villes a presque doublé et celui des villes moyennes de 20 à 100 mille habitants a triplé entre 1960 et 1982. Entre temps, le nombre de petites villes de moins de 20 mille habitants a augmenté de plus de la moitié,principalement en raison de l'urbanisation de zones considérées rurales avant 1982.

Le rythme rapide de la croissance des villes est conditionné par un transfert élevé de populations du milieu rural au milieu urbain. Ainsi,38% en 1960-1971,puis 43% en 1971-1982 de l'accroissement de la population urbaine est directement imputable aux migrations en provenance des campagnes. Le complément est dû aux mouvements naturels (excédent des naissances sur les décès).

L'un des aspects qui mérite d'être soulevé est le changement de comportement des villes vis-à-vis de la migration; entre 1960 et 1971, près de 75% des migrants nets du milieu urbain se sont installés dans les grandes villes, à elle seule, Casablanca attirait 30% de la migration nette du pays. Entre 1971 et 1982, la part de la migration qui revenait aux grandes villes a diminué à 45% et celle de Casablanca est tombée à 15%. Les grandes villes ne sont donc plus les seules pôles d'attraction du pays. Elles sont concurrencées par des localités moins prestigieuses qui commencent à faire écran et fixent mieux les migrations entre les différentes régions du pays.

On constate par rapport à la période 1960-1971, un doublement des soldes migratoires des villes de moins de 100 mille habitants et un quadruplement des soldes migratoires des 35 villes de 10 à 20 mille habitants. Le résultat, est que les centres de 10 à 100 mille personnes, qui ne représentaient que 23% de la population urbaine en 1960, en comptaient 27% en 1982, surtout à cause de l'évolution rapide de la population des centres de 2 à 50 mille habitants. Ce constat, du point de vue de l'économie régionale et d'aménagement du territoire, est d'un grand intérêt : l'effort dévolu par le passé aux petites et moyennes villes ne devrait pas se relâcher afin de conforter ces dernières dans leur rôle de pôle d'attraction de leur hinterland rural et d'éviter les problèmes causés par l'étouffement des grandes villes. En effet, par rapport à d'autres pays du Tiers-Monde qui commencent à payer le prix de l'asphyxie des grandes villes, voire des mégalopoles, le Maroc bénéficie

d'une situation privilégiée qui ne peut que l'aider dans ses politiques de développement et d'aménagement de l'espace ; il doit donc préserver cet avantage.

En outre, il est indispensable de réduire l'inégalité dans la distribution spatiale de la population urbaine. En effet, deux régions économiques seulement, celles du Centre et du Nord-Ouest, sur sept, regroupent plus de 60% de la population urbaine, et plus d'un tiers des centres urbains. C'est aussi dans ces deux régions que l'accroissement urbain global et le solde migratoire sont les plus élevés. Cette situation est, bien sûr, due à la présence des deux pôles d'attraction migratoire : l'agglomération de Casablanca-Mohammédia et celle de Rabat-Salé, entendue au sens large de l'axe qui joint Témara à Kénitra. A ce sujet, il importe de noter qu'en terme de propension à l'attraction des migrants, un net reéquilibrage de ces deux pôles est survenu : l'agglomération de Rabat-Salé a rattrapé celle de Casablanca-Mohammédia qui, entre 1960 et 1971, recevait 68% des migrants de plus.

e) Exode rural et aménagement du territoire

Les problèmes de l'exode rural, de la concentration de la population sur l'axe Casablanca/Kénitra et la nécessité subséquente d'aménager le territoire figurent dans six Plans sur sept (exception faite du Plan triennal 1965-1967).

Le Plan 1960-1964 met en liaison l'exode rural et la forte croissance démographique et formule des constatations générales sur l'exode rural : il appauvrit les régions de départ, prélève les jeunes, dynamiques et instruits et entraîne le vieillissement de la population rurale. Les Plans suivants relèvent tous la nécessité d'agir sur l'exode rural mais avec des formulations légèrement différentes. En 1968-1972 on évoque "Le freinage", de l'exode rural tandis qu'en 1978-1980 on cherche à la "ralentir", en 1981-1985 à "l'infléchir", enfin le Plan d'Orientation 1988-1992 mentionne, quant-à-lui, la "rétention" de l'exode rural.

Malgré ces différences sémantiques, une réalité semble émerger : l'exode rural est un mal nécessaire, car il est exclu de pouvoir maintenir plus de 70% de la population en milieu rural (proportion de 1960). Il

s'agira plutôt de contenir le flux des migrants ruraux-urbains au niveau souhaitable, en respectant les capacités d'absorption des villes et de réorienter les flux grâce à la création de nouveaux pôles de développement, en vue de ralentir la croissance démographique, jugée trop rapide, de l'axe Casablanca/Kénitra. Le plan 1973-1977 n'hésite pas, pour remédier aux déséquilibres démographiques, à solliciter le freinage du développement effectif de certaines régions au bénéfice des régions plus attardées par une réorientation des investissements. Plus positif, le Plan 1978-1980, prône l'amélioration des conditions de vie et de production des zones deshéritées et la promotion sociale de leurs habitants pour ralentir l'exode rural. Le Plan 1981-1985, tout en souhaitant l'infléchissement de l'exode rural par l'augmentation des possibilités de travail de la main-d'oeuvre rurale, constate l'accentuation des disparités régionales par la concentration des activités économiques sur l'axe Casablanca/Kénitra, en dépit de la politique d'équilibre régional de l'Etat. Le texte du Plan d'Orientation actuel 1988-1992 est consacré en grande partie au développement régional (et donc à la répartition spatiale de la population). De tous les 7 Plans,ce dernier a fourni le plus de détails sur les mesures destinées au rééquilibrage de la répartition spatiale de la population et la rétention de l'exode rural. Il s'agit, d'une part, de limiter l'attraction du grand Casablanca, par le développement des autres grandes villes et surtout des villes moyennes qui ont témoigné récemment d'un dynamique démographique et de développer des centres de croissance autour des pôles de développement (énumérés dans le texte du Plan), où les petites et moyennes entreprises serviront de points d'ancrage à la population rurale en quête d'emplois.

II.- Planification décentralisée au Maroc

La prise de conscience de la nécessité d'intégrer la composante spatiale dans la planification du développement au Maroc, ne s'est pas fait attendre. En effet, dès la seconde moitié de la décennie 1960, l'idée d'un examen régional des problèmes de développement fut admise ; mais à cela manquait une politique délibérée de développement régional, ainsi que des consultations régionales au moment de l'élaboration des plans. Cependant, le plan quinquennal 1968-1972 a réalisé quelques progrès en marquant une phase transitoire. Par l'inscription de projets localisés, il avait déjà visé une nouvelle optique de dévelop-

pement, la Planification Régionale.

C'est, le Plan Quinquennal 1973-1977, qui a marqué des réalisations décisives dans ce domaine. Une politique de régionalisation a été élaborée, et les mesures pour son application ont été prises. Un certain nombre d'institutions ont été mises en place, et 7 régions économiques ont été créées. Ces institutions ont été étroitement associées dans les différentes étapes d'élaboration du Plan. Donc le principe de participation et de consultation de base a été assuré.

Après le Discours Royal du 22 Mars 1974, dans lequel Sa Majesté le Roi a souligné l'importance de la régionalisation, et a invité les Assemblées Régionales Consultatives à se réunir en vue de la mise à jour du Plan 1973-1977, des travaux importants de planification régionale ont été entrepris et ont abouti à l'élaboration des programmes complémentaires. Le passage de la planification plus décentralisée était alors engagé de façon irréversible.

Ainsi, la préparation du Plan d'Orientation 1988-92 et son exécution en cours a permis de mettre en oeuvre une nouvelle vision de la planification régionale conforme aux Directives Royales contenues dans le discours prononcé par Sa Majesté le Roi. Le 24 Octobre 1984 et dans la Lettre Royale adressée au Premier Ministre en date du 10 Octobre 1985 et celle relative à la préparation du Plan d'Orientation en 1987.

Cette nouvelle vision permettra l'évolution vers une planification décentralisée qui est la traduction réelle de la volonté politique nationale visant à faire des collectivités locales de véritables acteurs du développement et des régions des entités économiques fiables.

A.- Stratégie du développement régional

La stratégie du développement régional s'articule autour de trois axes : la nouvelle vision de la planification régionale, les orientations et objectifs du développement régional et les réformes et mesures.

1.- Nouvelle vision de la planification régionale

Les préoccupations pour une planification régionale et locale vont de pair avec la volonté de renforcer le rôle économique des collectivités territoriales et le renforcement récent des finances locales.

Dans ce sens, la planification décentralisée devrait devenir progressivement une pratique quotidienne, menée en concertation avec l'ensemble des partenaires économiques régionaux et locaux, et un cadre naturel de réflexion et d'action sur les structures de l'économie et de la société.

La nouvelle vision de la planification régionale est centrée sur la programmation pluriannuelle des équipements communaux, d'une part, et des programmes prioritaires régionaux intégrés (P.P.R.I.), d'autre part.

En effet, la planification pluriannuelle au niveau communal, exige une responsabilisation des conseils communaux. Cet objectif ne pourra être atteint que si l'on travaille sur la base d'enveloppes budgétaires fixées à l'avance, par Région, par Province et par Commune.

Ainsi, les communes établiront des programmes pluriannuels comprenant le programme minimal (noyau dur) et les projets additionnels et s'engageront à les réaliser durant le Plan d'Orientation. En plus du contrôle continu des réalisations, certains projets communaux feront l'objet de contrats-programmes engageant l'Etat, les communes et les différents intervenants publics ou privés. Des commissions provinciales seront désignées éventuellement pour étudier les programmes d'équipement communaux et en contrôler la cohérence ; les programmes arrêtés par ces commissions seront transmis au Ministère du Plan.

Quant aux PPRI, ils se distinguent des autres équipements collectifs et sont créateurs de richesses par la mise en valeur de ressources nouvelles et la mise en oeuvre de structures et de systèmes de production nouveaux. L'objectif est d'arriver à mobiliser les énergies locales en vue d'élaborer dès 1988 un ou deux PPRI et de les faire aboutir au cours du Plan d'Orientation. Ces expériences seront généralisées par la suite, aux autres régions économiques.

Les PPRI qui dépassent par nature le cadre d'une seule province, doivent se déployer au niveau des secteurs productifs et seront réalisés par les opérateurs économiques régionaux moyennant des contrats avec l'Etat ou les collectivités locales.

2.- Orientations et objectifs du développement régional

Les actions à entreprendre au niveau régional s'articulent autour des trois orientations suivantes :

a) La réduction des déséquilibres régionaux et le développement du monde rural :

La recherche d'un équilibre régional adéquat passe par une réorientation judicieuse des courants migratoires et une distribution plus équilibrée des revenus dégagés de l'expansion et de la croissance économique.

Aussi, les efforts de la collectivité en matière d'équipement collectif, doivent-ils être canalisés en priorité vers les parties du territoire national les plus déshéritées.

Dans ce cadre, il faudra attacher une attention particulière au développement du monde rural, notamment par une meilleure incitation et une sensibilisation à l'utilisation rationnelle et efficiente des ressources et des potentialités agricoles disponibles au niveau local. D'un autre côté, l'encouragement de la petite et moyenne entreprise, adaptée aux conditions de vie rurale, permettra d'exploiter et de rentabiliser les atouts industriels des zones rurales.

b) La poursuite de la politique de décentralisation et de déconcentration :

Les collectivités locales doivent aspirer, après la phase de mise en place, à une nouvelle dynamique, liée inévitablement à de nouveaux moyens et à de nouvelles tâches. Parallèlement, plusieurs correctifs, au niveau des méthodes, doivent accompagner les moyens additionnels à consentir aux communes.

Au niveau provincial et préfectoral, les dispositions générales du Dahir du 12 Septembre 1963 portant sur l'organisation des préfectures, des provinces et de leurs assemblées, doivent être révisées conformément aux principes fondamentaux de la décentralisation.

En ce qui concerne le niveau régional, les études disponible actuellement relatif à la création des régions et de leurs assemblées, tracent d'ores et déjà les contours de la politique régionale à envisager au cours des prochaines années.

c) La participation de la population à l'oeuvre de développement et l'amélioration de la gestion des institutions régionales et locales.

Le Plan d'Orientation s'attachera à concrétiser l'organisation de la hiérarchie administrative, permettant un partage des responsabilités entre les services centraux et les services extérieurs, et une participation accrue de chaque cellule administrative et de chaque institution élue, à l'oeuvre de développement.

3.- Réformes et mesures

Les réformes et mesures en matière de développement régional visent notamment :

- La participation accrue de tous les acteurs à l'oeuvre du développement ;
- . en mettant en place des structures d'étude et d'exécution des programmes prioritaires régionaux intégrés au niveau des régions économiques ;
- en encourageant l'utilisation de la pratique contractuelle entre l'Etat, les entreprises publiques, les collectivités locales et le secteur privé;
- . en accordant la priorité aux projets créateurs du plus grand nombre d'emplois et situés dans les régions les moins nanties, et particulièrement les projets de la petite et moyenne industrie ;
- . en simplifiant la procédure d'octroi de crédits et en créant des cellules représentant, aux niveaux régional et local, les organismes

financiers spécialisés;

- L'approfondissement du processus de décentralisation par :
- la dotation de la région de pouvoirs exécutifs lui permettant d'accomplir sa mission ;
 - . la révision du découpage régional ;
- . l'équipement en priorité des centres chefs-lieux de communes qui constituent des centres d'activité ;
- Le renforcement des moyens humains et financiers des collectivités locales, notamment la création d'une Banque de Développement des Collectivités Locales,
- Transfert de 30% de la taxe sur la valeur ajoutée (TVA) aux communes pour la réalisation des projets locaux tout en déchargeant l'administration qui le faisait par le passé.
- L'exploitation rationnelle du patrimoine privé des collectivités locales,
- . en encourageant la création des coopératives de production susceptibles d'intégrer les lauréats des centres de qualification professionnelle ;
- . en incitant le secteur public et les collectivités locales à réaliser des projets communs avec la Promotion Nationale ;
- L'organisation harmonieuse et optimale de l'espace national et la protection de l'environnement.

B.- Les principales réalisations au niveau régional durant la période 1981-1987

Les réalisations au niveau régional se sont traduites par une programmation adéquate des projets et des ressources financières disponibles, par une participation effective de la population au niveau de la conception et de l'exécution du Plan, et surtout par une prise de conscience accrue de la nécessité de mettre en place une politique de développement régional et d'aménagement du territoire cohérente et intégrée.

Les réalisations au niveau régional se sont articulées autour des axes suivants :

1.- La mise en oeuvre d'une politique d'aménagement du territoire, de protection de l'environnement et de promotion de nouveaux pôles de développement passe par la réalisation d'études multidisciplinaires se rapportant à l'organisation de l'espace, l'identification et le développement de nouveaux centres de croissance (ville relais) et la réalisation de nouvelles zones industrielles.

Parmi les résultats attendus de cette politique il y a notamment, la décentralisation de l'activité économique à travers les différentes régions économiques du Royaume et l'allégement de la pression démographique sur les grandes villes.

- 2.- La réduction des disparités régionales, qui s'est concrétisée aussi bien dans le cadre des budgets d'équipement des différents départements ministériels et des budgets propres des Provinces et Communes que dans les programmes spéciaux de développement régional (FDCL,FSDR, Promotion National et Opération Nationale de Promotion de l'Emploi, dépenses particulières pour le développement des provinces sahariennes...).
- 3.- La consolidation des acquis en matière de décentralisation et de déconcentration à travers le renforcement des moyens humains et matériels des collectivités locales, l'élargissement de leur participation dans le processus de planification aux niveaux régional, provincial et communal, la poursuite de l'implantation des services extérieurs et la création de nouvelles Provinces et Wilayas.

URBANIZATION IN MEXICO: FACTS AND POLICY ISSUES

José B. Morelos El Colegio de México

The general purpose of this paper is to analyze the economic and demographic changes brought about by the urbanization process in Mexico. The first part summarizes some of the main aspects of the process of economic development from 1940 to 1980. The second part describes the most important and recent changes in the urban system, as well as the geographical distribution of population. In the third part, attention focuses on policy issues that have been implemented by the Mexican government to promote economic growth and to decentralize the economic and demographic growth of Mexico.

1.- Economic and Social Background

With the outbreak of the second World War, the Mexican economy found favourable conditions for its expansion in the world market by providing raw materials and manufactured goods for the belligerent countries. The government thereby began to introduce new industralization policies, and both internal and external factors contributed to the establishment of the conditions that caused the onset of the importsubstitution process. The goal was to encourage a higher and sustained GNP growth rate.

Under the logic of capital accumulation, the government designed several measures intended to remove bottlenecks and provide an infrastructure for the expansion of national production. At the same time, it has tried to encourage industry to relocate outside the major urban centers through a variety of fiscal and credit policies.

In addition, and with the same purpose of attaining decentralized development beyond the central mesa, the government established the River Basin Development Schemes (Unikel, 1982). Yet results fell short of expectations. The structuring of the price and tariff system encouraged the concentration of manufacturing in existing urban centres. Moreover, the introduction of capitalist farming and the stagnant peasant agriculture forced the migration of landless and underemployed workers to the major cities.

The rapid industrial expansion in the major urbanized regions -- Mexico City, Guadalajara and Monterrey -- increased the demand for labour in these urban centers. These regions therefore became the destination points of migratory flows. The net movement of rural population to major Mexican cities was 1.65 million from 1940 to 1950, and 1.76 million in the following decade (Unikel, 1976).

During the period, the processes of industrialization and urbanization This blend was viewed as proof of the were clearly intertwined. successful implementation of stabilized development strategies. consolidation of Mexico City's primary was considered positive, from the point of view of the economy as a whole. There were some analysts that called attention to the social problems closely related to the concentration of population in the biggest cities. They also mentioned the increased regional inequalities and the contradiction between the spirit of the governmental policies oriented towards a most equitable growth and the real situation that showed an increased concentration of income (Unikel, 1982). These problems were largely ignored, and the optimistic view prevailed. The basic argument was that as the income distribution in the cities was more equitable, the expansion of industrial and service activities in the urban labor market could accommodate the new arrivals (natives and migrants). It was also argued that urban places were the sites where the process of social mobility was most dynamic. Thus, they were considered as illustrative facts that through the urbanization process Mexico was on the road to modernization.

During the 1970s, Mexico was again subject to important economic and demographic changes and development. When stability came to an end at about the middle of the decade, the national economy was characterized by devaluation and inflationary crises. Recuperation and strong economic growth marked the late 1970s, before the onset of a new crisis during the early 1980s. At the end of the sixties, the urban concentration in just a few cities began to be seen as a "problem" when the rate of employment in industry decreased, and the overall rate of unemployment increased from 1.3% in 1950 to 3.2% in 1970. Foreign and Mexican estimates predicted, for the last year, a 15% of total unemployment. For 1980 the rate was slightly higher. According to these estimates, the total number of unemployed people in 1970 and 1980 was 2.2 million and 4.0 million respectively (Bustamante, Carlos, 1983).

2.- The Urbanization of Mexico

During the period 1940 to 1980, the population of the Mexico City metropolitan area experienced a high growth rate, but with a decreasing tendency: 5.4% in the 1940s and 4.7% in 1970. This trend is clear in the case of the Federal District, where the rate in the 1950s was 4.7% and 2.2% in the 1970s. The total population of Mexico City's metropolitan area in 1980 amounted to 14 million people; the estimate for 1989 is about 19 million people. In the 1980s the metropolitan area of Mexico City was one of the largest population centres of the world, and it is now probably the city with the largest population in the world.

To have an idea of the problem of economic, political and demographic concentration in Mexico City, the 19 million inhabitants represent 20% of the country's total population and are settled in about 1% of the country's territory. Almost 50% of Mexico City's population is employed in the industrial sector, and the city is host to nearly 70% of the country's service industries and 40% of its banking system. To further complicate the urban scene, many analysts have called attention to the intra-urban problems. According to Aguirre (1984), the most acute problems of cities are as follows:

A deficit in water supply (estimated to be about 10%); a deficit in sewage disposal (estimated to be about 25%); garbage collection problems (14,000 tons are produced daily); air pollution or environmental pollution due to 2.5 million cars and 30,000 industries; a lack of

transportation facilities and traffic congestion (of the estimated population, 14 million people per day use public transportation); problems with land tenure (illegal settlements of in-migrants); marginality (in the Federal District alone, there are 400 slum cities; an increase in crime rates; and personal and property offenses). The housing deficit is estimated to be about 577,000 units.

Similar problems are facing the two other major metropolitan areas of Guadalajara and Monterrey. Up to the 1970s, the most important features of the process of urbanization were an urban system characterized by macrocefalic cities, the most relevant of which is Mexico City, which is five times larger than the country's second city (Guadalajara); the unequal geographical distribution of the population and economic activities; the accentuated dispersion of rural population in small communities, and the aggravated intra-urban problems.

The rapid growth of the urban population was basically due to the growing number of large cities. In 1970, the 35 cities in Mexico with 100,000 or more inhabitants comprised 35.4% of the country's total population, the 119 small cities (of 15,000 to 49,000 inhabitants) 6%, and the 24 medium-sized cities (of 50,000 to 99,999) 3.5% of the population.

The belief that the urbanization will continue to show the same characteristics still prevailed among some scholars at the end of the 1970s. At the beginning of the 1980s, however, based on the concepts of Demographic Transition and Mobility Transition proposed by Selensky, some scholars began to view the irreversible concentration as an unlikely feature of the Mexican urbanization process. Furthermore, the evidence of a diminishing population in developed countries during the early 1980s supported the concepts founded in the urban transition theory. After several decades of rapid expansion, the large metropolitan areas in developed countries began to show negative net migration rates. Berry (1978) and Vining and Strauss (1977) introduced the terms of counterurbanization and "break with the past" to describe the recent changes in the urbanization process of developed countries. In the case of Mexico, Brambila (1989) presents some demographic evidence refuting the popular opinion that predicts a continuing concentration of

population in urban areas. One example is the patterns of differential growth between the urban and rural areas, and a second is referred to as the pattern of the rural-urban migration rates that exhibit an inverted shaped U-curve (see Table 1). The rural-urban migration rate started its downward trend in the 1980s. Following the operational definition proposed by Eldridge (1942) of urbanization as the multiplication of points of concentration or the increase in size of individual concentrations, we could describe the following patterns. For our purpose, the urban population was defined as that living in centers of 15,000 people or more. Thus, the concentration of population is due to the increase in the number of cities of 15,000 inhabitants and more, of which there were 119 in 1960, 166 by 1970, and 229 by 1980. The degree of urbanization in these three decades was 41.8%, 49.4% and 56.2% respectively. This means that in 1980 more than 55% of the Mexican population was living in urban centers. However, if the process of concentration is continuing, the speed of concentration is slowing down. In the period 1960-1970 the rate of urbanization was 2.13; by the next decade it had fallen to 1.39.

Table 2 shows the distribution of Mexican population by size of localities. In 1960, the population of a single city - the capital - exceeded one million; by 1970 this had risen to 3 million, and a decade later to 4 million. In 1980, the class of "one million population or more" included 0.05% of localities (4 out of 120,280), and 28.8% of the population. At the other end of the scale, the class of "1,000 population or less" included 99.15% of localities, but only 22% of the population.

These figures underline the difficulties that the country is facing in terms of concentration and population dispersion. As has already been pointed out, this is one of the features of the urbanization process in Mexico. Referring to the economic, social and political situation in the 1970s, Octavio Paz (1972) talked about two Mexicos. The first is represented by people living in rural or small communities, and the second by people settled in cities. In Table 3 the annual rates of

population growth of the various size classes are presented.¹ The metropolitan areas have experienced the highest growth rates, followed by the small cities. The smallest values correspond to medium-sized cities, which showed a negative rate (-2.76) in 1960-1970, while in the next decade the rate was below 1.0 percent.

The growth rates of the rural population exhibit the same pattern observed in other Latin American countries. The urban places with populations between 5,000 and 14,999 show an increasing growth rate. In 1970 the metropolitan cities concentrated 40.77 percent of the total population, and in 1980 the percentage was 47.96. In the other extreme (rural areas) the percentages were 44.04 and 36.87 respectively.

In order to have a complete picture of Mexico's urbanization process, attention will be focused on the population size and growth patterns of the metropolitan areas.

Table 4 names the 25 metropolitan areas (MA) of 100,000 or more inhabitants in 1980.² In a twenty year period, the number of MA rose from 14 to 25. The group that showed the most significant change was

1

Unikel et al (1976) proposed the following classification in the case of Mexico: localities of 5,000 or less inhabitants are rural; those of 5,000 to 14,999 are rural-urban or "mixed;" and those of 15,000 or more are urban. Graizbord (1988) considered small cities those of 15,000 to 100,000 inhabitants, and metropolitan areas those of 100,000 or more. For our purposes, small cities are those of 15,000 to 49,999 inhabitants, and medium-sized cities those of 50,000 to 100,000.

2

Criteria used to define MA: cities whose central area have a population of 50,000 or more; density; an economically active population engaged in secondary and terciary sectors; and physical and geographical variables. For details see: Negrete, Maria Eugenia, and Hector Salazar (1986).

that of cities with 250,000 to 749,999 inhabitants, rising from four MA in 1960 to 14 in 1980.

One of the aspects that calls for attention is the gradual changes between categories: the MAs in the lower categories in the 1960s moved up into the next group in the following decade, while new MAs appeared in the lowest category. The exceptions to this pattern were the MAs of Mexico City and Guadalajara, which stayed in the same category during the whole period.

In 1980, 14 states out of 32 did not have MA. The state with the highest number of MAs was Veracruz with six MAs (Coatzacoalcos, Veracruz, Jalapa, Orizaba, Poza Rica and Cordova). The first four MAs were in the class of 250,000 to 749,999 inhabitants; the other two were in the bottom class (100,000 to 249,999).

Table 5 presents population data by size of Metropolitan Areas, distinguishing central cities from peripheral ones. Table 6 shows the annual rates of growth for the population according to the abovementioned classification. One of the most important features is the loss of the relative importance of the central area in the MA of Mexico City since 1960. The percentage of population living there was 52.3 in 1960, which decreased to 16.5 two decades later. On the other hand, the population of the central cities in the other categories gained impor-The population living in the periphery of the largest MA (Mexico City) showed a sustained increase in the percentage values. This is not the case in the categories of "250,000 to 750,000" and "750,000 to 5,000,000." According to the theory of the city growth cycle, the growth of the core dominates that of the periphery in stage I. In stage II, the growth of the periphery dominates that of the core (Korcelli, 1984, p. 361). In the case of the Metropolitan Area of Mexico City, stage I came to an end in the 1960s, when the population of the core was higher than that of the periphery. Since 1970, this MA moved into stage II (suburbanization), with the population of the periphery dominating that of the core. The other Metropolitan Areas of Mexico are still in the stage of urbanization (stage I).

However, the annual growth rates of the agglomeration core,

presented a clear and consistent tendency towards lower levels, irrespective of size and time period. The same tendency can be seen in the peripheries of all Metropolitan Areas, except MAs of 100,000 to 249,999 inhabitants (see **Table 6**).

To some extent, the bell shaped curve advocated by Alonso (1973) is supported by the data in Table 6. This table shows the elasticities that are an approximate measure of the growth capacity of individual cities as compared to the overall agglomeration.³ The population of the central cities of Metropolitan Areas of 2,500,000 or less is growing faster than the average rate of all central cities. The exception is the Metropolitan Area of Mexico City. These results support what was previously stated regarding the city growth cycle. A second observation is that in all the core agglomerations, the elasticity is diminishing, except in those MAs of 250,000 to 749,999.

The elasticities of the peripheral agglomerations of the MAs of 750,000 to 2,500,000 and of 250,000 to 749,999 inhabitants are increasing, whereas they are decreasing in the rest of the Metropolitan Areas.

Given its specific features, the Metropolitan Area of Mexico City deserves further consideration. In the first place, the decline in fertility has been more pronounced there than in the other MAs. The marital fertility rate fell from 317 in 1960-1964 to 244 in 1972-1976. Preliminary data in the 1986 Survey on Fertility and Health suggest that the rate in 1986 was around 200 children per 1000 married women.

It would appear that fertility started to decrease in the central city and then, through some process of diffusion, the decline began to take place in some areas of the periphery, particularly in those where the middle class outnumbered the lower class. This fact, together with emigration, helps explain the declining population in the central city.

³

For computing elasticities, it is taken as benchmark the rates of growth of all metropolitan areas and those of the central cities and their periphery.

On the other hand, the life expectancy at birth has increased from 63.8 years in 1970 to 69.9 years in 1980, and in 1988 it reached 72.3 years. The annual gain in this period was almost 0.5 years. Another demographic characteristic of the central city is the aging process. The aging index in 1970 was 6.6% for all the Metropolitan Area of Mexico City, while for the central city it was 9.2%. In 1980 the values were 7.8% and 14.6% respectively. The figures are higher in the central city: 53.2% and 53.7% respectively.

The urban situation is getting worse. The most acute problems are water supply, public transportation deficit, and environmental pollution. As an author wrote, "the 2.5 million vehicles generated 5.2 million tons of contaminants per year, among which are 4.6 million tons of carbon monoxide, 450,000 tons of hydrocarbons, 60,000 tons of nitrogen oxide, and 10,000 tons of sulphur dioxide. It is estimated that these mobile sources produce 40% of the city's atmospheric pollution ... the industrial establishment produces an additional 30% ... and the remaining 30% of atmospheric contaminants can be attributed to other sources" (Garza, 1989).

In brief, the main features of the urbanization process are the concentration of population in the largest Metropolitan Areas; the increasing number of Metropolitan Areas with populations of 250,000 to 749,000; and a stability in the number of Metropolitan Areas with populations of 100,000 to 249,999. The largest Metropolitan Area, Mexico City, reproduces some features observed in the developed countries. Its central area gives an insight into the changes in migration patterns; in particular, we can observe the urban-urban migration or the migration from the core to the periphery (suburbanization). The other Metropolitan Areas are still in the stage of urbanisation (predominance of core population growth). The Metropolitan Area of Mexico City leads the demographic transition, with its central core showing the

The aging index is the population of 65 years and over as a percent of those aged 15 and under.

predominance of women and a high index of aging.

On the other hand, Mexico is facing the problem of population dispersion. The number of localities with a population of 1,000 or less has increased in recent years. From the economic and social viewpoints, the division of the two Mexicos stands out. The rural areas are characterized by lower living standards, a stagnant agricultural sector, the unifunctional character of their activities, lower educational levels, a prevalence of infections and respiratory diseases, and poor health levels. This situation is aggravated by the economic crisis due, among other factors, to the country's financial problems.

3.- Policy Issues

From 1940 to the 1960s, the Mexican government adopted several measures aimed at promoting regional and urban development. In practice, these measures were directed at specific economic sectors, so the impact at the regional level fell far from expectations. From 1970 onwards, the government has been paying more attention to the issues of regional and urban development planning. During President Luis Echeverria's term (1970-1976), regional policies were designed to develop industrial states, to decentralize economic activities, to deconcentrate population from the Metropolitan Area of Mexico City, and to improve government coordination (Unikel, 1982). The General Population Law was introduced in 1973. Its main objective was to match economic and social programmes with the needs posed by the size, structure, dynamics and distribution of the population, while at the same time recognizing the need for urban and regional planning. At the end of Echeverria's term the Human Settlements Law was approved.

President Lopez Portillo took office on December 1, 1976. During his presidency, the National Plan for Urban Development, the National Plan for Industrial Development, and the Regional Demographic Policy were introduced. The first plan was aimed at stopping the growth of the Metropolitan Areas of Mexico City, Guadalajara and Monterrey, encouraging the growth of intermediate cities, and integrating small cities and rural areas into intermediate cities (Aguilar, 1989). The second plan set priorities related to the creation of jobs, the rise of GNP, and

the provision of a minimum level of social welfare. The Regional Population Policy was aimed at decreasing migration to the three largest metropolitan centres and to border cities along the North Baja/California border. The policy also sought to curb population growth. The former objective was to be achieved through a strategy of migration, reorientation and relocation. The second would be achieved through a plan of birth control (Aguilar, 1989). During the administration of President Miguel de la Madrid (1982-1988), the National Development Plan and seven programmes related to the regional and urban problems were introduced (Garza, 1986).

The spatial strategy of the National Development Plan is concentrated in four points:

- to induce industrial decentralization;
- to stop migration to Mexico City by improving living conditions in rural areas;
- to consolidate urban systsems at the regional level along Mexico's coast; and
- to control location of manufacturing activities and services in Mexico City by rationalizing their physical expansion.

Unikel (1982), Garza (1986) and Aguilar (1989), among others, evaluated the impact on regional and urban development of the measures implemented by the past three administrations. They focused on problems that dwelled on theoretical and methodological matters, and on operational and administrative coordination. From the methodological point of view, the main criticism stems from the insufficient theoretical basis for analyzing Mexico's spatial and urban phenomena. Analysis of the determinants of regional and urban development is often inadequate, whatever the approach used (neo-classical or marxian). The state of the art in indicative planning makes it difficult to articulate the sectoral and spatial dimensions of the phenomena. There is an urgent need to develop a general planning theory. Generally speaking, the diagnosis deals with the manifestation of the problem instead of its

determinants. There is poor policy formulation in the plans and programmes that deal with market forces, and a deficient conceptualization of the process that occurs in the urban system. There are also inconsistencies in the criteria for defining and selecting regions. The above-mentioned shortcomings explain, in part, why there are inconsistencies between regional development problems and the aims of the sectoral programmes, and why the regional policy continues to be susbordinated to national economic growth.

From the institutional perspective, each administration, apart from imposing its own views on the subject, tends to discontinue all former plans and programmes. In addition, public officials frequently have or represent conflicting interests in regard to regional development. The collaboration between and within government agencies has thus far not materialized.

The forthcoming National Development Plan for the period 1989-1994 also deals with regional and urban issues. However, the priorities assigned to the stabilization programme are the international debt and its burden, the problems of inflation, and the balance of payments. Regional and urban policies may therefore be in conflict with the overall goal of re-establishing national economic growth.

To sum up, the urbanization patterns and trends in contemporary Mexico are mainly a product of historical and market forces and, to a lesser extent, the planning efforts conducted by the government. For the present and near future, it seems unlikely that the programmes included in the National Development Plan (1989-1994) will affect the tendency for the population to concentrate in the largest Metropolitan Areas. As in the past, regional and urban development will continue to be subordinated to the goal of national economic growth.

Table 1

Mexico: Urban and Rural Population, differential in rural/urban rattes of growth.

	1950	1960	1970	1980	1990	2000
Urban Pop. 1	11,348	18,458	25,706	4,660	71,065	102,293
Rural Pop. 1	15,248	17,911	20,607	23,305		29,951
% Urban	42.65	50.75	59.04	66.69	72.83	77.35
Differential growth	0.0321	0.0298	0.0275	0.0253	0.0236	0.0223
Rate of Urban growth	-	0.0486	0.0456	0.0421	0.0364	0.034
Rate of Rural urban migratio	on -	15.23	18.43	20.34	20.36	18.21
(x 1000) % of growth due to migrat: and reclasific		31.34	40.42	67.46	64.84	53.56

¹⁾ Figures in thousands.

Source. Brambila P., Carlos, Demografía de la Urbanización de México: 1970-1980. Mimeo, 1989. +Cuadro II, 2.1

Table 2.- Population of Mexico in localities by size class: 1960, 1970, 1980.

	Percent	100.00	28.84	3.82	9.24	90.9	2.44	4.30	1.51	6.91	14.92	21.96
1980	Population (Thousands)	66,855	19,282	2,553	6,178	4,052	1,633	2,876	1,010	4,619	696'6	14,683
	Number of Localities	120,280	4	4	18	26	24	76	59	261	5,365	114,125
	Percent	100.00	24.15	1.52	7.67	7.44	3.13	70.7	1.47	95.9	17.30	26.74
1970	Population (Thousands)	48,226	11,645	732	3,698	3,586	1,510	1,950	707	3,161	8,342	12,895
	Number of Localities	92,612	3	-	11	24	21	59	41	390	4,503	87,553
	Percent	100.00	15.49	4.57	2.91	7.37	5.60	3.64	1.60	6.81	18.85	33.16
1960	Population (Thousands)	34,922	5,409	1,596	1,016	2,575	1,956	1,271	558	2,379	6,582	11,580
	Number of Localities	84,778	-	2	3	14	26	14	32	299	3,602	80,758
	lities abitants)	,	nore	666,666	666,667	249,999	666,66	666,65	19,999	14,999	666 7	666
	Size of Localities (Number of Inhabitants)	Ţotal	1,000,000 or more	500,000 to 999,999	250,000 to 499,999	100,000 to 249,999	50,000 to 99,999	20,000 to 49,999	15,000 to 19,999	5,000 to 14,999	1,000 to 4,999	1 to
		<u> </u>				- 20)0 -					

Source: Ruíz Ch. C. "La Ciudad de México en el Sistema Nacional de Ciudades" (unpublished paper) El Colegio de México, 1985.

Table 3.- Annual rates of growth of Mexican population by size class: 1960-1970, 1970-1980.

Size of localities	local	ities	Annual rates	of Growth
			1960-1970	1970-1980
100,000	and	Bore	5.07	4.23
20,000	ដ	666,66	- 2.76	0.76
15,000	Ç	666,67	3.99	3.72
5,000	to	14,999	3.03	3.71
Less than	c	2,000	1.67	1.46

Source: Adapted and calculated from Table 2.

Table 4.- Metropolitan Areas by size class, for Mexico: 1960, 1970, 1980.

1980	Mexico, City	Guadalajara Monterrey Puebla	León Toluca Torreón San Luis Potosí Tampico Mérida Chihuahua Coatzacoalcos Veracruz Jalapa Orizaba Cuernavaca	Poza Rica Monclova Gaxaca Córdova Zamora Zacatecas Guaymas Colima
1970	Mexico, City	Guadalajara Monterrey	Puebla León Toluca Toluca Torreón San Luis Potosí Tampico Mérida Chihuahua	f Goatzacoalcos Orizaba Orizaba Cuernavaca Jalapa Poza Rica Monclova Gáraca Córdova Zamora Guaymas
1960	e Mexico, City	,000 Guadalajara	Monterrey Puebla León Torreón	San Luis Potosí Tampico Mérida Chibuahua Coatzacoalcos Veracruz Orizaba Jalapa
	of 5,000,000 or more	of 750,000 to 2,500,000	of 250,000 to 749,999	of 100,000 to 249,999

Source: Adapted from: Negrete, María Eugenia y Héctor Salazar Sánchez. "Zonas Metropolitanas en México", El Colegio de México, Estudios Demográficos y Urbanos. Vol. 1, Núm. 1, 1986. Table 4.

Table 5.- Population of Mexico by size of Metropolitan areas, distinguisting central cities from periphery: 1960, 1970, 1980.

Size of Metropolitan Areas	Number (T	of inhab	inhabitants		Percent	נ	
	1960	1970	1980	1960	0261	1980	
ALL	10,525	16,919	26,052	100.00	100.00	100.00	
CENTRAL CITIES Periphery	6,728	8,879	10,846	100.00	100.00	100.00	· · · · · · · · · · · · · · · · · · ·
of 5,000,000 or more	2,409	8,904	13,879	51.39	52.63	53.28	-
Central City ¹ /	2,832	2,903	2,296	42.09	32.70	21.17	
Periphery $^{2/}$	2,577	6,001	11,583	67.87	74.64	76.17	
of 750,000 to 2,500,000	2,051	3,473	5,403	19.48	20.53	20.74	
Central Cities 3/	1,639	2,590	3,552	24.36	29.17	32.75	
Periphery-	412	883	1,851	10.85	10.98	12.17	
of 250,000 to 749,999	2,416	3,530	5,378	22.96	20.86	20.64	
Central Cities 3/	1,757	2,606	3,934	26.12	29.35	36.27	
Periphery-	629	924	1,444	17.36	11.49	9.50	
of 100,000 to 249,999	679	1,012	1,392	6.17	5.98	5.34	
Central Citles 3/	200	780	1,064	7.43	8.78	9.81	
Periphery-	149	232	328	3.92	2.89	2.16	
				<u></u>			 ;

Notes: $\frac{1}{2}$ The Central City is made up of four delegaciones; $\frac{2}{2}$ it includes 12 delegaciones and 17 municipios (counties) of the State of Mexico; $\frac{3}{2}$ it includes only the Central Municipio; $\frac{4}{2}$ it includes the adjacent municipios.

Source: Adapted from Negrete, et al, op. cit.

Table 6.- Annual rates of growth and elasticities of Mexican Population by, size of Metropolitan Areas, distinguishing central cities from periphery: 1960-1970, 1970-1980.

•	Rates of Growth	Groveh		1/1
Size of Metropolitan	(x)		Elast	Elasticities"
Areas	1960-1970	1960-1970 1970-1980	1960-1970	1960-1970 1970-1980
All Metropolitan Areas	5.07	4.23		
Central Cities	2.96	1.96		
Periphery	8.01	6.24		
of 5,000,000 or more	5.33	4.35	1.05	1.03
Central City	0.26	-2.29	0.09	-1.17
Periphery	9.03	77.9	1.13	1.03
of 750,000 to 2,500,000	5.63	4.33	1.11	1.02
Central Cities	4.88	3.09	1.65	1.58
Periphery	8.14	7.24	1.02	1.16
of 250,000 to 749,999	4.05	4.12	0.80	0.97
Central Cities	4.21	4.03	1.42	2.06
Periphery	3.61	4.37	0.45	0.70
of 100,000 to 249,999	4.74	3.68	0.93	0.87
Central Cities	4.75	3.03	19:1	1.55
Periphery	4.73	3.39	0.59	0.54

 1 Elasticity is the quotient between the rate of growth of Metropolitan Areas, cities and periphery and the rate of growth of all Metropolitan, central cities and periphery. Source: Table 5.

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URBANIZATION IN THE PHILIPPINES: TRENDS AND PATTERNS

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1.- INTRODUCTION

The last half of the year 1989 is perhaps not the most propituous time to conduct a review of Philippine urbanization patterns. The most recent census data now available were collected in 1980 and are therefore sadly dated. To be sure, this problem will be remedied within a relatively short time once the 1990 Census has been carried out, thus giving Philippine population scientists a long-awaited opportunity to find out just what has been happening to our cities during the decade of the 1980s. For now, however, we will have to be content with snips of data, small-scale studies, or educated guesses as far as this period is concerned.

In contrast, our knowledge about urban patterns during the 1960s and 1970s is on reasonably firm ground. Not only do we have data from four different census rounds which were carried out during this period, there were also a large number of surveys and anthropological investigations conducted then, due largely to the high priority given by funding agencies at that time to demographic research.

The past decade, however, has been marked by an apparent decline in the quantity -- if not necessarily the quality -- of such investigations. There can be little doubt that more work is now needed on a variety of fronts to follow up the many insightful hypotheses and research leads which were developed for the Philippine case during the earlier period. Additional documentation concerning the magnitude and changes over

time in the urban problems now confronting the country is also needed, along with information on the international context within which these issues should be set. CICRED's call for a comparative study of matters pertaining to urbanization and the spatial distribution of population is therefore greatly to be welcomed, and one which will, I hope, be given the attention it deserves by Philippine demographers during the coming decade.

As a first step in this direction, the present paper sets for its purpose a review of findings which have been made to date about Philippine urban patterns. Our present concern will be more empirical than theoretical in nature, although some attempt will also be made to tease out the general patterns which underly the diverse observations noted in the review proper. In general, I will also eschew any major emphasis upon policy issues, as based on the assumption that these may more properly be raised at some later stage of the project.

The paper is divided into three broad sections. These deal with historical trends concerning urbanization and interregional migrants flows, some characteristics of urban and rural areas, and the spatial patterning of Philippine cities. Before moving on to these issues, however, a brief review of the Philippine economic and population situation is first presented.

2.- MAJOR ISSUES NOW FACING THE COUNTRY

The dramatic events of February 1986, which led to the sudden downfall of the twenty-year regime of President Ferdinand Marcos, may be viewed as a more or less inevitable outcome of a number of disturbing trends which plagued the country throughout most of this period. Economic growth was vigorous during the early years of Martial Law (declared by Marcos in 1972), fueled in large part by a supportive business community and heavy borrowing from foreign banks and international lending agencies. The subsequent rise in oil prices undermined these initial gains, however, since the country's petroleum stock is heavily import-dependent. Military costs associated with a two-front rebel movement (Communists in the hinterlands, Muslim secessionists in the South), the existence of large-scale patterns of graft and

corruption on the part of public officials, and burgeoning foreign debt payments added further to the heavy burden placed on Philippine taxpayers. Rural incomes declined in real terms during much of the period (Khan, 1977) and the country as a whole exhibited negative economic growth during 1984 and 1985. The record of the Aquino administration in this regard has improved greatly in comparison to these nadir years but, even so, per capita income levels are not expected to reach their 1978 levels until the early 1990s.

The country's demographic patterns have posed additional difficulties. The crude birth rate declined from about 45 per thousand in 1960 to 33 per thousand in 1983, but the death rate is also low, thus leading to a continuing problem of rapid population growth and its attendant consequences.¹ Average farm sizes continue to decline in rural areas. even as a largely unsuccessful land reform program proved powerless to overcome the centuries-old traditions of tenancy and a highly inegalitarian pattern of land distribution (e.g. Ledesma, 1982; Costello, The dilemma of declining resource-to-population ratios is a common theme in writings on the Philippine countryside. During the 1960s and 1970s this took the form of widely expressed concern over high and increasing levels of rural population pressure. More recently the emphasis has been upon environmental degradation, in particular with regard to the massive deforestation of upland areas. Unfortunately, no clear solution to these problems has yet emerged. Green Revolution agricultural technology raised cereal production somewhat, but relatively few of the resulting benefits appear to have trickled down to the small farmer class, tenants, or the landless (e.g. Umehara, 1983; Madigan, 1989).

Birth rates in Philippine cities are also high, as shown by Pernia's (1976) finding that the major source of urban growth continues strongly to be natural increase rather than net in-migration. Urban areas are also plagued by problems of widespread poverty and income inequality, although average living standards are significantly higher here than in the countryside.

Various studies have shown Filipinos to be a highly mobile people, both in terms of permanent migration and more temporary moves (e.g.

Smith, 1976; Ulack, Costello and Palabrica-Costello, 1985). They are also characterized by relatively high levels of educational attainment and widespread familiarity with the English language. Rates of female labor force participation are high, especially in the cities. The economic outlook is thus by no means completely bleak, especially given the country's rich resource base and its proximity to markets in Japan and the newly industrializing countries of Asia. Prospects for future economic growth are now considered to be reasonably good and the investment climate has improved markedly during the past few years. Most recent capital flowing into the economy, however, appears to be destined for an urban area, particularly so for the country's National Capital Region (Metropolitan Manila).

3.- URBANIZATION AND POPULATION REDISTRIBUTION PROCESSES

Twentieth century migration flows in the Philippines have been dominated by two major streams. The first of these is a basically rural-to-rural movement, out of densely settled agricultural areas in Luzon and the Visayas towards frontier regions in the Cagayan Valley (northeastern Luzon), Mindoro and Palawan islands, and Mindanao. Such movements were especially heavy between the end of World War II and the early 1960s, during which period over a million persons migrated to Mindanao alone (Wernstedt and Simkins, 1965, Table 1). A second major stream has been from various source areas to the common destination of Manila and its immediate environs. The overall impact of these moves was, on the one hand, to greatly reduce inequalities in the levels of agricultural density which existed among the country's broad regions, and on the other, to set the foundation for Metropolitan Manila's eventual emergence as a national primate city.

The decades of the 1960s and, in particular, of the 1970s witnessed the closing of the Philippine frontier. Net migration rates in most rural communities of Mindanao were reduced towards zero during this period or even became negative in character. Further growth within the island was now largely centered in its cities, and sizeable return flows to Luzon and the Visayas became for the first time apparent (Ulack, 1977; Ulack, 1979; Smith, 1976). Meanwhile, in-migration continued to the

Metropolitan Manila area, eventually spilling over into the two regions of the country (Central Luzon and Southern Tagalog) located immediately adjacent to the National Capital Region.

Data from the second National Demographic Survey indicated that nearly two thirds (64.5 percent) of all migrants moving between 1965 and 1973 chose an urban destination. Movements were also heavily directed from the poorer regions of the country -- including a number of the frontier areas which had previously been net gainers from the migration process -- to those which were more economically developed (Perez, 1983, Tables 3.5 and 3.12).

The heavy in-migration to rural (i.e. frontier) areas which took place during the first 60 years of the century, as coupled with the high rates of natural increase which are still found in such locales, have resulted in a comparatively slow pace of urbanization, historically speaking. Measured in absolute terms, the number of urbanites in the country has, of course, increased markedly.² Concomitantly high levels of rural growth, however, have meant that the transition towards an increasing proportion of the total population which can be classified as urban has not been a rapid one.

Table 1 illustrates this conclusion. Presented therein are data on Philippine urbanization levels, as taken from the eight population censuses which the country has held since the turn of the century. Note that findings on the "tempo" of the rural-to-urban transition indicate that, of the three intercensal periods during which the urbanizing process proceeded most rapidly, two of these took place before 1950. Findings such as these led one major urbanologist writing during the 1970s (Pernia, 1976a) to conclude that the pace of urbanization in the country has actually been rather "sluggish." Indeed, and as Pernia has pointed out, the tempo of urbanization undergone by Western nations during the late nineteenth century was generally equal to or larger than that found for the Philippines between 1948 and 1970. The same is also true for the contemporary experience of such Asian countries as Thailand, Malaysia, Korea, Taiwan and Japan.

Seen in this light, the results for the 1975-80 period, during which

time the tempo of urbanization again reached a very high level, forecast an increasingly urban future for the country. As we have seen, prospects for further rural-to-rural migration are very slim indeed, given the uniformly high levels of rural population density which are now being experienced. Current projections of urban growth in the country have therefore been typically made upon the assumption that rapid urbanization would continue throughout the last two decades of the present century.³

We have already indicated the pattern of heavy in-migration into the National Capital Region (Manila and its major suburbs) which has been sustained throughout most of the century. As such, we may expect to find a steady increase in urban primacy measures throughout this period. This is indeed the case, as the following figures show:

Year	Primacy Index
1903	1.75
1918	1.73
1939	2.07
1948	3.24
1960	3.23
1970	3.44
1975	3.54
1980	3.44

These data, which were assembled by Pernia and Paderanga (1983, Table 3.2) show a more or less steady advance in Manila's role as the country's national primate city.⁴

Economic statistics provide strong support for the conclusion of increased demographic primacy and hint at some of the forces which underlie this process. As of 1975, for example, Manila and its suburbs could claim only 19 percent of the country's manufacturing establishments. That these were clearly the country's biggest and most capital-intensive operations is shown, however, by the 47 percent share of manufacturing employment found in Metropolitan Manila. A like figure (47 percent) was also found for the share of gross value added obtained

for this setting. And, when the nearby regions of Central Luzon and Southern Tagalog are added, these figures rise to 43 percent, 65 percent and 74 percent, respectively (Pernia and Paderanga, 1983, Tables 4.1, 4.2 and 4.4).

An indication that these patterns must have persisted into the decade of the eighties is provided by investment data from the same period. Between 1970 and 1975 the National Capital Region garnered 44 percent of the paid-in capital of newly registered corporations, a figure which rises to 73 percent if the Central Luzon and southern Tagalog regions are added (Hermoso, 1983, Table 1.1). These regions also accounted for well over half of all industrial and service sector loans from the national government's development bank for the period 1948-1975 (Hermoso, 1983, Table 1.1), thus showing the manner in which past Philippine governments have actually acquiesced in the trend towards primacy despite their frequent pronouncements to the contrary.⁵ Currently, the financial pages of the country's newspapers are reporting the formation and expansion of a large number of businesses, indicative of a fairly bullish investment climate. Again, however, the great bulk of these new projects would appear to be slated for Metro Manila or its immediate environs.

The upshot of all this is likely to be a pattern of sustained demographic growth in and around the nation's capital. By the end of the present century, Metro Manila is expected to become one of the world's largest cities, with a population of somewhere between 10.5 (Jones, 1983, p. 3) and 12.3 (Hauser and Gardner, 1982, Table 1.9). Urban diseconomies of air pollution, traffic jams, problems with garbage and sewage disposal, inadequate city service provision and the like which are already being experienced with a population of only 7 or 8 million persons will surely be significantly greater when this *scenario* of continued primate city growth is played out. Widespread consensus therefore exists within the Philippine demographic community that the primacy problem should represent a major focus of the nation's overall urban policy.

As a final comment on the above topic, it will be well to review briefly the recent experience of other urban centers in the country. We criticism of the relatively high rates of economic growth experienced of late, auspicious though they may be in other ways). Should this be true, the most likely hypothesis would naturally be that demographic growth would follow suit; that is, that the fastest growing regional cities will be the larger ones. And, while some towns have also grown substantially in size and in non-agricultural functions, these are generally those which are located near to a large city or which are connected to the same by means of a major highway. As such, the overall pattern outside of the National Capital Region would appear to resemble more that of an emerging network of metropolitan areas, rather than of a set of diffusely scattered towns and small cities (cf. Costello, 1989, for a summary of this general argument).

4.- CHARACTERISTICS OF URBAN AND RURAL AREAS

Intimately associated with the question of rural-urban migratory trends are the social and economic differences associated with those two types of areas. The income and employment opportunities which are commonly perceived to exist in cities are, on the one hand, the main reason why migrants are willing to hazard their future on such a risky move. In turn, the selective nature of the migratory flows which accompany the urbanization process tend also to change the composition of both sending and receiving communities.

We have seen how manufacturing jobs, especially those in the larger (and more highly paying) companies tend to cluster around the Metropolitan Manila region. Professional, administrative and clerical workers are also overrepresented in this, the most economically developed area of the country. Much the same can be said for the labor force composition of urban areas in general, as compared to that for communities located in the Philippine countryside. Again, this appears to be particularly true for cities in the larger city size categories (Costello, 1989).

Living standards are also markedly higher in Philippine cities. The 1985 Family Income and Expenditure Survey (Republic of the Philippines, National Census and Statistics Office, 1987) obtained a mean yearly household income of P57,193 (about US\$ 2,900) in the National

have seen how the very largest city has grown inordinantly large. How about the smaller city size categories? Have significant differences in growth patterns emerged among these entities during the past few decades?

Our major contrast, in this regard, will be between relatively large regional cities (250,000 and over) and those smaller urban places located beyond the influence of Manila. According to one school of thought (the "diffuse urbanization" perspective -- cf., in particular, Hackenberg, 1980a), it is the towns and cities in the latter category which hold the best prospect for bringing the fruits of development to the great mass of Philippine poor. These communities are viewed largely in their role as rural service centers, and are said to now be exhibiting healthy levels of demographic and economic growth as a function of trends toward increased non-agricultural employment in what are basically rural areas. Green Revolution technology, rural electrification, improved means of transport and communications, trends toward increased commuting and circulation: all of these are said to increase the viability and equityserving functions of a wide network of small urban places throughout Southeast Asia (Hackenberg, 1980a; Madigan, 1981; Jones, 1983; Rondinelli, 1983). Hackenberg (1980a, p. 404), in particular, has noted what he sees as a trend towards diffuse urbanization in the southernmost Philippine region of Mindanao and has argued that the process probably does not need "an intervening layer of major regional cities to stimulate its growth."

The idea that a network of smaller cities and towns would serve the country's rural hinterlands in a manner superior to that performed by the present urban hierarchy is a plausible, though as yet unproven, one. Finding proof that the country is in fact moving towards such a city size distribution is, however, highly problematic. A more likely hypothesis is that it is the larger urban places, rather than the smaller ones, which are now growing fastest. As shown in Table 2, this pattern has proved true for all of the intercensal periods since 1903, including the most recent (data are from Pernia, 1983, Table 1). And, while data are lacking for the 1980s, it is commonly believed that the positive economic growth generated during the Aquino administration has centered largely on Metro Manila and the regional capitals. (This, in fact, is a common

Capital Region, as compared to \$\mathbb{P}40,502\$ for all other urban areas in the country and \$\mathbb{P}21,875\$ for rural communities. The cost of living in urban areas is, of course, somewhat higher than that found in the countryside, but the urban advantage would no doubt persist even if this factor could be taken into account.

The comparative difference in terms of living standards between Metro Manila and the other regions of the country appears to have remained relatively stable in the past two decades. As the data in Table 3 show, the incomes earned by inhabitants of Metro Manila were about twice as high as those earned by all households in the country in both 1971 and 1985. The rapidly urbanizing regions of Central Luzon and Southern Tagalog were also doing better economically than virtually all other regions in the country at both points in time. central points, which have been the location of so many new commercial and industrial enterprises, have not further outstripped the other regions in terms of comparative living standards is no doubt due to the large number of poor, rural-born migrants that have come to live there during the period in question. The existence of this migrant underclass, most of whom are earning very low incomes indeed, has no doubt depressed somewhat the average living standards found in their point of destination 7

An additional implication of the above point is that the levels of income inequality ought to be higher in Philippine cities than in rural areas, given the way in which urban areas have attracted large numbers of poorer households that now coexist with those in the middle and upper strata. In general, Philippine-based demographers have argued that this is indeed the case (e.g. Hackenberg, 1980b; Costello, 1983). Indeed, the uppermost decile of households in Metro Manila were earning in 1975 an income level which was twenty-two times as large, on the average, as that found among those in the bottom decile (Bronger, 1983, Figure 1). At the same time, however, it should be noted that cities have traditionally represented the locale in which the nascent Philippine middle class has clustered most heavily (Doeppers, 1971). There is therefore some hope that the currently high levels of income inequality could represent a temporary, or transitional, phenomenon.

Migration to Philippine cities tends to be highly selective of young adults, females and the better educated (e.g. Ulack, 1979; Perez, 1983; Costello, Leinbach and Ulack, 1987). As such, we should not be surprised to find disproportionately large numbers of persons with these characteristics living in urban areas. Selectivity by education tends to be stronger for men than for women and appears to have declined somewhat over time (Palabrica-Costello, 1980). This latter finding lends some support to the generally pessimistic picture provided by advocates of the "overurbanization" thesis, but the evidence would still appear to indicate that most rural-urban migrants benefit from their decision to move.

On balance, migrant males (though apparently not females) rank about as high as urban nonmigrants in terms of occupational status and levels of living. Their comparative advantage over rural stayers is, of course, even greater in this regard. This same group has also been found to not be disproportionately represented among informal sector workers and, in any event, considerable evidence also exists for the proposition that many types of informal sector activities can act as viable routes to upward social mobility (Hackenberg, 1980a; Costello, Leinbach and Ulack, 1987). Again, most empirical studies report positive findings regarding the comparative economic standing and chances for upward mobility found among rural-urban migrants, informal sector workers, and even the great majority of urban slum dwellers (e.g. Laquian, 1971). If there is any fly in this particular pot of ointment it is probably that prospects for such marginal groups may become attenuated in future years, should they continue to expand more rapidly than will allow for their continued absorption into the urban economy. One series of surveys in Davao City, for example, noted an increase, over the period 1972-1974, from 11.5 percent to 16.2 percent in the proportion of the city's labor force employed in the "bazaar economy": market vendors, peddlars, buy and sell merchants and sari-sari storekeepers (Hackenberg, 1975). The possibility is thus raised of an urban involutionary trend in which the early gains registered by low-skilled rural-urban migrants can no longer be matched by subsequent cohorts (cf. Costello, 1984, pp. 16-20 for a further discussion of the "urban involution" thesis).

Besides serving as loci for the process of economic development, cities can also function as centers of cultural change and "modernization." Various types of fertility studies, for example, have shown urbanites to be further along the road to the modern pattern of purposely controlled childbearing than are inhabitants of the Philippine countryside. Age at marriage tends to be higher in the cities, birth rates lower, and acceptance of family planning more widespread (e.g. Concepcion and Smith, 1977; Pagtolun-an, 1980; Palabrica-Costello and Costello, 1989). Urban residence also tends to be associated with use of the mass media, political knowledgeability and the gainful employment of women.

In line with these observations, it might also be added that a significant *cultural* dimension to Philippine urban life is provided by the intermixture of different ethnic groups that can be found in the city. Studies have indicated that this phenomenon is now well underway in the largest and most industrialized cities of the country (Ulack, 1979; Costello, Magdalena, and Sealza, 1982). The spread of nationalism —as opposed to a provincial or regional outlook — is likely to be spurred by this process, as is the creation of new ideas and outlooks. Acquisition of the national language (Tagalog/"Filipino") as a form of *lingua franca* is also proceeding more rapidly within those areas which are marked by ethnically heterogeneous populations (Costello, 1984/85).

5.- SPATIAL PATTERNS

Relatively little work has been done on patterns of residential segregation in Philippine cities. In terms of ethnic group affiliation, the majority of the populace belongs to one of about a dozen "lowland Christian" linguistic groupings. Social distances between these groups are not particularly acute, nor does casual observation indicate that they are strongly segregated from one another in terms of urban residential patterns. Two minority groups which do lie somewhat outside the mainstream of Philippine society, however, are the Muslims and the Chinese (e.g. Bulatao, 1974). The former group restricted itself for many years to its own rural-based ethnic enclaves in Mindanao-Sulu, but has shown some propensity to migrate to Christian-dominated cities such as Manila, Iligan, Cagayan de Oro and Cotabato City in the past

decade. (Such moves are probably made in the hope of avoiding the military conflicts which have plagued the Muslim regions for the past decade or two, as well as in response to the opportunities for economic advance found in these particular cities). In general, urbanized Muslims do seem to cluster together in specific neighborhoods, often near the public market or in a neighborhood with a mosque.

In contrast to the Muslims, the Filipino Chinese have been highly urbanized throughout the course of the twentieth century. This group, too, would often appear to be concentrated in or around the city's business district, although many younger Chinese may well be moving into planned subdivisions on the urban peripheries. Again, however, no empirical analysis has yet been made of this phenomenon.

What little information is available on residential segregation among the social classes in Philippine cities seems to indicate that, again, such patterns are not unusually acute (Costello and Palabrica-Costello, 1984). As is the case in most Western nations, what segregation does exist is generally greatest between groups at the two extremes of the socioeconomic status distribution (i.e. between the wealthiest and poorest households). Patterns of social class segregation do appear to be intensifying, though, thus lending further support to the conclusion that the Philippine urban setting is characterized by high and increasing levels of income inequality.

Studies of individual slum and squatter areas have been frequently undertaken, often with a view towards describing the community life experienced by lower class rural-to-urban migrants. In actual fact there is not a particularly strong tendency for such persons to *initially* settle in lower class districts, due to the large number of migrants who first take up residence in the city as extended relatives or domestic servants in higher status households (Costello, 1987). To the extent that rural-urban migrants eventually come to marry and form their own households, however, residence in a slum or squatter district is indeed resorted to with some frequency. The social problems which are objectively associated with such areas are, of course, severe although the slum dweller's subjective perception of the same may often be relatively less critical (Hollnsteiner, 1973; Ulack, 1976; Laquian, 1971). Slum and

squatter districts are typically located in low-lying areas, thus leading to flooding and associated sanitation difficulties. Access to city services is typically poor or nonexistent and the ever-present threat of eviction brings a sense of insecurity to most squatter households. Housing is often grossly substandard and physical densities can be extremely high.⁸

Other evidence on the lifestyles of slum and squatter dwellers is more positive, however. Squatters pay minimal rent or none at all, thus making it easier for them to cope with the high cost of urban living. Slum dwellers who are able to gain a foothold in the city's economy generally report that they have achieved significant mobility gains and that they are unwilling to return to their community of origin. Unemployment rates may be surprisingly low, while home ownership is common, and political radicalism rare (Laquian, 1971; Hollnsteiner, 1972; Ulack, 1976). School enrollment rates among slum children can also be high (Heckart-Hackenberg, 1974). And, while some reservations might well be expressed about the quality of the educational experience which is most typically encountered in such settings, this is probably at least on a par with whatever is available in rural areas of the country.

The famous dictum that, "if you've seen one slum you've seen them all" appears not to be completely accurate for the Philippine case. As Richard Ulack (1978) and Robert Hackenberg (1974) have argued, the older and more firmly established slum districts — which are generally located near to market areas or other districts characterized by intense economic activity — may typically offer significant opportunities for social mobility. It is thus in the newer, and more peripherally located, slum and squatter areas that poverty is most acute. Transport costs to most jobs, schools, or government offices will be higher in such settings, even as opportunities for housewives to participate in the bazaar economy (urban informal sector activities) will be significantly reduced. As such, squatter relocation programs carried out upon the older slum districts under the guise of "urban renewal" have generally met with strong and often successful opposition on the part of squatter community members (Bagadio, 1986).

Despite the drawbacks associated -- for the lower classes at least--with residence on the city's periphery, it is generally in these areas

where further urban growth has been taking place. As such, an ongoing metropolitanization process appears to be characteristic of a number of larger Philippine cities. Population deconcentration in the Manila area has been underway for over half a century now with the growth rates of both an inner and then an outer band of suburbs easily surpassing those found in the central city (Stinner and Bacol-Montilla, 1981). Unlike the case in most Western cities, however, population densities in the core area of Metro Manila have continued to increase, albeit at a somewhat diminished rate in recent years. This has aggravated already existing problems of central city crowding.

As noted earlier, certain outlying districts of major Philippine cities appear to be populated largely by lower status households. At the same time, however, the setting up of middle class or upper class residential enclaves in such settings is also a commonly found pattern (e.g. Doeppers, 1971; Hackenberg, 1980b). At least one study (Reyes and Kim, 1979) has shown that out-migrants from the city of Manila who have moved to this city's suburban zone tend to be positively selected in terms of educational status. The eventual emergence of a Burgess-type concentric zonal (or "North American") model of the geographic distribution of residential groups within Philippine metropolitan areas is thus a possible, though by no means certain, outcome.

As is implied by the concept of a "metropolitan region," such very large cities as Manila or Cebu ought to be exerting some impact upon their more remotely situated hinterlands, as well as upon land uses in their immediate suburban wone. This does appear to be the case, and may also be true as well for the next smallest city size category. For the case of Manila, it has been shown that population growth rates and socio-economic status scores for a relatively wide band of outlying communities are inversely correlated with distance from the central city (Smith, 1973; Pernia and Paderanga, 1983, Table 2.4). Within the Northern Mindanao region it has also been shown that levels of living are significantly higher, and growing at a significantly more rapid pace, within those municipalities which are most accessible to the regional capital of Cagayan de Oro City (Costello, 1988). Levels of net inmigration are also greater for municipalities situated near to this particular city (National Economic and Development Authority, Region

X, N.d.).

Whether such patterns are also characteristic of other large regional urban centers is difficult to determine at this point, but one interesting study of agricultural productivity in different areas throughout the country was able to demonstrate the existence of a significant and positive correlation between access to a major regional urban center and this particular variable (Luna, Pernia, and Hermoso, 1983). The greater access to urban markets afforded by locations in the urban hinterland appears to encourage a commercial orientation on the part of farmers, as contrasted to the traditional subsistence outlook formerly held. Urban access also facilitates the use of agricultural inputs, extension services, and credit.

What is significant about most of the above studies is that they do not show similar effects for smaller cities and towns, a finding which would again appear to cast some doubt on the "diffuse urbanization" model. Where small towns are indeed growing and demonstrating an improved ability to attract non-agricultural employment opportunities, these are generally found along a major highway and well within the reach of a larger city. As such, the use of a "growth pole" or "metropolitan" approach to planning for the country's urban hierarchy may well turn out to be more productive in the long run than strategies which exclusively emphasize towns and small cities.

6.- CONCLUDING COMMENTS

The Philippines as of 1989 represents a case study in many of the major problems -- rapid population growth, slum formation, urban primacy -- associated with Third World urbanization. At the same time its urban communities exemplify in many ways the prospects for future economic growth and individual betterment which have often been associated with life in the city. Additional research is sorely needed to sort out these two seemingly contradictory trends. CICRED is therefore to be congratulated for sponsoring this seminar, which should prove to be a noteworthy step in this direction. It is my hope that participants from other countries will be able to benefit in some small way from the Philippine materials which have been reviewed in this paper, just as the

community of Philippine demographers will, I am sure, be enriched from the comparative findings which will be forthcoming from the project.

- 1. Compared to its major Southeast Asian neighbors (Malaysia, Indonesia, Thailand), the Philippines as of 1975 ranked highest in terms of population growth and lowest with regard to the growth rate of its Gross National Product (Hackenberg, 1980a, Table 1).
- 2. Nearly ten million persons were added to the country's urban population between 1960 and 1980 (Meija-Raymundo, 1983, Table 4.2), and this in a country of only 27 million persons at the beginning of the period in question.
- 3. Cf., for example, Pernia (1986, Appendix Tables 2 and 3) who projects urbanization levels of 41.6 percent and 49.0 percent for the country as a whole in the years 1990 and 2000. The total urban population is expected to grow by an average of one million persons per year during this twenty year interval.
- 4. The measure used by Pernia and Paderanga (1983, p. 39) is the "four-city index of first-city primacy" which "shows the predominance of the largest city over the next three urban centers." Data for 1980 were as yet preliminary when these figures were computed.

- 5. Miranda (1977) reports that, between 1964 and 1972, nearly half (48 percent) of all government expenditures on infrastructure were allocated to either the Central Luzon or Southern Tagalog regions of the country. (These two regions comprised only a little over twenty percent of the country's total population at this time).
- 6. As an example of the sort of growth which may be occurring in the larger regional cities, the director fo the Philippine Census Bureau for Northern Mindanao has indicated to the author in a private communication his belief that the urban population of Cagayan de Oro City (the largest city and political capital of the region) will have nearly doubled in size by 1990, as compared to the 1980 figure. This estimate is based upon observed growth in selected census districts of the city, as were surveyed for various purposes during non-census years 1987 and 1988.
- 7. Note in this regard that Lo, Salih, and Douglass (1978) argue that levels of inequality between urban and rural areas in Southeast Asia have tended to increase over time. The data presented in Table 4 do not provide much support for this perspective, nor do the results of an investigation of geographical correlates of living standards in Northern Mindanao during the period 1960 to 1980 (Costello, 1988).
- 8. Bronger (1983) points out that density levels in the Tondo Offshore Area (a major slum area in Manila) have now reached 122,449 persons per square kilometer. Comparative figures for the city of Manila and the Metropolitan Manila area are, respectively, 42,961 and 9,315 per square kilometer.
- 9. One recent trend which may work against the institutionalization of the North American pattern is found in the increasingly common construction of large and expensive condominium apartment buildings within Manila's core area, thus replicating in some ways the "gentrification" process now underway in many Western cities.

TABLE 1

Levels and Tempo of Urbanization, Census Years 1903-1980

Year	Level of Urbanization ^a	Tempo of Urbanization ^b	
1903	13.1		
1918	12.5	-0.32	
1939	21.6	3.36	
1948	27.0	3.09	
1960	29.8	1.27	
1970	32.9	1.45	
1975	33.4	1.46	
1980	37.3	3.54	

SOURCE: Mejia-Raymundo (1983, Table 1).

TABLE 2

Annual Population Growth Rates for Cities in Different Size Categories, 1903-1980

City Size Category	1903-39	1948-60	1960-70	1970-80
Small (40,000-59,000)	1.79	2.00	2.05	2.17
Medium (60,000-99,999)	2.57	3.11	2.11	2.57
Large (100,000 and over)	3.16	3.75	4.22	3.79
TOTAL	2.51	3.10	3.18	3.15

^{*} Measured as the percent of the population residing in urban areas.

^b Computed as the difference between urban and rural rates of growth.

TABLE 3

Mean Annual Family Incomes (in Pesos) by Region and Ratio of Regional Mean Income to National Mean, Philippines, 1971 and 1985

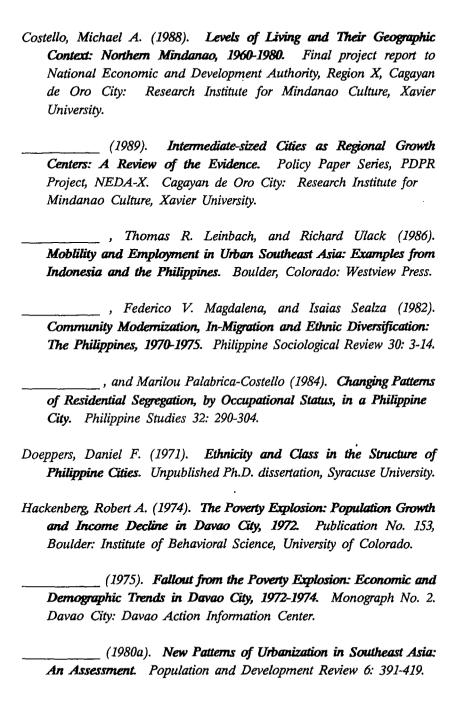
	Mean		Ratio	
Region	1971	1985	1971	1985
Corc Areas				
Metro Manila	7,785	57,193	2.08	1.84
Central Luzon	4,127	38,819	1.10	1.25
S. Tagalog	4,332	29,985	1.16	0.97
Traditional Agri- cultural Areas	•			
Ilocos	3,299	31,463	0.88	1.01
Bicol	2,785	20,221	0.75	0.65
W. Visayas	3,206	24,807	0.86	0.80
Cen. Visayas	2,548	20,756	0.68	0.67
E. Visayas		17,767		. 0.57
Frontier Areas				
Cagayan Valley	2,390	27,441	0.63	0.88
W. Mindanao	3,062	23,779	0.82	0.77
N. Mindanao		27,402		0.88
So. Mindanao	3,577	28,222	0.96	0.91
Cen. Mindanao		24,366		0.78
Philippines	3,736	31,052	1.00	1.00

SOURCES:

Data for 1971 are from Pernia (1977, Table 3); those for 1985 are from Republic of the Philippines, National Census and Statistics Office (1987, Table 1). Note that the 1985 data have not been adjusted for inflation and successive devaluation of the Philippine peso between 1971 and 1985. It is these forces, rather than real economic growth, which can account for most of the apparent increase in mean family incomes which took place during the period in question.

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EFFORTS TO RETAIN RURAL MIGRANTS IN SENEGAL

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INTRODUCTION

The Republic of Sénégal is bounded in the north and the north-east by Mauritania and Mali respectively, and to the south by Guinea Bissau and Guinea. There are two contrasting seasons: the dry season stretching from November to July and the rainy season from August to October. Rainfall fluctuates widely and drought has been prevalent in the last decade or so.

The 1988 population of Sénégal, 6.8 million persons (5 million in 1976), is spread over 196,712 km2 in 10 divisions with national density of 35 per km2. At an annual growth rate of 3 percent, the population is set to double by the turn of this century.

In 1976, Sénégal was divided into 8 regions: Cap-Vert, Casamance, Diourbel, Louga, Fleuve, Sénégal-Oriental, Sine-Saloum and Tiès, and revised to 10 regions in 1988 [The other regions are Fatick and Kolda]: Cap-Vert became Dakar; Casamance was divided into two regions (Kolda and Ziguinchor); Fleuve became Saint-Louis, Sénégal-Oriental, Tambacounda; Sine-Saloum was divided into two regions (Kaolack and Fatick) while Diourbel, Louga and Thiès remained unchanged.

Sénégal is predominantly a moslem country (92 percent Moslem). There are six main ethnic groups: the Wolofs (40 percent) are mainly in the centre, the north (Diourbel, Thiès, Kaolack) and the west (Dakar); the Serers (19 percent) located in the south and the centre of

the Groundnut Basin (Fatick, Kaolack); the Toucouleurs (over 9 percent) along the River Valley; the Peulhs (over 12 percent) dispersed throughout the country; and the Diola and the Mandiguos (8 percent each) occupy Casamance and the south-east regions.

Only 25 percent of the population is literate. Enrolment rate for the primary school is 53 percent and 11 percent for the secondary schools. Its chief export crop is peanuts; millet and rice are produced for domestic consumption. The country is endowed with few natural resources, phosphates being the main viable mineral. The per capita income of US 380 in 1984 makes it one of Africa's poor country.

Sénégal's economy is essentially agricultural; more than 73 percent of the labour force is engaged in agricultural activities [The following section draws extensively from Adepoiu (1989). The proportion of the total population working in the secondary and tertiary sectors is low. just over 15 percent: 55 percent of these two sectors can in fact be classified as informal sector. Climatic conditions are very harsh and variable. Rainy seasons are generally brief and the main export crops are subject to periodic natural hazards and to the international market conditions. In the long dry season, lasting almost five months, rural activities are at their lowest and underemployment peaks at this time. Such structural underemployment of rural workers explains, in part, the incidence of rural exodus towards the towns on seasonal basis (Associations des Chercheurs Sénégalais, 1985). Between 1970 and 1985, for instance, the agricultural sector has been hit by drought at least seven times, the 1983/84 being extremely severe. The latest drought had the effect of reducing farmers' gross income by about 35 percent (World Bank, 1989).

The drought of 1977 severely affected the economy from which the country has not yet recovered. Dakar, especially, received large number of "refugees" and displaced persons from the hinterland. While the total population was growing annually at 2.8 percent, that of Dakar was triple that rate, and for the region of Dakar, the recorded rate was 5 percent. The large inflow of migrants has intensified population maldistribution. In 1988 Dakar region with 2,728 person per km2 has the highest density trailed at a far distance by Thiès with 142 persons per km2. Dakar

region supports 21.8 percent of the population, up from 19 percent in 1976, on only 0.27 percent of the country's land area while Tambacounda (former Sénégal-Oriental) occupies 30.3 percent of the land area on which only 6 percent of the population lived in 1988 (Table 1). Other relatively high population densities are found in the rural areas of the Groundnut Basin (Diourbel and Sine-Saloum with 141 and 55 persons per km2 respectively) and in Casamance (35 persons per km2).

The level of urbanization, is among the highest in Sub-saharan Africa: In 1988, 39 percent of its population was classified as urban\ footnote. For administrative reasons, the urban population in Sénégal comprises the population of all municipalities [(communes urbaines) some of which have less than 10,000 inhabitants], apparently increasing from 32 percent in 1976 and projected at 48 percent by the year 2000 (Republique du Sénégal, 1985). This is a remarkable increase from about 24 percent in 1960 and 27 percent in 1970. Between 1960 and 1970, urban population recorded an annual growth rate of 4 percent and 3.7 percent in the period 1970-82 period (World Bank, 1972) and 4.4 percent between 1976 and 1988 (Table 2). The proportion of urban population is higher in the Dakar region which has a level of urbanization of 96 percent (up from 86 percent in 1976) compared with 34 percent in Thiès, 27 percent in Fleuve and the lowest of 15 percent in Louga (Table 1). There were 27 towns of 10,000 inhabitants or more in 1988, a sharp increase from the figure of 17 in 1976. By 1988, there were five towns with population of 100,000 or more each: Dakar (1, 447, 642), Thiès (175,4 65), Kaolack (152, 007), Ziguinchor (124, 283) and Saint-Louis (115,372) up from three in 1976: Dakar (813,317), Thiès (115, 245) and Kaolack (104, 154) (Table 2). It is obvious from the table that the most important towns are situated in the west part of the country or the south (Casamance area). The hinterland areas are also localities of significant exodus of population. The exception is however Richard-Toll where the establishment of the Senegalese Sugar Company stimulated the rapid growth of the "town" from 5,518 inhabitants in 1976 to 29,611 by 1988, at an annual rate of growth of 15 percent.

Although the data remains fussy, it is claimed nevertheless that the population of Dakar apparently multiplied three-and-half times in the

twenty-one year period 1956-1976 (Colvin, n.d.). In 1988, the provisional census figure estimated Dakar's population at 1, 447, 642, up from 813.317 in 1976 and 583.000 in 1971. Indeed metropolitan Dakar constituted 51 percent of the urban population in 1976, and nearly 55 percent by 1988. Thiès came a far distance, accounting for 7.2 percent of the urban population in 1976 and only 6.6 percent by 1988 (Table 2). As the population of Dakar increases, the structure becomes young. Zachariah and Condé (1981) estimated that in the mid-70s, 60 percent of the total net rural-urban migration was directed to Dakar alone. This finding is corroborated by the 1979-1980 Survey "Enquête Main-d'Oeuvre Migration" which arrived at an estimate of 61 percent (SONED Afrique, 1981). Such is the urban setting of Dakar which at an annual growth rate of 6 percent is set to double its population within a generation. For the rest of this century, Dakar's administration would have to face the enormous task of providing jobs and housing for its teeming population. In 1982, over 60 percent of the city's population already lived in slums and squatter settlements (Kurian, 1982) apparently a jump from 30 percent in 1969 (World Bank, 1972).

MIGRATORY FLOWS

Data sources

The literature on migration before the 1960s is scanty and interest was kindled among social scientists working in this field only after independence. For the period 1960-88, migration data covering most of Sénégal are derived from five sources namely:

- The National Demographic Survey of 1960-61: a sample survey carried out by the "Direction de la Statistique". The basic file is not available but some results are contained in various studies (Gueye, 1986; Rodriguez, 1989);
- The National Demographic Survey of 1970-71, a three-round survey of 150,000 individuals, with a duration of 6 months for each round;
 - The first General Population Census of 1976 (a "census" was held

on 1907 (Rodriguez, 1989). It was the first step towards generating valuable demographic data for planning;

- The Labour Force/Migration Survey of 1979-80, a sample survey of 60,000 individuals aged 10 years or more; \item The 1988 Population census whose results have not yet been released.

A long standing type of migration seems to be rural-rural movement. Pelissier (1969) showed that this type of migration from the Groundnut Basin to colonise new lands in Saloum and Ferlo was initially organised by religious authorities, the Mourides, who were interested in producing cash crops at the expense of food crops (Portères, 1952). Wade (1969) recognized the important role played by Mouridism in the development of agriculture production while O'Brien (1971) argued that the main challenge to this movement is rural-urban migration, more so when it is recognised that the level of income is higher in the colonised zone than in the region of origin (Rocheteau, 1975). Rural-rural migrants consist mostly of the Wolofs of Diourbel, Louga and Mbacke. Between 1972 and 1974, 300 Serers families from Sine were resettled in the new lands of Sénégal-Oriental. In spite of the small size of the target population (1969 individuals) the programme points to the feasibility of an alternative settlement to replace the degradation of land quality in Sine (Trincaz, 1979).

Apart from migration for settlement, there are two other type of rural-rural migration both of them seasonal: the "Navetanat" during the rainy season and the "Nooran" during the dry season generally from Fleuve region and Fouta (Guinea) and are closely linked to agricultural periods of peanuts (Diop and Dieng, 1985).

All migration surveys from 1960 to 1980 have shown that up to one half of the migration is directed to Dakar (Gueye, 1986). The cause of these flows is the underdevelopment of rural areas with consequences for food deficit, fall in agricultural production and an unplanned urbanization leading to acute employment and health problems (Savane, 1989). At an estimated urban population growth of 5.8 percent per annum, one person out of three now live in urban areas.

These patterns of migration and the uneven distribution of the population urged the government to create Regional Development Societies based on four large development zones: the Society for Agricultural Development and Extension (SO.DE.VA.) in the Groundnut Basin (Centre), the Society for the Development and the Exploitation of the Delta (S.A.E.D.) in the Valley Region (North), the Society for the Development of Textile Fibres (SO.DE.FI.TEX.) in the Sénégal-Oriental region (East) and the Society for the Agricultural Development of Casamance (SO.MI.VA.C.) in Casamance (South) based on climatic/ecologic conditions, agriculture specialization and the customs of the population (nomadic/sedentary, farmers/catlle rearers, etc).

Using the data from a survey by Cantrelle in Niakhar and Paos-Koto from 1962 to 1969, Lacombe (1972) showed that the bulk of migrants move towards Dakar in the dry season when the conditions in rural areas are harsh. This massive seasonal outmigration is further examined by Roch (1975) who claimed that the major cause of the phenomenon lies in the low level of earnings in these zones especially from January to May, and that international migration is far from being negligible hence it demands more attention.

In the Valley region, the efforts of the government and the Organization for the Valorisation of the Sénégal River (O.M.V.S.) to promote irrigated agriculture had changed the mobility of the population although it has been difficult to definitely settle the inhabitants (Delaunay, 1984). However, it has been speculated that reversal migratory outflows may be expected (Diallo, 1989) especially with the construction of Diama and Manantali dams, the construction of small irrigated perimeters by S.A.E.D. and the setting up of agro-industries like SOCAS for tomatoes and the Senegalese Company of Sugar (CSS) for sugar cane.

International Migration

The lack of data is a major constraint to the study of international migration. Available estimate of Senegaleses living in foreign countries, 210,000 in 1979-80, is an underreporting. Among them, nearly 175,000 are settlled in Europe (principally France). These originate mainly from

Saint-Louis and Tambacounda regions. The other 35,000 are found mainly in Côte-d'Ivoire, Gabon, Saudia Arabia, Congo, U.S.A. and Cameroon. The principal motive is the serach of employment. In the same period, the number of foreigners living in Sénégal is 350,000 and are mainly from neighbouring countries: Guinea, Guinea-Bissau, Mauritania, Mali, Gambia, Cap-Vert Islands and other non African countries especially France and Lebanon.

Internal Migration

Two broad types of internal migration are of interest in Sénégal: permanent migration caused mainly by the concomitant attraction of towns and the deterioration of economic and environmental conditions in rural areas. The direction of these streams is from east to west and leads to rapid growth of population of cities like Dakar, Saint-Louis, Thiès, Kaolack and Ziguinchor. The bulk of these migrants are from the Valley of Fleuve where 25 percent of the population are classified as out-migrants, as well as from Diourbel and Casamance. Some authors however argue that permanent migration has increased significantly since 1960 (Ndiaye, 1989; Gueye, 1986; Diop and Dieng, 1985).

Seasonal migration is mainly caused by climatic conditions. The hugh underemployment in rural areas during the long dry season period is a major push factor and explains the flow of cityward migrants in search of supplementary earnings. Each year, the rural population moving from a region to another is estimated at 15 percent. The results of the 1970-71 survey shows that Dakar received 80,000 seasonal migrants in the dry season but less than half that size in the rainy season.

Dominant direction of internal migration

In the period 1960-1988, the various sources of data cited above allow the analysis of interregional flows of migrants. In spite of the varying quality of data, the following results show the magnitude and the direction of migrants over the time period.

In the 60s, the number of migrants is 329,520 out of an estimated total population of 3,110,000 in this period (Table 3). Among the seven regions of the country two broad groups of zones are distinguinshable with respect to their migration characteristics:

- Nearly 41 percent of the migration is directed to Cap-Vert with origin mainly from Fleuve (10.8 percent), Thiès (10.8 percent) and Diourbel (9.9 percent). Sine-Saloum attracted 33 percent of the total migrants of the country mainly from Diourbel (50 percent).
- The regions of out-migration where net migration is negative are: Diourbel, Thiès, Fleuve, Casamance and Sénégal-Oriental but the intensity of the phenomenon is higher in the first three regions.

In the '70s, the situation has slightly changed by the emergence of a new in-migration region namely Sénégal-Oriental and the fact that the attractiveness of the Sine-Saloum region has declined by half to 16.2 percent of the total migrants in the country (Table 3). In the early 70s, Cap-Vert region became increasingly attractive (49 percent of the migrants) while the mobility of the total population increased from 10 percent to 13 percent. However it must be noted that the new in-migration region of Sénégal-Oriental attracted less than 5 percent of the migrants coming mainly from Sine-Saloum and Thiès regions. The main regions of out-migration are, as in 1960 Diourbel, Thies and Fleuve: 67 percent of the outmigrants are from these three zones. In 1976, 655,397 persons were recorded as migrants out of a total population of 4,999,581 inhabitants, a proportion of 13 percent, as in 1970 (Table 1). The attractiveness of Dakar also intensified. For both the in-migration and the out-migration regions, the situation remained the same as in the 70s (Table 3). According to some studies, the new region of Louga was an outmigration one and in 1976 the mobility of its population was highest compared to the other regions (Gueye, 1986).

In the 80s, the data of the Labour Force /Migration Survey relating to the last migration within the last five-year period, shows that there was a shift in the direction of migration: the traditional group of in-migration regions had changed from Cap-Vert--Sine-Saloum--Sénégal-Oriental to Cap-Vert--Sine-Saloum--Diourbel. The migrants in Diourbel originate mainly from Thiès. Comparison with the other surveys is hampered by changes in methodologies: in this survey the target group was the population "de jure" aged 10 years or more estimated at

3,591,000 inhabitants of which 257,120 ({\em i.e.} 7 percent) have made at least one migration (Table 3).

Explaining the migration flows

From 1960 to 1988, the region of Dakar continued to be the main attractive zone for migrants: it received almost half of them. The prime factors which explain this persistent trend are the regional disparities in the concentration of development in Dakar, and the characteristics of the rural economy.

In low income countries, industrial concentration in some development zones influences the flow of migrant workers. Dakar which occupies less than 0.3 percent of the national territory nevertheless contains averagely: 67 percent of the wage earners, 88 percent of the enterprises, 60 percent of the hospitals, and the lion share of the public administration. Besides, 90 percent of the total capital investment is located in Dakar. The result is a rapid growth of this town leading to inflation of social cost and acute problems of housing (Adepoju, 1989). This urged the government to initiate some decentralization policies in the Dakar-Thiès axis and few others like Richard-Toll (sugar, mills), Ros-Bethio (tomato concentrates) and Ziguinchor (processing of fishery products). Rural development projects have also been set up to redress depopulation of rural areas.

With respect to the distribution of labour force, Dakar with 15 percent of the national population, contains 55 percent of the urban labour force, more than 63 percent of the employees in the modern sector and 87 percent of those in the modern private sector.

The rural economy and earnings are characterised by climatic variations, dominance of the two-crop system (millet and groundnut) and foodstuffs deficit. There are four landmarks in the development of the rural economy since independence:

- 1960-67 period with normal rainfall, increase of investment in agricultural equipment, and a growth of 4.8 percent cultivated areas and 5 percent of fertilizer use;

- 1968-72 was marked by a series of drought and an increase in rural exodus. In this period, the combined effect of decline in areas under cultivation (from 2.6 to 2.2 million hectares), an unfavourable international market and hence a decline of the purchasing power of the farmers, led to a gross value added of the sector decreasing by 8 percent per annum;
- 1973-76, a period of recovery with improvement in climatic conditions and a rise of agricultural prices;
- Recently, the government had initiated the New Agricultural Policy aimed at the desengagement of public investment and more participation by peasants.

The first flows of migrants were from Fleuve and Thiès. The inability of the region to grow cash crops because of desertification (Diop, 1989) and the search for wage income (Lerricollais and Vernière, 1975) had led the local population to move to Dakar and foreign countries. But there is also a sociological aspects of the phenomenon: the region is mainly habited by Toucouleurs and Sarakholes who are generally traders which explains their move to the country's capital, Dakar and beyond: Côte-d'Ivoire, Congo, Zaïre and France. The migration from Thiès derives mainly from its proximity to Dakar and has been facilitated by the development of transportation network in this axis.

Since the 70s the direction of rural-urban migration from the hinterland to Dakar had extended to the whole country. In the 80s migrants were drawn from all the regions except Tambacounda which received rural-in-migrants from Kaolack and Fatick. But it must be noted that a proportion of rural-urban migrants is also directed to medium sized towns, generally the regional capitals. The motives are the same: search for employment, rural underdevelopment, draught and desertification, etc. However, the patterns of migration differ from one region to another: for example, while migrants from Saint-Louis tend to settle permanently in Dakar, those from the Groundnut Basin and Casamance (Ziguinchor, Kolda) are seasonal migrants whose migration is dictated largely by the agricultural timetable of their regions of origin.

Rural-rural migration is directed to essentially two zones: Sine-Saloum (Kaolack and Fatick) and Tambacounda (former Sénégal-Oriental). Sine-Saloum receives rural migrants mainly from Diourbel and Louga. The earlier migrants from those regions constitute what is called the "Mouride movements". This religious brotherhood played a very important role in the extension of the groundnut agriculture in the north of the basin (Pelissier, 1966). However, in the 70s, migrants were attracted from Casamance and Fleuve. Migration to Tambacounda is explained by over population and land shortage in Sine-Saloum. This has led to massive outmigration organised by the former New Land Society which succeeded in moving some people from Sine to Tambacounda region.

RURAL DEVELOPMENT STRATEGY

Government efforts to retain rural migrants in their localities have their origin in the guidelines of its rural development policy. According to the last Four-year Plan (1981-85), this policy has five major objectives, namely:

- to eliminate the food shortage by increasing and diversifying production;
- to promote socio-economic development of rural areas by the establishment of remunerative price policy while installing agro-industrial facilities;
- to secure regular incomes for farmers and ensure their participation at the management level through development of the cooperative system;
- to set up a nationwide plant-cover programme to combat desertification.

These objectives are realised through development schemes carried out by Regional Development Societies located in four large zones: the Sénégal River region, the Groundnut Basin, the Sénégal-Oriental and the Lower Casamance zones.

The Senegalese River Region

The Senegalese River is occupied by three main ethnic groups: the Soninke in the department of Bakel, the Tukuler in Matam and Podor departments, and the Wolof in Dagana department.

Until the 40s, the region has been characterised by intense rural exodus towards other parts of the country and out-migration to foreign countries. In fact, this out-migration was initially seasonal (Diop and Dieng, 1985) but since 1950, it adversely affected the labour force of the Valley. The results of the Labour Force/Migration Survey of 1979-80 show for instance that 61.8 percent of the rural-rural migrants and 59.7 percent of rural-urban migrants are 25-55 years old. International migration (also involving persons mainly in these groups) is directed principally to France and costal African countries.

The surveys carried out in the villages in this region show that the proportion of emigrants to the total labour force is high: 44 percent at Barkevi-Barkatou and 46 percent at Goumal! (Weigel, 1978). This indeed seriously disturbs the social organisation of labour and agricultural production. This mechanism of labour force out-migration and the subsequent destabilization of the production system seems to be a vicious circle since it is stimulated by two factors: increase in the participation of females and youths in productive activities as most adults have migrated, and remittances by migrants.

In the face of rural depopulation, government initiated action to contain out-migration from the Valley through:

- Intensification of rice-growing by development of areas under cultivation and extension of "small perimeters" irrigated by motor pumps. According to the Fifth four-year Plan (1977-81), the objectives of this programme is "to keep the existing population in the Valley and train the peasants in the techniques of irrigation" (Republic of Sénégal, 1977-81);
 - The diversification of types of crops in the Dieri, the introduction

of stockfarming, the follow-up of the tomato programme and the continuation of the solar pump project at Bakel;

- A complete supervision of water supply which will allow the possibility of a double crop-system especially as, with the construction of the Diama dam, new popentialities are opened.

For now, available information is to scanty to permit an assessment of these programmes and their impact on rural exodus as outlined in the objectives.

The Groundnut Basin

season.

This zone, which covers 33 percent of the national territory and more than 50 percent of the total population, consists of five regions: Diourbel, Thiès, Louga, Kaolack and Fatick. The main agricultural crop is groundnut (often combined with a subsistance production of millet). Introduced in Cayor in 1885, this crop had been extended to the south Serer zone and the unoccupied lands in Ferlo and Saloum. The availability of these new lands explains the attractive role played by the Groundnut Basin in the 50s. The migrants attracted to these locations consist of: the Navetanes arriving from the Valley region and Guinea during the rainy season but these flows were later curbed by the development of culture attelée (horse-driven cultivation); and the Noranes who came for the harvest during the dry

Recently, the Groundnut Basin has experienced rural exodus towards cities mainly Dakar. This shift in the direction of rural migrants is due mainly to the population density in the region resulting in intensive cultivation, short crop rotation and hence a decline in agricultural production (both groundnut and millet).

The recent development plans estimate the excess of labour force in the region at 200,000 workers. The efforts to correct this situation and contain rural exodus are centred on:

- movement of 300 families in Sénégal-Oriental under the former Terres Neuves Colonization Project;

- extension of the Louga-Kebemer zone which favours a variety of edible groundnut;
 - production of Sahel cereals in Thiès and Diourbel.

So far the real impact of these programmes on the mobility and the development of this region has not been assessed. We intend to include this in the on-going study.

The Sénégal-Oriental

This zone consists of the departments of Tambacounda, Kedoudougou and Bakel where rainfed rice and irrigated crops are grown.

The agriculture policy in this region was however hindered by low population density (less than 10 inhabitants per km2) and inadequate labour force. The situation has however improved since 1973 with the arrival of new settlers from the Groundnut Basin. However, some authors argue that the ressettlement of Sénégal-Oriental has its difficulties in the fact that the earnings are higher for cityward migrants than for rural-rural migrants and hence it is an herculean task to stem rural exodus from the Groundnut Basin (Diop and Dieng, 1985). In fact, diverting the rural migrants towards the unoccupied land of Sénégal-Oriental to be successful must be an integrated part of a national territory planning. In pursuance of this strategy government's efforts focussed on:

- the setting up of a Regional Development Society called SO.DE.FI.TEX. (Society for the Development of Textile Fibres) which promotes the cotton sector while encouraging other crops such as cereals, groundnut, and maize while training the rural craftsmen;
- two rice-growing projects are also launched in the region: the first consists of small irrigated perimeters in the water basin (750 hectares) with a labour intensive input, and the second concerns the introduction of rice-growing (10,000 hectares);

- a stock-farming project for an integrated system of management of rights of pasture of 65 pastoral units for 30,000 stock-breeders.

It will be interesting to examine the achievements of this Regional Development Society and make recommendations in light of government's desengagement policy as a component of the adjustment programme which curtails public subsidies.

The Lower Casamance

The peculiarity of this region, whose major ethnic group is the Diola, is the domination of rice as the main agricultural crop. The option of rice production is dictated by good pluviometric conditions with a rainy season of nearly ten months (March-January). But recently, economic forces influenced the Diola to grow groundnut and millet albeit on a small scale.

In the last decade, the population of Casamance which was rather sedentary has been involved in migrations towards cities mainly Dakar. According to the Labour Force/Migration Survey of 1979-80, the migrants are mostly adults under 40 years. These are seasonal migrants, both males and females. The impact on the labour force is quite immense as the migrants' stay in the towns usually overlaps the duration of the long agricultural season (ten months). A survey by de Jonge et al.(1978) shows for instance that the massive female out-migration to Dakar which has its peak in July-November had led to a drastic fall in rice production (Diop, 1989).

The government development strategy in this region also relies on a Regional Development Society called SO.MI.VA.C (Society for the Agricultural Development) which is working in close association with the Chinese Mission in the area. The primary objectives of the strategy is to convince the inhabitants that they can earn incomes comparable to those earned by migrants in Dakar. That is why the Fifth-four year Plan (1977-81) claimed that "the ultimate objective is an improvement in income by striking a balance between crops for sale and those required for food, the latter being increased in order to ensure supplies of

foodstuffs for the inhabitants" (Republic of Sénégal, 1977). Other activities include the establishment of the barrages at Nyassa and Guidel in order to control the influx of water and the outflow of fresh-water from the dams at Baila, Kamobeul, Soungrougrou and Bignona; and the follow-up of the Sedhiou II project based on the combination of agriculture and stock-farming.

REGIONAL DEVELOPMENT SOCIETIES: OBJECTIVES, ACHIEVEMENTS AND CONSTRAINTS

Society for the development and exploitation of the Delta (S.A.E.D.)

This society, created in 1965, is intervening in the Saint-Louis region (former Fleuve region) where the harsh climatic conditions in the region has been complicated by drought and desertification. The society's main orientation is the promotion of irrigated agriculture in the delta (Santoir, 1983). Its initial objectives were to distribute and manage irrigated perimeters; provide credit of seeds, fertilizers and agricultural machinery to peasants; and free technical assistance the local population.

When the New Agricultural Policy was introduced in 1984, these objectives were reoriented. Emphasis was placed on breaking up of all the irrigated perimeters into smaller ones which would be managed by inhabitants themselves. In order to cope with the perspectives brought about by the "Après barrage", S.A.E.D. has to focus on: regional planning, research and coordination, monitoring of project, studies of long-term strategies. It was recognised, above all, that the society must train the population in self-management of projects in order to ensure a gradual desengagement of S.A.E.D. .

A few achievements can be credited to S.A.E.D.. In 1971, it constructed small dikes between the small perimeters in order to control the flood of the Sénégal River; this for instance allowed the cultivation of 5,000 ha in the delta. The society also diversified production of crops in the perimeter of Dagana: 1,100 ha of rice, 400 ha of tomatoes, beans and maize in 1978. It is to be recalled however that S.A.E.D benefited from the opportunities provided by the Diama and Manantali dams constructed by O.M.V.S..

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The society faced some problems. As indicated in the Sixth National Plan (1981-85), the S.A.E.D. delayed the execution of its projects; it concentrated on the development of large perimeters which are costly (CFA 3 million/ha) and inadequate in spite of the provision made in the 1986-87 budget of financing small perimeters such as Matam 3 and Italkena. It is also claimed that in spite of the high level of investment (CFA 240 billion) in dam projects, the society encouraged food crop instead of cash crop production as initially programmed; and that little attention was paid to the social and physical consequences like environmental degradation, and the rise of some diseases (onchocercosis, bilharziasis).

Society for agricultural development and extension (SO.DE.VA.)

SO.DE.VA. was created in 1968 and covers the Groundnut Basin (Diourbel, Louga, Kaolack, Fatick and Thiès). Its main objectives are to provide technical assistance to rural peasants through administrative structures such as: rural communities and producters groups; educate rural population through health extension and training of craftsmen; and diversify agricultural production by encouraging production of maize, beans and cassava while installing small perimeters irrigated with wells.

In contrast to S.A.E.D. whose resources are essentially assigned to investment, SO.DE.VA. (with 1,339 officials in 1977) spends almost all his credit (averagely CFA 2 billion per annum) on administrative expenses. This heavy administration overlead is its main shortcoming and the government plans now to reduce its staff by 75 percent in the coming five years.

The main achievements of SO.DE.VA. in the basin include: the Louga-Kébémer operation which is concerned with extension work in a zone conducive to a variety of edible groundnut; providing skilled assistance to sowing operation; rural promotion in Sine-Saloum; and production of Sahel cereals in Thiès-Diourbel.

Societey for agricultural development of Casamance (SO.MI.VA.C.)

SO.MI.VA.C., founded in July 1976, is the Development Authority

of the Casamance region with objectives to: definite and formulate development policies for the region in conformity with the national development strategy; definite adequate research themes; set up hydro-agricultural facilities; and monitor all regional development projects in Casamance. SO.MI.VA.C. operates three major projects in the region:

- The Rural Project of Sedhiou (P.R.S.): this four-year project (1976-80) carried out the following programmes: follow up of animals' health; planting of 1,650 ha of rice; settlement of 400 families in Sefa perimeter; training of farmers; and provision of fertilizers. With respect to rice production, the goals were reached at 110 percent in the first year of the project but fell to 75 percent in the second year. The achievement for peanut is particularly encouraging: 132 percent in the first year and 113 percent in the second. The difficulties faced by the society are: low level of subsidies and heavy administrative mechanism.
- The Chinese Agricultural Mission (M.A.C.): SO.MI.VA.C. tries to make the M.A.C. specialize itself in small dams for the mastering of water in close collaboration with other two projects (P.R.S. and P.I.D.A.C.). The objectives of the M.A.C. are: dissemination of new techniques for rice-growing; improvement of the mastering of water by the construction of small dams; and the development of irrigated agriculture. The results of the M.A.C. are encouraging: for example, in the case of irrigation, 17 villages and 35 ha were covered in 1976 increasing to 24 villages covering 40 ha in 1977. This project also succeeded in mobilization of people by involving local populations in the construction of small hydro-agricultural projects. This generated employment and incomes for the local residents.
- The Provisional project for Agricultural Development in Casamance (P.I.D.A.C.): its zone of intervention covers Ziguinchor, Bignona and Oussouye. The major objectives are to train farmers in rice growing techniques; disseminate new techniques and distribute fertilizers; and construct small dams. This project was however constrained by the irregularity in its financing.

Apart from the specific difficulties of each sub-project, the

SO.MI.VA.C. was also faced with financial problems. For example, of the CFA 270 million budget for the take off approved by the Ministerial Council in March-April 1977 only CFA 180 million was released to SO.MI.VA.C. and even then not until April 1978! In pursuance of its Structural Adjustement Policy, the government has decided to reduce its staff by 60 percent (Diallo, 1989).

Society for the development of textile fibres (SO.DE.FI.TEX)

SO.DE.FI.TEX., founded in 1974 concentrates its activities in the cotton zone especially in Tambacounda, as well as participate in the extension of cotton production to the Groundnut Basin and Kolda region. The aims of this society are similar to those of the other regional development societies. They are: to train peasants and modernise the sector; provide fertilizers and diversify agriculture towards other crops like peanuts, maize, millet and sorghom.

The successes of SO.DE.FI.TEX. in the cotton field is attributed to favourable natural conditions of the region especially the soil, climate and the good price paid to the peasants (CFA 70 per kg). Production in this sector has been impressive: 20,607 tons in 1980-81, 47,081 tons in 1982-83 and 59,102 tons in 1984-85. This high level of production puts cotton as the second export crop. Its production covers 40,000 ha with an average rate of land return of 1,100 kg per ha. Moreover, SO.DE.FI.TEX. makes some interventions in pluvial rice growing with a production of 19,129 tons in 1977 (up from 1,210 tons in 1973). In 1977, the society embarked on a vast operation for the improvement of stock-farming throughout the area; besides, training of rural craftsmen has been launched with considerable success.

Table 1: Distribution of the Population of Senegal by Regions: 1976-1988

Regions	Area	Area(km2)		Population		Density	sity	dru	PC uz	Urban population	
•	1976	1988	1976	1988	rate of incr %	1976 190 p/km ²	$\frac{1988}{m^2}$	No.(1976)	3 50	No.(1988)	ĸ.
Cap-Vert	550	550	940,920	1,500,459	4.0	1,711	2,728	813,317	86	1,447,642	96
Casamance	28,350	28,350	730,682	991,266	2.6	56	35	123,673	17	211,986	21
Diourbel	4,359	4,359	423,638	616,184	3.1	26	141	626'88	21	133,469	22
Fleuve	44,127	44,117	514,735	651,206	2.0	12	15	120,963	23	178,880	27
Longa	29,188	29,188	419,559	489,529	1.3	14	17	48,124	11	72,434	15
Sén-Oriental	59,602	59,602	287,313	383,572	2.4	در	9	40,026	14	61,060	16
Sine-Saloum	23,945	23,945	1,006,158	1,312,291	2.2	42	55	160,302	16	233,304	18
Thiès	6,601	6,601	675,440	937,412	2.8	102	142	195,826	29	319,882	34
Total	196,722	196,712	4,997,885	6,881,919	2.7	25	35	1,591,210	32	2,658,657	39
Source: Bureau National du Recensement (1976, 1988)	eau Nationa	l du Recen	sement(1976	5, 1988)							

Table 2: Distribution of urban population by urban centres: 1976-1988

Towns		Popul	lation		Rate of
	1976	%	1988	%	incr. %
Dakar	813,317	51.1	1,447,642	54.5	4.9
Thiès	115,245	7.2	175,465	6.6	3.6
Kaolack	104,154	6.6	152,007	5.7	3.2
Ziguinchor	69,646	4.4	124,283	4.7	4.9
Saint-Louis	88,665	5.6	115,372	4.3	2.2
Diourbel	53,754	3.4	77,548	2.9	3.1
Mbour	36,952	2.3	76,751	2.9	6.3
Louga	33,579	2.1	52,763	2.0	3.8
Tambacounda	25,735	1.6	41,885	1.6	4.1
Mbacké	25,390	1.6	38,947	1.5	3.6
Kolda	18,951	1.2	34,337	1.2	5.1
Richard-Toll	5,518	0.3	29,611	1.1	15.0
Tivaouane	16,999	1.1	27,117	1.0	4.0
Bignona	14,507	0.9	22,237	0.8	3.6
Joal-Fadiouth	11,170	0.7	19,003	0.7	4.5
Fatick	9,998	0.6	18,416	0.7	5.2
Bambey	9,835	0.6	16,974	0.6	4.6
Kaffrine	11,430	0.7	16,957	0.6	3.3
Dagana	10,171	0.6	15,706	0.6	3.7
Velinguara	8,755	0.6	14,068	0.5	4.0
Sedhiou	9,332	0.6	13,212	0.5	2.9
Guinguinéo	10,948	0.7	12,887	0.5	1.4
Mékhé	8,663	0.6	12,109	0.5	2.8
Nioro-du-Rip	7,934	0.5	11,840	0.4	3.4
Kédougou	7,723	0.5	11,216	0.4	3.1
Matam	9,849	0.6	10,722	0.4	1.5
Kébémer	6,769	0.4	9,851	0.4	3.2
Linguère	7,776	0.5	9,820	0.4	2.0
Khombole	6,797	0.4	9,437	0.4	2.8
Gossas	7,365	0.5	9,289	0.4	1.9
Sokone	5,784	0.4	8,554	0.3	3.3
Bakel	6,568	0.4	7,959	0.3	1.6
Podor	6,760	0.4	7,469	0.3	0.8
Oussouye	2,482	0.2	3,849	0.1	3.7
Foundiougne	2,689	0.2	3,354	0.1	1.8
TOTAL	1,591,210	100.0	2,658,657	100.0	4.4

Source: Bureau National du Recensement(1976, 1988)

Table ; 3: Migratory flows by region: 1960 - 1980

	 		
Region	In-migrants	Out-migrants	Balance
1960	 	······································	·
Cap-Vert	133,720	21,380	+112,340
Casamance	9,080	19,020	-9,940
Diourbel	21,540	112,080	-90,540
Fleuve	19,620	65,660	-46,040
Senegal-Oriental	480	7,44 0	-6,960
Sine-Saloum	108,080	30,580	+77,500
Thies	37,000	73,360	-36,360
Total	329,520	329,520	•
1970	1		
Cap-Vert	247,347	33,752	+213,593
Casamance	16,669	40,833	-24,164
Diourbel	39,304	136,236	-96,932
Fleuve	22,546	105,08 3	-82,537
Senegal-Oriental	22,604	15,465	-7,139
Sine-Saloum	81,413	77 <u>,</u> 877	+7,139
Thies	73,099	93,736	-20,637
Total	502,982	502,982	
1976			
Cap-Vert	321,138	58,818	+262,320
Casamance	25,909	63,252	-37,343
Diourbel	47,042	89,207	-42,165
Fleuve	28,391	111,886	-83,495
Louga	28,111	109,043	-80,932
Senegal-Oriental	20,413	17,124	+3,289
Sine-Saloum	93,442	91,929	+1,513
Thies	90,951	114,138	-23,187
Total	655,397	655,397	•.
1980			
Cap-Vert	84,977	69,671	+15,306
Casamance	22,265	25,94 0	-3,675
Diourbel	26,239	22,661	+3,578
Fleuve	24,748	27,333	-2,585
Louga	11,728	21,668	-9,940
Senegal-Oriental	8,448	10,933	-2,485
Sine-Saloum	47,906	39,158	+8,748
Thies	30,809	39,756	-8,947
Total	257,120	257,120	•
Source: Guèye (1986)	055		
	 - 255 -		

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MAJOR REASONS FOR URBANIZATION IN TURKEY

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1.- INTRODUCTION

The main reasons for urbanization in Turkey are changes in demographic characteristics, demographic movement, economic growth, industrialization, and social improvements.

The birth rate in rural areas is high, with a resultant large population. Unemployment has risen as a result of technical changes in the agricultural sector and the loss of small agricultural holdings. Income in the agricultural sector was always small compared to that of other sectors and, beginning around 1945, the lure of city life encouraged the migration from rural to urban areas. As can be seen from the statistics, this trend has increased in recent years.

Technical and economic growth did not keep pace with the population growth in the 1930s and 1940s. Life in the cities was hard for the migrant population, and many slum areas were created by the building of inferior housing on public property. Normally only the head of the household migrated to the city in search of a marginal job, and this low-income group began to experience both social and economic problems. Over time these slum areas became permanent quarters, the facilities increased and the construction type changed, but migration continued unabated.

Urbanization is higher in some regions than others, and 30% of the total migration in the past 25 years has been to the three largest cities. Using population criteria, an urban area is now considered to be that with a population of more than 2,000.

The growth in population outpaced technical and economic improvements. As a result, social regions were created in 1960, family planning studies were initiated, and land reform studies were undertaken in 1973 to try to decrease the rate of urbanization.

This paper attempts to look at the urbanization process from 1935 to the present and analyzes the basic characteristics of the urban population, the changes in agriculture, population growth by population groups, and the population increase in the country's three largest cities. Also discussed is "The Urbanization Tendency Survey" conducted in these cities, which analyzed the socio-economic characteristics of a household, the personal characteristics of adult household members, and dwelling conditions.

2.- MAJOR ISSUES OF URBANIZATION

Population Growth in Turkey

Turkey's first population census was taken during the Ottoman Empire in 1520, and another was conducted in 1927 after the founding of the Republic in 1923. Since that time, a population census has been taken in the years ending with 0 or 5 (see Table 1). Turkey has a high annual growth rate compared with that of other countries, especially in urban areas (Graphic 1, Graphic 2).

Population Movement

Population movement must be analyzed in two ways: between social classes and between settlements. The poor socio-economic conditions of the rural population and the industrialization in the cities has resulted in the migration to cities from the countryside, the result of which is the growing proliferation of slum areas in and around the major cities. Table 2 shows that the percentage of the population leaving their place of birth has risen from 8% to 21% in recent years.

Changes in Agricultural Structure and Industrialization

The land area of Turkey is 780,576 km², a large part of which

(131,000 km²) is mountainous and unsuitable for agricultural purposes. The number of farms increased between 1970 and 1980, but this increase was not enough to offset the population growth (Table 3). When modern agricultural techniques came into use, unemployment increased, income from agriculture fell, and the farming population declined (Table 4).

However, agriculture still remains the primary activity in rural areas. Although much needs to be done to increase agricultural productivity, irrigation studies have been largely completed, land reform studies have been initiated, and farmers are becoming increasingly aware of the importance of proper crop selection and fertilization.

According to the Economic Development Plan, the structure and the sectors of the Turkish economy have been changing, both of which have increased the rate of urbanization. However, the main reason for urbanization continues to be the high population growth in rural areas.

3.- URBANIZATION AND POPULATION MOVEMENT

Changes in Population According to Population Group

The number of villages with a population of less than 2,000 has not changed since 1935, but the proportion of the population living in these villages has declined from 75% to 36%. If we analyze the units that have more than 10,000 inhabitants, the population has increased 9.64 times since 1935. During the period 1975-85, cities with a population of 25,000 and more have had a higher growth rate than the entire population of Turkey (Table 5).

Changes in Population of Ankara, Istanbul and Izmir

In the last 25 years, 30% of the population movement from rural to urban areas has been to the three cities of Ankara, Istanbul and Izmir. Table 6 shows the population changes and the index values taking 1935 as base year. The population increase includes population growth, migration and changes in city boundaries. According to the 1985 population census, these three cities contain 18% of Turkey's total

population (Graphic 5).

4.- URBANIZATION TENDENCY RESEARCH

Urbanization has been remarkably high in recent years compared to that of other countries. According to studies conducted by the State Planning Organization, the urbanization rate has been 05% per year for the past 25 years.

Industrialization in urban areas is slow compared with the level of urbanization, and for this reason the migration from rural to urban areas is causing problems. Slum areas are proliferating, with poor living conditions, substandard housing, and high unemployment. 48% of the population of Ankara lives in slum areas, 18% in Istanbul, and 31% in Izmir. Several research studies have been undertaken and have analyzed the problems of these slum areas at four different time periods.

Prior to 1950, technical progress in the agricultural sector resulted in an increase in the rural unemployment rate. After losing their small and unproductive land holdings and thus their income from farming, people moved to the cities in search of a job. This migration exacerbated the urban unemployment problem. The head of the household first moved to the urban areas to find a job, but in those days industrialization was slow, and the only jobs available were menial and poorly paid. Due to the housing shortage in large cities, migrants settled on public land that had no utilities, built their own housing, and the rest of the family then moved to the city. Cities were not attractive places to live in, but rural conditions were even worse.

Between 1951-1960 there was significant foreign investment in Turkey. Agricultural production and the number of small businesses grew, and more credit was made available for the trade sector. Industrialization increased, the heads of households living in slum areas found permanent jobs, and other members of the household began to work in marginal jobs. As per capita income grew, politicians began to realize the importance of this voting group, and new facilities such as transportation were introduced into slum areas. Migrants were now more comfortably and safely housed.

From 1960 to 1970, the slum population became an important consumer market, and permanent quarters were established amid improving living conditions.

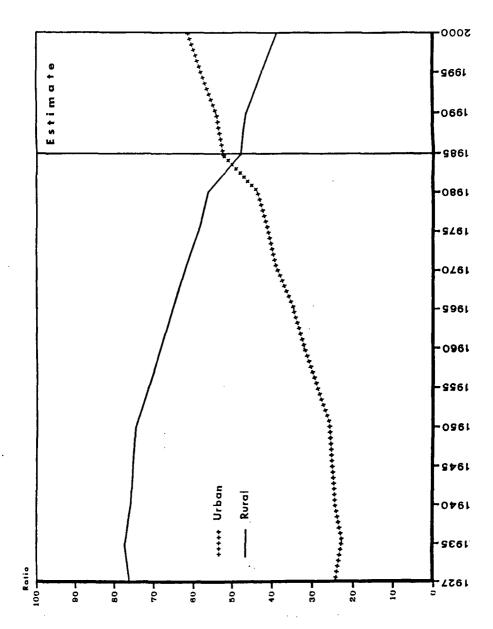
In the early 1970s, these areas became more urbanized, and land values rose as a result of high inflation and demand. Households with enough money built new, well-designed houses, while others gave their land to builders for the construction of apartment blocks in return for an apartment in which to live. The slum areas became an integral part of the city.

On behalf of the State Planning Organization, the State Institute of Statistics prepared an "Urbanization Tendency Research" project that covered the three cities that attracted 30% of the rural migrants. The study was completed in two steps. The first concentrated on slum areas, and the second on the city as a whole. A two-stage stratifying cluster sampling was applied to the slum areas, and a 1% sampling rate was used. Each cluster contained five dwellings.

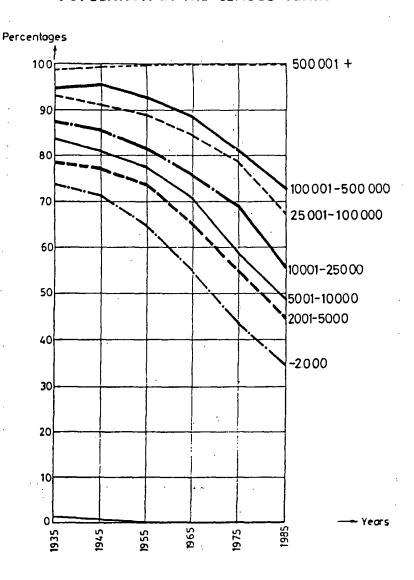
The questionnaire was divided into three sections, the first dealing with the socio-economic characteristics of the household, the second with the personal characteristics of each adult household member, and the third with details of the dwelling itself.

The results from this survey are not yet available, but further research is planned along these lines in the near future for the rural areas in order to discover the factors relevant to the urbanization tendency.

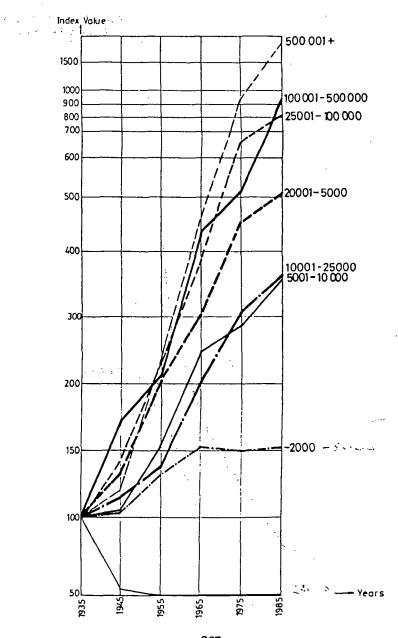
3000 Estimate RATE OF GROWTH 9661 POPULATION -0661 5861 **** 0861 1. POPULATION BY CENSUS YEAR AND ANNUAL RATE OF GROWTH ***************** 9261 0261 9961 0961 -9961 1820 1942 1940 1932 Rate of growth | Population (1000) - 4261 40 -- 80 000 -70 000 30 --- 80 000 25 -- 50 000 -40000 -30000 10 -- 20 000 5 --- 10 000 15 20-35 101 5. - 264 -



3. PERCENTAGES OF THE POPULATION GROUP IN TOTAL POPULATION BY THE CENSUS YEARS



4.INDEX VOLUE OF POPULATION GROWTH BY CENSUS YEARS



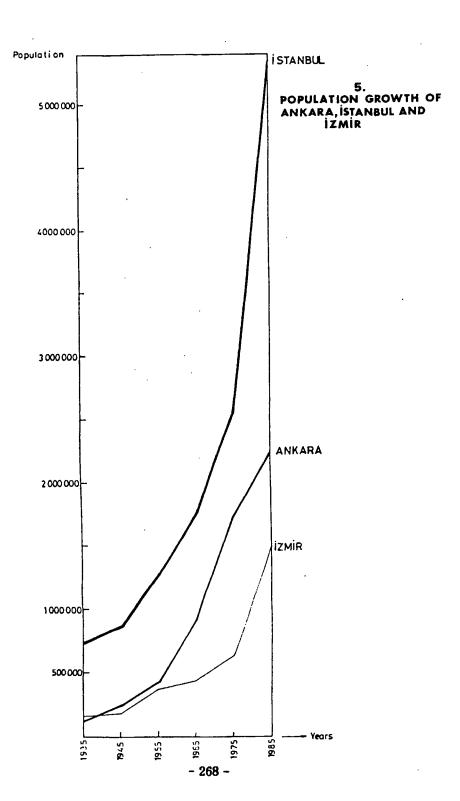


TABLE 1

Urban and rural population, annual population growth rate according to the census years.

				Urban Places (Places which have more than 2001 population)	laces which h	ave more than	Villages (Places which have less than 2000 population)	s which have	less than
Census Years	Total	ĭ	Total	Population by Census years	Percentage of total	Inter-corsal population Population by Growth rate %o Census years	Population by Census years	Percentage of total	Inter-censal psyulation Growth rate %o
1935	16 158 018		1.00	3 802 642	23.5	ı	12 355 376	76.5	i
1945	18 790 174		1.00	4 687 102	24.9	20.91	14 103 072	75.1	13.23
1955	24 064 763		7.00	6 927 343	28.8	39.07	17 137 420	71.1	19.49
1965	31 391 421		1.00	10 805 817	34.4	44.46	20.585 604	65.6	18.33
1975	40 347 719		8.1	16 869 068	41.8	44.54	23 478 651	58.2	13,15
1985	50 664 458	•	1.00	26 865 757	53.0	46.54	23 798 701	47.0	1.35

Source : State Institute of Statistics.

TABLE 2
Distribution of population according to the place of birth and resident place.

Census Years	Resident population born in the same place	×	Resident population born in different place	*	Total	<u> </u>
1935	14 048 987	·· 92	1 146 304	08	15 195-291	1 00
1945	16 280 160	91	1 677 398	09	17 957 558	1 00
1955	20 664 971	89	2 507 954	11	23 172 925	, 3 00
1965	26 464 040	87	4 018 770	13	30 482 810	1 00
1985	39 110 606	79	10 614 719	21	49 725 325	1 00

Source : State Institute of Statistics

TABLE 3

Number of agricultural establishments and agricultural area for agricultural census years.

Census Years	Size of Agricultural Establishment (hectare)	Number of Establish	· -	ricultural rea (hectare)
	TOTAL	3 058 905	, is	7 064 994
	Large Establishment total	2 284		766 825
Small Establish	nment total	3 056 621	16	3 298 169
TOTAL .		3 650 910	22	764 030
Large Establish	ment total	6 405	. 1	096 886
Small Establish	ment total	3 644 505	21	667 144

			•	Areas mo	Areas more than 10 000	•	Areas less	Areus less than 10 000	
Census Years	Total active Population	Agricultural Active Population	Percen- tage %	Total active Population	Agricultural Active Population	Percen- tage %	Total active Population	Agricultural Active Population	Percen- tage %
1935	7 921 205	6 480 068	82	984 966	172 935	18	6 936 239	6 307 133	91
1945	7 626 390	5 809 698	92		ţ	ı	ı	1	ı
1955	12 205 272	9 446 102	7.	2 164 352	370 708	17	10 040 920	9 075 394	90
1965	13 557 860	9 750 269	72	3 056 867	333 143	11	10 500 993	9 417 126	90
1975	17 383 828	11 694 513	29	5 525 401	1 307 155	24	11 858 427	10 387 358	88
1985	20 556 786	12 118 533		7 237 755	633 740	. 60	13 319 031	11 484 793	96

Source : State Institute of Statistics

TABLE 5 Increase in population by population groups and census years.

Population groups of resident places	1935	×	1945 (000)	×	1955 (000)	×	1965	×	1975	×	1985	×
- 2.000	11 895	74	13 443	72	15 888	99	17 946	57	17 827	44	18 106	36
2.001 - 5.000	872	8	1 152	90	1 757	02	2 669	60	4 028	10	4 401	60
5.001 - 10.000	649	8	677	4	994	8	1 433	05	1 786	04	2 267	04
10.001 - 25.000	931	90	1 084	90	1 298	92	1 879	90	2 887	02	3 330	07
25.001 - 100.000	718	8	1 018	92	1 693	02	2 755	60	5 012	12	5 770	11
100.001 - 500.000	. 277	05	478	60	585	8	1 226	8	1 488	04	2 646	30
500.001	758	95	908	02	11 849	80	3 483	11	7 320	18	14 143	28
Tribes	8	803	30	8					•			
	16 158	100	18 790	100	24 065	700	31 391	100	40 348	100	50 663	100

Source : State Institute of Statistics

TABLE 6

Changes in population of Ankara, Istanbul and Izmir for the years 1935 and 1985.

	1935	1945	1955	1965	1975	1985
ANKARA						
Population	122 720	226 712	451 241	902 218	1 701 004	2 235 035
Index value	100.00	184.73	367.70	735.18	1 386,08	1 821.25
Population	745 610	875 400	1 276 213	1 756 385	2 547 364	5 475 982
Index value	100.00	117.41	171.16	235,55	341.65	734.43
Population	170 959	198 396	296 578	417 413	636 834	1 489 772
Index value	100.00	116.05	173.47	244.16	372.51	871,42
				•		

CHANGEMENTS TECHNOLOGIQUES ET PRODUCTIFS : LEUR REPERCUSSION SUR LA DISTRIBUTION SPATIALE ET L'URBANISATION DE L'URURGUAY

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1.- Introduction

Nous pouvons caractériser l'évolution de la population uruguayenne au cours des dernières décennies par :

- son faible taux de croissance résultant des faibles niveaux de fécondité et du vieillissement de la structure par âges,
- l'accroissement continu de l'urbanisation, caractérisée par la décroissance de la population rurale et l'augmentation de la population urbaine, et
- le développement, pendant les périodes plus récentes, d'un processus d'émigration, intimement associé à celui de la détérioration de l'économie.

Faire une esquisse sommaire des caractéristiques démographiques uruguayennes nous ramène à l'apparition précoce d'une société moderne diversifiée, qui allait avoir une grande incidence sur la dynamique démographique postérieure. L'épuisement de la dynamique économique qui permettait de soutenir ces processus et qui débouche dans la crise de 1950 et dans la stagnation postérieure, marque non seulement une limite, mais aussi des désajustements critiques dans le modèle socio-démographique atypique, qui s'est réalisé pendant la première moitié du siècle.

La crise fournit le contexte à d'importants changements démographi-- 274 - ques. Le plus spectaculaire est sans doute le processus d'émigration, qui se déroule lentement dans les années 60 et qui culmine pendant la décennie suivante.

Mais il y a d'autres phénomènes moins visibles, qui sont également importants. Au début du siècle, nous avions déjà des niveaux de mortalité décroissants et la fécondité - quoique relativement élevée - montrait un processus de diminution qui allait s'accentuer dans les décennies postérieures. Ces variables ont ramené la population uruguayenne au cours des dernières décennies au stade presque final de la transition démographique (quoiqu'il soit possible d'espérer théoriquement des décroissances plus grandes dans les niveaux de fécondité et de mortalité).

Ces comportements de la population uruguayenne s'opèrent d'une manière interactive avec les conditions et les tendances du système social uruguayen. Ceci donne lieu à certains processus sociaux tels que les comportements reproducteurs de vastes secteurs de la population, qui permettent d'atteindre de faibles niveaux de fécondité.

En dernière analyse, la plupart de ces manifestations ne font que renforcer les tendances naturelles de vieillissement de la population.

Pour compléter ces éléments descriptifs, il convient d'examiner en outre certains traits distinctifs de la réalité urbaine de la société uruguayenne (1). Dans une analyse sommaire, nous pouvons signaler que :

- la population est concentrée dans peu de centres et
- elle est "hiérarchisée".

La population urbaine a atteint 85 % du total en 1985, ce qui suppose une croissance de 9 % depuis le recensement de 1963. Parallèlement, la ville de Montévidéo conserve des niveaux élevés de primauté, (près de 50 % de la population urbaine) quoiqu'elle présente une perte de 12,5 % dans la période analysée. Cela est dû à l'émigration ainsi qu'à d'autres phénomènes de plus longue durée tels que la perte d'importance de la migration interne dans la croissance de la

capitale (2). Ce processus n'est pas dissociable de celui qui se manifeste dans son Aire Métropolitaine, qui maintient et même augmente son taux de croissance. Ce dernier passe de 6,2 % entre 1963 et 1975 à 6,5 % entre 1975 et 1985. Cela lui permet de compenser la réduction de la part de la Capitale dans la population totale. Le poids de l'aire dans son ensemble, a même augmenté dans la population uruguayenne.

Cependant, le dynamisme individuel des centre de l'Aire Métropolitaine décroît par rapport à d'autres situés en dehors d'elle. C'est ainsi que pendant la période 1963-1975, ils occupaient les premières places quant au rythme de croissance, alors que pendant la période 1975-1985, ce sont d'autres centres non-métropolitains qui manifestent le plus grand dynamisme. Leur caractérisation n'est pas facile à faire. Leur évolution n'est pas linéaire.

Appartiennent à ce groupe :

- des centres reliés aux nouvelles aires agro-industrielles dynamiques (Bella Union, Rio Branco)
- des centres reliés aux services internationaux de tourisme (Maldonado/Punta del Este)
 - des centres reliés au trafic de frontière légal et illégal (chuy).

La perte de primauté et l'orientation du dynamisme vers d'autres zones et d'autres types de centres, semblent être les faits les plus saillants. Les phénomènes en eux-mêmes et bien des aspects qui les caractérisent posent d'importantes questions en ce qui concerne les mouvements migratoires.

2.- L'objectif

L'objet de cette présentation est de discuter quelques-unes des principales interprétations des mouvements migratoires et la distribution spatiale de la population, au cours des trois dernières décennies, prenant en compte les changements les plus remarquables de leurs tendances. Le surgissement de ces changements fait apparaître probablement, l'évidence de processus qui ne sont pas entièrement expliqués à

travers les optiques théoriques et méthodologiques d'études antérieures.

Ici, nous nous proposons de formuler une brève discussion des problèmes qui s'y rapportent et d'identifier quelques questions essentielles pour lesquelles il n'y a pas de réponses adéquates.

Pour se faire, nous proposons:

- a) de définir les portées et l'approche de l'analyse
- b) de réaliser une description succincte des modèles interprétatifs impliqués dans des études nationales précédentes
- c) de réaliser une description des résultats les plus significatifs du recensement
- d) d'exposer quelques hypothèses interprétatives alternatives, tendant à expliquer quelques-unes des questions posées
- e) de suggérer quelques lignes de recherche pour le futur

3.- La portée de l'approche

Le cadrage de l'analyse de la distribution spatiale dans les limites politiques du pays exige certaines précisions qui se rapportent au concept de distribution lui-même lié à l'homogénéité des unités spatiales intra-nationales utilisées dans la description et à la validité de la "frontière politique" en tant que déterminant de l'univers migratoire.

3.1. Les portées de la distribution spatiale

L'idée de distribution spatiale a recours à des instruments de statistique comparative et à l'analyse des "états" de la population à certaines dates précises (population demeurant en chaque unité territoriale intra-nationale à la date du recensement).

De ce point de vue, on privilégie l'étude de "changements" dans la résidence permanente ou à long terme des individus, et on néglige les déplacements résidentiels de courte durée et une ample série de mouvements qui n'entraînent pas nécessairement des changements de la résidence "habituelle".

La discussion contemporaine à propos des mouvements de la population souligne ces aspects en tant que formes spécifiques de mobilité spatiale dans la société (Lattes, Picouet, Simmons). Celles-ci sont importantes pour comprendre les relations entre le milieu rural et le milieu urbain, où se formalisent des changements dans les modèles de résidence des salariés ruraux. Elles sont en même temps associées à d'importants mouvements du travail au caractère régional (national et international) ou saisonnier (non nécessairement agricole, tel le cas de l'emploi dans les centres touristiques), qui supposent précisément des déplacements sans changement de la résidence habituelle.

Sans doute, les changements récents dans la structure socioéconomique ont augmenté l'importance de ces processus et ont déterminé le besoin de leur étude spécifique. Cependant, une analyse de la période antérieure montre qu'ils existaient déjà et que, tout simplement, il n'étaient pas enregistrés, à cause des limitations de l'information ou bien parce qu'on ne leur attribuait pas l'importance qu'on tend à leur donner aujourd'hui.

D'une manière ou d'une autre, il est certains que cette information n'est pas disponible à partir du recensement, et qu'il n'existe jusqu'à présent guère d'enquêtes de migration qui proposent des études "d'histoire de vie" nécessaire dans ce but.

De toute façon, avec les limitations susmentionnées, et en exerçant un contrôle explicite de ces phénomènes, la comparaison des distributions spatiales successives peut illustrer quelques changements d'importance. Au moins quand les changements dominants s'associent à des déplacements permanents de personnes entre différents points du territoire. A partir de cette première vision générale, il sera possible de préparer des études exhaustives.

3.2.- Les caractéristiques de la division intra-nationale

Le problème de l'"homogénéité" des unités résultantes de la division du territoire national est la deuxième question à considérer. La division devrait nous garantir que les mouvements entre unités soient plus significatifs que ceux qui ont lieu à l'intérieur de chaque unité. Mais cette signification implique, outre les aspects quantitatifs, des aspects qualitatifs.

La division devrait nous fournir une désagrégation significative du pays dans la perspective de sa structuration socio-économique (3). On devrait envisager de véritables communautés culturelles à base territoriale, constituées historiquement, ce qui implique des rapports d'identité et d'appartenance entre les membres.

La migration est, en dernière analyse, une décision d'individus et de groupes qui agissent en fonction de mécanismes de contrôle, d'adaptation et de stimulation, fonctionnels par rapport à la structure sociale.

L'étendue réduite du pays présuppose celle de ses divisions intérieures et limite les problèmes d'hétérogénéité du point de vue quantitatif.

Cela n'exclut pas l'existence de problèmes d'intérêt. Le processus d'urbanisation des unités - commun à la totalité de celles-ci - produit un déplacement interne significatif qui n'est pas enregistré.

Des effets similaires résultent de la localisation d'activités exigeant de la main d'oeuvre dans un endroit de l'unité territoriale. Ces activités peuvent être rurales ou urbaines.

C'est le cas du pôle agro-industriel de Bella Union, petite sousrégion du département (grande division administrative) d'Artigas. Son développement explique, sans doute, le bouleversement des indicateurs départementaux, qui passent du taux de migration nette le plus bas au taux le plus élevé, entre les deux périodes inter-censitaires. A la suite de cela, c'est le seul département qui présente une croissance réelle de la population rurale pour la période 1975-1985.

La considération des soldes migratoires résultant d'importants flux d'émigration et d'immigration attire un intérêt semblable. Ainsi le département de Maldonado présente un solde net réduit, résultat de flux inverses significatifs. Il est clair que le renouvellement de la

population répond à des processus, simultanés et sans rapport entre eux, de répulsion rurale et de demande urbaine dans les centres de tourisme international, qui se résolvent en des mouvements de et vers l'intérieur de l'unité.

Sans doute l'homogénéité est construite en fonction de régularités historiques qui peuvent être contestées par les mêmes facteurs qui déterminent la migration. Ceci impose de la prudence dans l'adoption des divisions, qui maintes fois sont choisies en considération de la comparabilité statistique et non à cause de leur représentation sociale.

Dans le cas uruguayen, des expériences antérieures permettent d'affirmer que les Départements sont des unités ayant une capacité explicative. De manière que des valeurs différentes peuvent être assumées comme représentatives de comportements sociaux également différents (Lombardi, Veiga). Les groupements départementaux résultant de l'analyse d'une variété de dimensions de la structure socio-économique, peuvent assumer le caractère d'une "régionalisation" du pays susceptible d'expliquer quelques aspects de la migration (Filgueira, et al, Niedworok).

3.3.- La frontière nationale

La dernière question que nous avons l'intention de traiter se rapporte au problème de la frontière politique comme déterminant de l'univers d'analyse. Ceci suppose la résolution de la migration interne en tant que "problème national", isolable des phénomènes de migration internationale qui pourraient affecter le pays d'une manière simultanée.

Le sujet a une importance différente selon le cas et les circonstances historiques considérés, et il ne faudrait pas faire des généralisations, au moins à partir de circonstances particulières du cas uruguayen.

Nous traiterons des aspects les plus intéressants de ce cas, et la manière dont ils ont une incidence sur la considération du problème migratoire.

A cause de son importance exceptionnelle dans la réalité uruguayen-

ne, nous commencerons par une référence au problème de la migration internationale. Une partie de l'analyse quantitative que nous allons réaliser se déroule pendant une période de forte émigration d'Uruguayens.

En moins de 10 ans (1967-1975), le pays perdit 8 % de sa population totale et atteignit en 1974 un solde migratoire négatif. En effet, l'émigration qui se produisit au cours de cette année fit descendre le volume absolu de la population (Fortuna et Niedworok, op. cit.).

Environ 57 % du flux d'émigration s'est dirigé vers les pays voisins (49,8 % vers l'Argentine, 7,2 % vers le Brésil). Quoiqu'on considère que le flux le plus important est parti de Montévidéo (76 % en provenance de la Capitale) (Niedworok). Il existe des évidences sur d'autres mouvements régionaux au caractère similaire.

La frontière politique uruguayenne s'imposa à l'origine, en fonction d'intérêts externes complexes, sur un espace économique qui s'était constitué antérieurement pendant la période coloniale. Sont importants par rapport à ce fait, aussi bien l'existence antérieure de marchés régionaux plus vastes, que l'homogénéité écologique et culturelle des deux côtés de la frontière (Jacob).

Il y a eu dès l'origine une tendance au transit dans les deux sens. Cela était possible dans le cadre légal du commerce et du mouvement des personnes, ainsi que dans le cadre illégal de la contrebande et du passage de personnes dépourvues de documents administratifs.

Ceci est favorisé par les caractéristiques géographiques, car le déplacement est facile. La récente réalisation d'importantes oeuvres binationales de communications a réduit presque à zéro les limitations physiques.

S'il y eut des limitations au trafic de bien et de personnes, elles étaient dues à des décisions politiques des pays voisins, en réponse à des objectifs économiques et sociaux divergents (CEPAL). Mais, et c'est là un fait fondamental, l'homogénéité locale n'est pas incompatible avec des développements différents des deux côtés de la frontière. Les aires

frontalières vont continuer à subir l'initiative de politiques globales d'un caractère national, provincial ou départemental, qui peuvent modifier unilatéralement les relations d'équilibre. Cela peut déterminer des circonstances où il existe des inégalités dans le demande de main d'oeuvre et dans les niveaux des prix. Il se constitue alors des conditions particulières dans les aires de frontière, elles peuvent avoir une incidence sur les mouvements de population.

Dans le cas uruguayen, ces faits ont une importance additionnelle : la frontière est un phénomène dû à deux circonstances.

La première est sa proximité géographique : la distance jusqu'à la frontière la plus éloignée ne dépasse en aucun cas 700 km pour n'importe quel point du territoire uruguayen.

La seconde a trait au fait que tout le sol est utilisé depuis le siècle dernier et qu'il n'y a pas de possibilité "d'expansion de la frontière intérieure" et donc, d'un mouvement migratoire interne.

La migration répond ainsi à la dynamique interne d'une certaine structure. L'existence de changements dans la structure socio-économique a nécessairement une incidence sur la transformation de l'espace social et sur les changements dans la configuration spatiale (Prates, Pineiro). La migration sera affectée dans sa dynamique, dans son volume et dans ses orientations, en vertu de ces changements.

Les commentaires que nous avons faits admettent deux lectures. Dans un sens rétrospectif, ils sont le résultat de l'expérience accumulée à travers une recherche récente. Elle a impliqué une exploitation d'interprétations qui continuent à être utiles en ce moment. Dorénavant, il faut capitaliser cette expérience et la discussion académique internationale en vue d'analyser d'une manière plus adéquate le phénomène migratoire.

4.- Les modèles interprétatifs

Nous n'allons pas procéder ici à un grand développement des études réalisées. Nous n'en ferons qu'un simple commentaire, en situant leurs éléments fondamentaux, les grandes questions traitées et celles qui apparaissent aujourd'hui négligées.

Il s'agit de travaux réalisés pendant la deuxième moitié des années 70, sur la base de l'information démographique et socio-économique comparable, qui se rapporte uniquement à la décennie antérieure. Plus en arrière, la seule information disponible concerne l'agriculture et quelques études monographiques (4).

Dans ce cadre, il s'agit de faire une description de la situation globale à partir de 1950, où "l'Uruguay éprouva (le début d') une stagnation économique intense et soutenue ...". "De tout ce qui précède il semble clair que les hypothèses les plus convenables ... pour interpréter le comportement migratoire répondent à ces facteurs d'expulsion, et non d'attraction ... (Ces hypothèses) qui rendent compte des déplacements de population dans des conditions de stagnation ou de récession (Prates)".

Les affirmations renferment une constante de la recherche sociale de la période : la préoccupation causée par la stagnation structurelle. On ne tient pas compte des effets de la crise et des changements sociaux, économiques et politiques qui se dessinent vers la fin de la période. Ce fait est important pour comprendre la portée des analyses et discuter de leur adéquation à la réalité actuelle.

Dans la considération de leur capacité explicative passée et de leur utilité future, sont en jeu plusieurs questions.

L'une d'elles concerne les changements nécessaires dans les approches interprétatives (Lattes, Picouet), qui conceptuellement, rendent plus complexe la relation entre structure socio-économique et les mouvements de groupes particuliers (5). En général, les études contemporaines ont recours à l'idée de changements adaptatifs pour surmonter la crise, lesquels peuvent déterminer l'apparition d'autres activités dynamiques, et sans que cela signifie une valorisation positive de ces changements du point de vue social. En partie à la suite de cela, on admet des déterminismes et des déplacements multiples dans la migration, qui rendent excessivement restrictives les explications

fondées sur quelques facteurs hégémoniques peu nombreux.

En tenant compte explicitement de ces considérations, nous allons relever les aspect les plus significatifs des études réalisées.

Celles-ci envisagent l'interprétation des processus migratoires, dans une perspective historique-culturelle, comme une dimension du développement socio-économique. Dans ce sens, il faut donner la plus grande importance à la relation entre migration et composantes de la structure sociale.

Les études font un effort décisif pour discuter et adapter les modèles de causalité. On a donné beaucoup d'importance aux conditions particulières de chaque contexte, à travers deux lignes de réflexion :

- celle qui analyse la décision des migrants, et
- celle qui s'intéresse à l'identification des éléments de la réalité, stratégiques dans la détermination de la migration.

En général, on part de l'existence de différences structurelles entre l'endroit_d'origine et l'endroit de destination.

Les individus ou plus précisément les unités domestiques, reçoivent des stimulations de l'environnement socio-économique à travers divers mécanismes de socialisation. De cette manière, le migrant potentiel reconnaît le degré d'adaptation à son milieu et connaît les opportunités et les obstacles associés à la décision de migrer.

Ce schéma rencontre des difficultés pratiques (coût, accès à l'information) pour sa mise en application dans les études.

Néanmoins, il continue à être un apport important à ces études. La compréhension du comportement des migrants a été liée à l'identification des formes diversifiées de mouvement dont on parle aujourd'hui (6). A certain point, elle a été associée à la compréhension des mouvements de courte et de longue distance, qui impliquaient diverses échelles de différences socio-économiques entre l'origine et la destination. En fonction de celles-ci, les migrants prennent la décision de se

déplacer.

L'interprétation dominante a envisagé la migration par rapport à la stagnation du modèle agro-exportateur de l'élevage intensif (Prates, Filgueira). Une forte influence de la théorie du "produit principal" a une incidence sur la perception de la configuration territoriale déterminée d'une manière unilatérale par l'organisation de la production de la viande et de la laine, ses mécanismes d'industrialisation, de commercialisation et d'exportation.

"... la grande homogénéité productive du secteur rural, à peine modifiée dans quelques sous régions, ... amène à concevoir le processus migratoire, son volume et son orientation, comme conditionnés fondamentalement par les facteurs de "push" dans les régions d'origine. Ceci est spécialement valable pour les migrants ruraux, qui, à l'intérieur d'une grande homogénéité, continuent à migrer, d'où il résulte la décroissance absolue continue de la population rurale".

"D'autre part, ... les seules zones nettement diversifiées économiquement, sont celles de Montévidéo et son aire d'influence (départements du Sud) : il n'est donc pas surprenant que le flux migratoire continu se produise de l'intérieur vers cette aire" (Prates, op. cit.).

Les chiffres départementaux pour la période 1963-1975 ne font que confirmer tout cela. En effet, seuls les départements du sud présentent des taux de migration nette positifs et les départements traditionnel-lement "éleveurs" présentent les valeurs négatives les plus élevées (voir tableau 4) (7). La population rurale décroît dans tous ces départements et le degré d'urbanisation s'y accroît.

Ce dernier fait a occupé une place secondaire dans la compréhension des mouvements migratoires. Sans doute représente-t-il une alternative ou une étape du déplacement vers le sud. Mais il peut aussi renfermer des changements dans la localisation de la résidence de l'emploi rural (Pineiro) ou des dynamiques propres indépendantes du thème agricole (Maldonado-Punta del Este).

Cependant, le problème urbain allait devenir intéressant du fait de

la prépondérance de Montévidéo et du développement de son Aire Métropolitaine (Lombardi).

Pendant la période 1975-1985, il s'est produit des changements surprenants dans les taux migratoires et dans les tendances de la distribution spatiales, confirmant simultanément certaines affirmations précédentes. Ils font surgir d'autres faits qui n'avaient pas revêtu d'importance jusque là. Six départements éleveurs perdent une partie de leur population en termes absolus et tous (à l'exception de Florida) présentent les taux d'émigration nette négatifs les plus élevés de la période. Sans doute s'agit-il d'une véritable vérification de l'expulsivité des aires d'élevage, un phénomène qui a été appelé "le vidage du centre du pays".

Simultanément, les départements limitrophes du Brésil deviennent des récepteurs de migrants, et la zone sud se fractionne en des comportements divergents. Dans tous les cas, il y a une diminution absolue de la population rurale, à l'exception du département d'Artigas.

Des faits qui pendant la période antérieure auraient pu être inclus dans quelques "sous régions modifiées" de la scène agro-exportatrice générale, ont émergé au niveau de la conscience. Mais il est certain que les phénomènes qui se produisent avaient une importance bien moindre que celle qu'ils ont à présent.

Les transformations du milieu rural ont-elles la capacité d'expliquer ces transformations ? Pas totalement.

Les études agricoles récentes développent l'idée de la "stagnation dynamique" (Pineiro). On entend qu'il y a eu une "stagnation" lorsque le Produit Agricole Brut per capita n'a pas augmenté. Mais elle est caractérisée comme "dynamique" parce qu'il s'est produit des modifications relatives à l'intérieur de cette stagnation en ce qui concerne l'importance des différentes branches productrices. Les changements profonds de la demande, interne et externe, ont une incidence sur ces modifications. A titre d'exemple, il convient de rappeler que les exportations traditionnelles (laine non traitée et viande) tombent de 80 % à 40 % face aux produits manufacturés et produits agricoles "non

traditionnels" (produits lactés, riz, agrumes, volailles). Ces produits s'accroissent à des rythmes qui leur permettent de représenter actuellement un tiers des exportations traditionnelles.

Ces changements produisent nécessairement des modifications structurelles qui peuvent avoir une incidence sur l'explication des transformations. Précisément, les nouveaux processus agricoles tendent à se localiser dans le zones qui présentent aujourd'hui des soldes migratoires positifs. Donc, l'association n'est pas négligeable.

Il s'agit de processus agro-industriels, où une partie importante de l'élaboration du produit final se réalise dans l'aire de production primaire. En même temps, les formes d'organisation de la production changent par rapport à "l'estancia" (ferme) traditionnelle. En général, il s'agit de formes capitalistes plus modernes, qui supposent des changements dans le rapport contractuel avec la main d'oeuvre et aussi dans le rapport logement/travail.

Dans cette perspective, ces activités pourraient amener des changements dans la localisation résidentielle du travail rural, à la croissance de l'urbanisation dans ces départements.

Interpréter les changements de la distribution en termes de changements dans la structure productrice, maintiendrait la limitation quant à l'absence d'inclusion d'autres motivations sociales dont le rapport avec cette structure n'est pas immédiat.

L'analyse de la croissance des centres urbains des départements frontaliers du Brésil montre que ceux qui sont situés sur la frontière présentent les taux de croissance urbaine les plus élevés du pays pour la période. Dans quelques cas, il s'agit de centres qui partagent des activités commerciales et administratives propres à la frontière, avec d'autres liées aux tâches agro-industrielles. En d'autre cas, il s'agit de centres frontaliers exclusivement.

La différence de prix pour les produits de consommation et pour les facteurs de production agricole et industrielle s'est transformée en une référence permanente dans l'étude de la frontière.

En dernière analyse, l'accès à des biens de consommation brésiliens, améliore le revenu réel des résidents. La possibilité du déplacement vers la frontière en tant que "stratégie de survie", privilégie les secteurs inactifs les plus âgés, où la résidence n'est pas déterminée strictement par la localisation de la source des revenus. Une migration ayant ces caractéristiques devrait se répercuter sur le vieillissement du lieu d'accueil. Dans un contexte de vieillissement généralisé de la société uruguayenne, les départements considérés présentent des niveaux plus bas que la moyenne du pays. Ceci pourrait suggérer qu'il y a d'autres faits s'ajoutant à la constitution des taux migratoires.

5.- Le futur

Sans doute est-il prioritaire de surmonter les restrictions de l'information. Pour se faire, il convient de chercher à comprendre les aspects motivationnels de la migration. A travers ces aspects, il est possible d'enregistrer les médiations de la structure sociale entre les déterminants matériels et les comportements des individus et des ménages.

Mais il est fondamental de faire des ajustements en rapport avec les caractéristiques spécifiques du pays. L'Uruguay est l'un des pays les plus petits de l'Amérique Latine, tant en surface qu'en population. Il a des frontières avec les deux nations les plus étendues du continent, dont certains centres principaux - beaucoup plus grands que Montévidéo - sont tout proches.

Les frontières ont la précarité de cette situation, renforcée par les facilités physiques et sociales d'accès et de transit.

Cette ouverture géographique immédiate est la manifestation visible d'un penchant à l'émigration, dont la continuation semble probable.

L'Uruguay est une société ouverte, dans un espace écologiquement homogène. L'analyse migratoire devrait donc intégrer les mouvements régionaux de caractère international.

Dans cette perspective, la réduction de la préoccupation aux déplacements ruraux-urbains et aux changements structuraux de la production agricole restreint l'horizon d'analyse.

Les processus régionaux de transformation structurelle sont beaucoup plus complexes, et les marchés intégrés, capables de développer de nouvelles activités (financières, industrielles, de la consommation domestique, etc...). Par conséquent, les études devront arriver à un équilibre dans la considération de la détermination entre les causes démographiques et les facteurs socio-économiques et politiques.

Tableau 1
Uruguay: indicateurs démographiques

					<u>.</u>
		1963		1975	1985
SUPERFICIE	Km2			318.392	
Poblacion Total Tasa de Crec. Intercensal	(0/00)	2.595.510	6.2		2.955,241 5.6
Poblacion Urbana Tasa de Crec. Intercensal	(0/00)	2.076.130	8.9		2.511.446 3.5
Poblacion Rural Tasa de Crec. Intercensal	(0/00)	519.380	-5.2		419.121 .4
Grado de Urbanizacion	(0/0)	80.0		82.5	85.0
Primacia Urbana (de MV	D) (0/0)	55.9		51.2	49.7
Concentration Urbana 1/.	(0/0) 33.5		34.8	33.5

Fuente: CIESU (Lombardi y Altezor, op.cit.)

1/ Distribucion tamano rango

Tableau 2

Taux d'émigration

DE	PARTAMENTO	OS 1970-1975	DE	PARTAMENTOS	1980-1985
1	Montevideo	9.00	1	Montevideo	9.75
2	Colonia	9.33	2	Colonia	11.20
3	Maldonado	11.48	3	Rocha	12.28
4	Paysandu	13.31	4	Rivera	12.39
5	Salto	13.51	5	Artigas	12.42
6	San Jose	13.90	6	Paysandu	13.96
7	Canelones	14.30	7	Cerro Largo	14.15
8	Rocha	14.50	8	Canelones	16.17
9	Soriano	15.31	9	Salto	17.86
10	Lavalleja	17.31	10	San Jose	18.00
11	Florida	17.96	11	Florida	18.12
12	Flores	18.05	12	Lavalleja	19.51
13	Rio Negro	18.15	13	Treinta y tres	19.88
14	Rivera	19.17	14	Soriano	20.35
15	Cerro Largo	19.51	15	Flores	20.43
16	Artigas	19.61	16	Rio Negro	20.80
17	Durazno	21.53	17	Tacuarembo	21.15
18	Tacuarembo	21.97	18	Maldonado	21.49
19	Treinta y Tres	23.31	19	Durazno	22.44

Fuente: D.G.E.C.

Tableau 3

Taux d'immigration

DEPARTAMENTOS 1970-1975		DEPARTAMENTOS 1980-1985			
1	Artigas	8.79	1	Colonia	9.20
2	Rivera	8.82	2	Salto	9.59
3	Soriano	8.90	3	Soriano	9.66
4	Colonia	9.60	4	Paysandu	10.92
5	Montevideo	10.02	5	Montevideo	11.19
6	Salto	10.63	6	Lavalleja	12.30
7	Lavalleja	11.11	7	Tacuarembo	12.78
8	Cerro Largo	11.35	8	Flores	13.99
9	Tacuarembo	11.46	9	Florida	14.30
10	Flores	12,45	10	Rio Negro	14.64
11	Paysandu	12.49	11	Durazno	15.06
12	Florida	13.75	12	San Jose	15.74
13	Rio Negro	13.76	13	Cerro Largo	16.16
14	Durazno	13.92	14	Maldonado	16.90
15	Rocha	14.03	15	Rocha	17.70
16	Treinta y tres	15.00	16	Treinta y Tres	18.52
17	Maldonado	18.72	17	Rivera	18.54
18	San Jose	20.82	18	Artigas	20.39
19	Canelones	24.92	19	Canelones	21.40

Fuente: D.G.E.C.

Tableau 4
Solde migratoire

DE	PARTAMENT(OS 1970-1975	DE	PARTAMENTO	S 1980-1985
1	Artigas	- 10.82	1	Soriano	- 10.69
2	Tacuarembo	- 10.51	2	Tacuarembo	- 8.00
3	Rivera	- 10.35	3	Salto	- 8.27
4	Treinta y tres	- 8.31	4	Durazno	- 7.38
5	Cerro Largo	- 8.16	5	Lavalleja	- 7.21
6	Durazno	- 7.61	6	Flores	- 6.44
7	Soriano	- 6.41	7	Rio Negro	- 6.16
8	Lavalleja	- 6.20	8	Maldonado	- 4.60
9	Flores	- 5.60	9	Florida	- 3.82
10	Rio Negro	- 4.39	10	Paysandu	- 3.04
11	Florida	- 4.21	11	San Jose	- 2.26
12	Salto	- 2.66	12	Colonia	- 2.00
13	Paysandu	- 0.81	13	Treinta y tres	- 1.36
14	Rocha	- 0.47	14	Montevideo	1.44
15	Colonia	0.27	15	Cerro Largo	2.01
16	Montevideo	1.02	16	Canelones	5.22
17	San Jose	6.93	17	Rocha	5.42
18	Maldonado	7.23	18	Rivera	6.15
19	Canelones	10.62	19	Artigas	7.98

Fuente: D.G.E.C.

NOTES

- (1) Les références de cette caractérisation ont été obtenues dans : "El cambio de las ciudades" (Lombardi M. et Altezor C., 1987) et "Indicadores Economicos Departementales" (CIESU/SAREC, inédit)
- (2) "La migracion internacional de uruguayos en la ultima década" (Fortuna J. et Niedworok N., 1985)
- (3) La possibilité d'analyser la distribution en fonction d'unités de recensement plus petites existe. Sans doute, l'utilisation de programmes tels que le REDATAM, permettra d'obtenir des "cartes" très détaillées de la distribution. Le problème se rattache précisément à la difficulté de donner un contenu social aux groupements qui en résultent.
- (4) Nous faisons allusion aux Recensements Agricoles et à l'étude de la "Situacion Economica y Social del Uruguay Rural" (CLAEH/CINAM, Montévidéo, 1963).
- (5) Il est clair que pendant cette période, des phénomènes d'expansion comme le développement touristique de Punta del Este ont déterminé des changements dans la distribution spatiale et des mouvements de la population sans changement de la résidence habituelle. Aux points culminants du processus, cela comprenait la relation entre Punta del Este et Montévidéo, ainsi que celle entre Punta del Este et Buenos Aires.
- (6) Dans la perspective uruguayenne, cette discussion a été très liée à la participation dans le projet comparatif de PISPAL : "Desarrollo Regional, Migraciones y Primacia Urbana en America Latina" (1979).
- (7) La caractérisation des départements est basée sur l'étude de Lombardi et Veiga (op. cit.).

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SOME ASPECTS OF POPULATION DEVELOPMENT AND URBANIZATION IN VIETNAM

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1.- INTRODUCTION

A number of international meetings held during the past few years have called the attention of policy makers and researchers to the issue of urbanization. But in Vietnam, the problem of urbanization has remained relatively untouched and has not attracted a great deal of attention on the part of scientists.

This report presents the common problems of population growth and distribution, based on the results of the last two national censuses. It also describes some distinguishing features of Vietnamese cities and towns. However, an evaluation and an international comparative study are difficult to analyze and will have to follow at a later date. There is a lack of information on population characteristics, and no exact definition of the urban/rural population, as different countries use different criteria. In Vietnam, all inhabitants of cities, towns and district centers are considered by the Government to be part of an urban population.

Almost all cities, towns and district centers in Vietnam today have a minimum of 2,000 inhabitants, of whom 50% or more are employed in non-agricultural sectors with all the necessary urban living facilities. Although the most common criterion for an urban population is considered to be a minimum population of between 2,000 - 5,000, it is in fact very difficult to compare a Vietnamese city or town with that of a city or town in Europe or North America because of the differences in not only urban infrastructure, facilities, and services, but also the influence of the conservative rural population.

The first part of the report deals with the growth and distribution of the Vietnamese population. The second part describes the distinguishing features of Vietnamese cities and towns. Selected indicators for Vietnam's population are given in the tables.

2.- VIETNAM'S POPULATION GROWTH

According to the declaration made by the Central Population Census Steering Committee on June 15, 1989, the population of Vietnam at midnight on April 1, 1989 was 64,412,000, of which 31,318,000 were male (48.6%), and 33,093,000 were female (51.4%). Detailed population figures by sex and urban and rural areas of the country are given in **Table 2.**

Since the last Census on October 1, 1979, the population of Vietnam has increased by 11.7 million, and the average annual population growth rate is 2.1%, which is equal to the population of a medium-size province of 1.3 million (Table 1). In the same period, annual food production has grown by approximately 0.5 million tons.

Vietnam today is a populous country with a high annual population growth rate. If the present trend continues, Vietnam will have a population of 80 million by the end of this century. Thus, in the coming ten years, about 15 million people will be added to the current population.

Vietnam's population grows rapidly because of many economical, social and political factors. There is a tradition of large families, especially among the peasants who comprise 80% of the country's population. The process of urbanization goes very slowly, and has had little effect on the high birth rate throughout the country. Family planning programs have made a considerable contribution to reducing Vietnam's birth rate from 3.95% in 1976 to 2.66% in 1988, but the number of women having their fourth child is still high -- 25% in 1985, 24.5% in 1987, and 23.3% in 1988.

According to the statistics of the 1988 "Contraceptive Prevalence Survey" conducted in the frame of project "VIE/87.PO4" (funded by

UNFPA) on 4,806 households with 25,386 people, 4,172 were married women living in 151 communities and subquarters of 12 provinces or cities. The Total Fertility Rate (TFR) is 4.2. Although the number of women using contraceptive methods is quite high (53%, with 33% of them using the IUD), most women still wish to have three children, and effective measures against pregancy are not yet widely applied (e.g., pills and sterilization techniques). The population education programme has not achieved its aim of promoting the advantages of having a small family.

Various surveys on vital statistics have shown a decrease in Vietnam's death rate. This is due in part to the successful application of advanced medical achievements combined with traditional medicine, and government investment in the development of medical services around the country. Great efforts have also been made in maternal and child health, which have reduced the infant mortality rate from 45% in 1979 to 40% in 1988. Vietnam's population is very young: 42% are in the 0-14 age group; 13.3% are aged 50 and over. Forty-five percent of the female population is of childbearing age (15-49).

The young population has influenced the low death rate, and will be one of the reasons for the alarming rise in the number of women of childbearing age in the next 10-20 years.

Vietnam's population has been increasing unevenly for some time, due mainly to the killing of a large number of people in the various wars and the ensuing chaotic large-scale migration from the countryside to the cities and towns. After the 1975 liberation, the government advocated a new population policy that encouraged people to move to the "new economical areas." The annual number of migrants to the new areas consists of approximately 50,000 to each province.

However, the redistribution of the population has not yet achieved its expected results. The population density in some parts of the country is much lower than that of the Mekong and Red River Delta areas, which continue to have the highest population density, due in part to more favourable agricultural conditions, better roads, and more commercial development. A strategic policy in the coming years for

population and labour distribution remains, therefore, and the all-out exploration of all potential land, forests, seas, and natural resources has to be implemented.

3.- SOME DISTINGUISHING FEATURES OF VIETNAM'S URBANI ZATION PROCESS.

Vietnam's urban population has been increasing slowly over the past 50 years. According to the statistics of the population census of April 1, 1989, the urban population increased from 10,115,000 in 1979 to 12,737,000 in 1989. It can thus be seen that the population in cities and towns has grown at the annual rate of 2.43% (compared with 2.03% in rural areas) in the past ten years.

However, this urban population increase is due mainly to the natural population growth; in-migration has had little effect. Despite the growth of the urban population, its proportion in relation to the rural population is so small that it has no decisive national influence, especially on the existing high fertility rate of the country as a whole (see **Table 3**).

The urban population is concentrated primarily in five large provinces and cities: Hanoi, Hochiminh City, Haiphong, Haugiang and Quangnam-Danang, that comprise 48.68% of the country's urban population. The capital, Hanoi, and the other cities are city-ports, which were built in the middle of the 19th century and have since been developing and functioning as bridges that link the countryside with the big cities. Of the 40 cities and towns with more than 50,000 people, only Hanoi and Hochiminh City have a population of more than one million. Thus, at the turn of the century, the level and rate of urbanization will be expected to remain low, in spite of the intense population pressures on agricultural land.

In 1979 the proportion of the urban population in the south to the country's population was 25.6%, which had increased to 26.5% by 1989. In the north these figures were 13.2% and 13.9% respectively. During the past ten years, the annual growth of the urban population in the south has been 2.53%, compared with 2.23% in the north.

The distinguishing feature of Vietnamese urbanization is unidentified unity of urban and rural features. It is this unity that is considered an important foundation for the urbanization process in the country as a whole, where the rural population predominates. It is a combination of both traditional and modern characteristics. Living next door to people who have lived in cities for generations are the new arrivals from rural areas who have never felt the influence of city life and who still hold opinions that are considered backward and traditional.

The flow of migration from rural areas to urban centres caused a so-called "ruralization" of cities, which became especially obvious in wartime, when flows of refugees seeking safety flocked to such big cities as Danang and Saigon. Due to the in-migration of refugees, Saigon in the 1970s became one of the most crowded cities in the world (34,000 persons / sq.km).

The rapid urban population growth surpassed the ability of cities to provide jobs, and it became impossible to meet even the minimum needs of the population, and resulted in a serious decline in the quality of the environment, housing, water supply, and urban transport, as well as a soaring unemployment rate.

The process of urbanization in Vietnam is slow compared to that of many other countries. According to United Nations' estimates, the urban proportion of Vietnam's population may reach 27.1% in the year 2000, whereas these figures in other South-East Asian countries and the world as a whole are 35.5% and 46.6% respectively. This is due in part to the many pull and push factors connected with the economic development strategy, urbanization, government investment difficulties, and so on. The Vietnamese government is presently grappling with the urgent problems of electricity, water supply, housing, drainage and sewerage, conservation, public health, and urban transport.

According to electricity and water supply service statistics of August 1989, the average per capita daily water and electricity consumed in Hanoi were 0.2 cubic meters and 3 Kwh respectively. These figures were much lower in other Vietnamese towns and cities.

The housing problem remains the most crucial. The results of a survey of a sample of 6,000 households in Hanoi have shown a decrease in living area from 4.0 sq.m per capita in 1954 to 2.4 sq.m in 1982. Of 4,000 households, 88% are single room flats, and 22% are families with 7-8 persons living together, 28% with 8 or more persons, and 13.5% with families sharing one room. Partly as a result of this problem, the average age of marriage in Hanoi has risen to 28.3 for men, and 24 for women.

The low standard of housing in urban areas has clearly shown that the war impeded the development of urbanization. It is worth noting that the urbanization process is slow because Vietnam is an agricultural, backward and populous country with a high annual population growth. In order to speed up this process, Vietnam must: (1) insure a steady tempo of economic development, (2) invest wisely in the development of urbanization programs, and (3) administer a sound population control policy to safeguard the environment. Only then can Vietnam rid itself of the 'false urbanization' concept that has existed for more than half a century.

TABLE 1
POPULATION DENSITY BY ECONOMICAL AND GEOGRAPHICAL REGIONS

Regions	Population (Thousand		Population Density (persons/sq.km)		
,	at 1st October 1979	1st April 1989	1st October 1979	1st April 1989	
Whole country	52,742	64,412	159	195	
Hanoi capital	2,571	3,057	1,202	1,429	
Hochiminh City	3,420	3,934	1,686	1,939	
1. Red River's Delta	11,820	13,574	678	<i>77</i> 9	
2. Middle and Mountainous	8,051	10,069	82	102	
3. Former 4th Regio	n 7,546	8,568	145	165	
4. Central Coast	5,752	6,660	128	148	
5. Southern Highland	ds 1,483	2,486	27	45	
6. Southeast of Mekong's Delta	2,648	3,737	123	174	
7. Mekong's Delta	15,442	18,273	366	433	

TABLE 2: VIETNAM'S POPULATION BY SEX, URBAN AND RURAL AT THE O HOUR, 1st APRIL 1989

	·	Total Population	Male	Female	Urban Population	Rural Population
WI	HOLE COUNTRY	64,412	31,319	33,093	12,737	50,630
1	Hanoi Capital	3,057	1,474	1,583	1,089	1,968
2	Hochchiminh City	3,934	1,846	2,088	3,169	765
3	Haiphong City	1,448	694	754	456	992
4	Caobang Prov.	556	273	293	54	512
5	Hatuyen Prov.	1,026	504	522	87	939
6	Langson Prov.	611	297	314	78	533
7	Laichau Prov.	438	217	221	58	380
8	Hoanglienson Prov.	1,032	510	522	160	872
9	Bacthai Prov.	1,033	507	526	195	838
10	Sonla Prov.	682	342	340	87	595
11	Vinhphu Prov.	1,806	861	945	212	1,594
12	HaBac Prov.	2,061	984	1,077	103	1,958
13	Quangninh Prov.	814	411	403	350	464
14	Hasonbinh Prov.	1,840	884	956	178	1,662
15	Haihung Prov.	2,440	1,148	1,292	122	2,318
16	Thaibinh Prov.	1,632	759	873	85	1,547
17	Hanamninh Prov.	3,157	1,495	1,662	329	2,828
18	Thanhhoa	2,991	1,439	1,552	205	2,786
19	Nghetinh	3,582	1,737	1,845	296	3,286
20	Binhtrithien	1,995	950	1,045	344	1,651
21	Quangnam-Danang	1,739	827	912	525	1,214
22	Nghiabinh	2,288	1,089	1,199	310	1,978
23	Phukhanh	1,463	707	756	422	1,041
24	Thuanhai	1,170	566	604	259	911
25	Gialai-Kongtum	873	431	442	175	698
26	Daclac	974	487	487	165	809
27	Lamdong	639	319	320	210	429
28	Songbe	939	459	480	44	895
29	Tayninh	7 91	379	412	87	704
30	Dongnai	2,007	993	1,014	479	1,528
31	Longan	1,121	531	590	189	932
32	Dongthap	1,337	636	701	153	1,184
33	Angiang	1,793	877	916	461	1,332
34	Tiengiang	1,484	697	7 87	184	1,300

TABLE 2 (CONTINUED) VIETNAM'S POPULATION BY SEX, URBAN AND RURAL AT THE O HOUR, 1st APRIL 1989

		Total Population	Male	Female	Urban Population	Rural Population
35	Bentre	1,214	575	639	91	1,123
36	Cuulong	1,812	859	953	176	1,636
37	Haugiang	2,682	1,281	1,401	482	2,200
38	Kiengiang	1,198	575	623	253	945
39	Minhhai	1,562	753	809	291	1,271
40	Vungtau-Condao	136	68	68	124	12
41	The branches of					
	separate enumeration	1,045	7 8	167		

Note: The branches of separate enumeration consist of: Ministeries of Home Affairs, Foreign Affairs, National Defense, Labour (enumeration of Vietnamese who were nominated for long-term study abroad). Data of the branches of separate enumeration are excluded from the rural and urban population.

TABLE 3: AVERAGE POPULATION BY PROPORTION - FEMALE AND URBAN

Year	Average Population	Proportion (percentage)		
	(Thousand)	Female	Urban Population	
1931	17,702	50.5	7.5	
1936	18,972	50.8	7.9	
1939	19,600	50.7	8.7	
1943	22,150	50.9	9.2	
1954	23,061	51.0	10.0	
1955	25,074	51.2	11.0	
1960	30,172	51.7	15.0	
1965	34,929	51.8	17.2	
1970	41,063	51.4	20.7	
1975	47,638	52.1	21.5	
1976	49,160	52.0	20.6	
1977	50,413	51.7	20.1	
1978	51,421	51.6	19.7	
1979	52,462	51.5	19.5	
1980	53,722	51.6	19.1	
1981	54,927	51.5	18.6	
1982	56,170	51.5	19.2	
1983	57,373	51.2	19.1	
1984	58,770	50.9	19.1	
1985	59,650	50.8	19.2	
1986	61,109	51.1	19.3	
1987	62,452	51.9	19.7	
1988	63,727	50.6	19.9	
1989*	64,412	51.4	20.1	

Sources: Statistics 1930-1984, Hanoi, "Statistical Publishing House."
"Dai Doan Ket Newspaper", Hanoi, June 1986, No. 14.

[&]quot;Nhan Dan Newspaper", Hanoi, 7-8-1989.

^{*} Population at 1-4-1989.

