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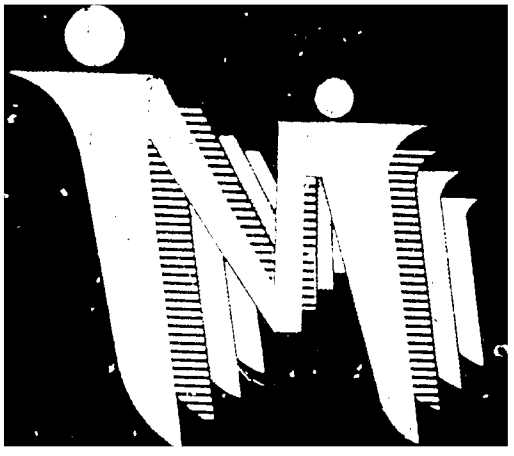

NATIONAL
MIGRATION
SURVEYS

SURVEY MANUALS

I. SURVEY ORGANIZATION AND MONITORING

UNITED NATIONS

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ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC
Bangkok, Thailand

Comparative study on migration,
urbanization and development
in the ESCAP region

Survey manuals

NATIONAL MIGRATION SURVEYS

I. SURVEY ORGANIZATION AND MONITORING

UNITED NATIONS
New York, 1980

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PREFACE

This document is a provisional version of the survey organization and monitoring manual for the national migration surveys to be taken in the ESCAP region. The migration surveys were set up in response to the recommendations made in several population conferences held over the last ten years.[1]

The migration surveys are components of a regional project, "Comparative study on migration, urbanization and development in the ESCAP region". The first phase of this project consists of analysis of census materials on migration and urbanization in the participating countries. Although special tabulations from the 1970 round of censuses have been generated to focus specifically on migration and urbanization, these have limitations in providing information on the relationships between migration, urbanization and development. The main aim of the national migration surveys is to provide the kinds of detailed information that cannot be collected in national population censuses.

The data to be collected in the migration surveys will focus on the following four major issues:

(*a*) Patterns and types of population mobility;

(*b*) Demographic and socio-economic characteristics of migrants and non-migrants;

(*c*) Motivations of people to move or not to move;

(*d*) Demographic and socio-economic consequences of migration in areas of both origin and destination.

Preliminary versions of the questionnaire were circulated in 1978 to a large number of experts throughout the ESCAP region and in other parts of the world. Their comments were taken into consideration in the production of a questionnaire which was tested in Indonesia, Pakistan and Thailand in 1979. The results of these tests were discussed at the first session of the Advisory Committee on Migration and Urbanization, held at Bangkok from 29 October to 1 November 1979. The discussions and recommendations of this Committee were published in the ESCAP *Asian Population Studies Series,* No. 47, 1980. The Advisory Committee recommended that a small working group should be set up to revise the questionnaire, taking into consideration the results of the pre-tests and the discussions of the Committee. A revised version of the questionnaire was circulated among the Committee members for their comments and then tested in a pilot survey conducted in Thailand in May 1980. The results of the pilot survey were used to modify this document, the questionnaire and the other manuals required for the national migration surveys. In addition to the present document, the manuals include:

(*a*) Manual for interviewers;

(*b*) Manual for supervisors;

(*c*) Manual for interviewer trainers;

(*d*) Sample design manual;

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1 Recommendations were made by the Second Asian Population Conference, held at Tokyo in 1972; the World Population Conference, held at Bucharest in 1974; Habitat: United Nations Conference on Human Settlements, held at Vancouver in 1976; the ESCAP Committee on Population at its first session, held at Bangkok in 1976; the Expert Group Meeting on Migration and Human Settlements, held at Bangkok in 1977 and ESCAP at its thirty-fourth session, held at Bangkok in 1978 and its thirty-fifth session, held at Manila in 1979.

(e) **Manual for office editors and coders;**

(f) **Tabulation plan;**

(g) **Data processing system manual.**

This manual is a guide for national co-ordinating committees, survey directors and the survey operations/management teams. Its goal is to explain the planning, control, organization and monitoring involved in implementing the national migration surveys. In this sense, the manual is very much a "management" tool. It aims to fill the gap between the highly technical materials to be used by national statisticians and the general funding and catalytic, co-ordinating role played by the United Nations Fund for Population Activities (UNFPA), ESCAP and the various sources of technical assistance.

The manual has been developed as a "core" or general framework and it is hoped that participating countries will follow it as closely as possible, allowing for minor modifications which may be required to meet local circumstances. ESCAP will welcome the opportunity to discuss any modifications which a participating country feels will be necessary. While priority is given to individual country requirements, it is recommended that the information collected should be as uniform as possible to allow standardization of materials and procedures. The results should allow a comparison between countries which will maximize the understanding of a common problem affecting the majority of the countries in the ESCAP region.

Apart from any minor modifications, specific modules can be designed to meet any particular aspect that a country might want to analyse in greater detail. These modules can be added to the core questionnaire. Technical assistance can be made available to help in the design and testing of these modules.

It is hoped that the results of the analyses of the data collected through the national migration surveys will be incorporated into the development of population redistribution policies in the participant countries.

The manual, *Survey Organization and Monitoring,* deals with many of the same topics that are discussed in other manuals, but does so from the perspective of management. In addition, the technical operations involved in the survey (sample selection, interviewing, tabulation, etc.) are viewed here as a process and not as a series of discrete operations (as they may appear to an interviewer, editor or programmer). This manual is designed to be used after the national co-ordinating committees have been established and the survey directors selected, but before the detailed planning stage has been completed. It is hoped that the manual will be used throughout the survey operations and the publication and analysis of the data.

PART ONE

SURVEY ORGANIZATION AND PLANNING

I. INTRODUCTION

A. GENERAL DESCRIPTION OF THE PROJECT

The ESCAP project, "Comparative study on migration, urbanization and development in the ESCAP region", was initiated in July 1977. Its primary goal is to assist decision makers in formulating policies for population redistribution in countries of the ESCAP region.

The results of the policy-oriented research should reveal the linkages between temporal variations in the urban/rural rate of development and variations in the volume, type and direction of population movements. This will permit the identification of the socio-economic and socio-psychological factors that are either causes or consequences of migration and rural-urban population redistribution.

The focus of the project is on a programme of activities to be conducted in each country. There are three phases:

(a) *Phase I:* analysis of migration, urbanization and development using existing data sources (primarily data from the most recent population census);

(b) *Phase II:* in-depth analysis of population movements using national migration surveys to collect detailed information;

(c) *Phase III:* the utilization of the research findings from phases I and II in policy formulation and programme development directly related to control of population movements.

In the first phase, ESCAP assisted coutries in the region by producing a special set of cross-tabulations of census data illustrating the socio-economic characteristics of migrants and non-migrants. The analysis of the first phase is being prepared by national research teams and will be published in a series of country reports on the analysis of migration, urbanization and development.

While the use of existing data can provide valuable insights into migration and mobility, it none the less is clear that there are significant gaps in the data. Censuses normally do not examine the types of migration and mobility phenomena in detail, nor do census variables deal with the determinants and consequences of mobility behaviour. This is a prerequisite for the evaluation and formulation of comprehensive population redistribution policies.

B. ROLE OF THE NATIONAL MIGRATION SURVEYS

The national migration surveys, the second phase of the project, are designed to provide decision makers with the detailed information they need to develop and implement population redistribution policies as an integral part of their socio-economic development plans.

The national migration surveys are country programmes in which participating countries will be assisted by ESCAP in collecting high quality information on population migration and mobility. The surveys will be comprehensive in nature and are intended to investigate a wide range of socio-economic, demographic and cultural factors affecting population movements. They will provide information on the characteristics of migrants *versus* non-migrants, permanent migrants *versus* circular/seasonal migrants, return migrants *versus* non-return migrants as well as potential migrants and commuters. Migration histories will be collected in conjunction with changes in work status and important family events. *Ex post facto* information on the characteristics of the migrants at the time of their migration will be collected, as will data regarding the decision-making process of the move.

A distinction will be made between the factors which motivate the migrants to leave their usual place of residence and the factors governing the choice of their destination. The links established through remittances and visits between migrants and their relatives and friends and the impact on development will be investigated. In addition to the preliminary survey reports to be published by the staff of the national surveys, national research teams will be formed to prepare an in-depth analysis of the survey data.

The research findings from the surveys will be used in the third phase, which will focus on analysis, policy formulation and programme development to deal with controlling the volume and direction of population movements. The value of the results of this phase will be very much enhanced if they can be described on a comparative basis. For this reason, ESCAP is planning to conduct an inter-country programme for the comparative study of the relationships between migration, urbanization and development.

C. ROLE OF THE SURVEY ORGANIZATION AND MONITORING MANUAL IN THE NATIONAL MIGRATION SURVEYS

As currently planned, the national migration surveys will result in the completion of between 12,000 and 15,000 questionnaires in each of seven countries (Indonesia, Malaysia, Pakistan, the Philippines, the Republic of Korea, Sri Lanka and Thailand). Given the in-country scope of the project and the fact that comparable data are among the principal survey goals, ESCAP, with technical support from other organizations, has developed a series of manuals to assist in the technical implementation of the survey.

Survey Organization and Monitoring draws in part from the other, technically-oriented manuals. However, there are several important differences. First, the other manuals generally deal with one phase of the survey process such as, for example, interviewer training, office editing or data processing. This manual deals with all these technical processes and also covers areas that are of primary importance to survey managers.

In addition, the technical manuals have been written for the use of national statisticians, data processors and clerical personnel. This manual is written explicitly for survey directors and members of the survey management team.

Finally, the scope of *Survey Organization and Monitoring* differs from that of all the other manuals. It covers all phases of the survey operation, from detailed planning through field-work, publication and dissemination of results. This manual is therefore designed to be used throughout survey operations in a country.

II. ORGANIZATION, COMMUNICATION AND DOCUMENTATION

A. REGIONAL ORGANIZATION

In a number of international population conferences held in the past decade, Governments have requested United Nations assistance in dealing with population distribution problems. The Second Asian Population Conference, held at Tokyo in 1972, requested that ESCAP, among other activities:

> "sponsor a comparative survey of selected cities and densely populated rural areas in the region in order to assess the recent trends in migration and urbanization and obtain a clear picture of the emerging issues in the context of the increasing deterioration of the human environment. As far as possible, there should be standardization in regard to the questionnaires, tabulations and analyses."

1. Advisory Committee on Migration and Urbanization

In recognition of this need, ESCAP established an Advisory Committee on Migration and Urbanization to advise on the development and implementation of survey activities. Governments participating in the survey are members of the Committee, which meets once a year. The Governments are represented by members of their respective statistical offices, research institutes or planning agencies, depending on the stage of project implementation.

The first session of the Advisory Committee was held at Bangkok from 29 October to 1 November 1979. The main functions of the session were:

(*a*) To review the project's first phase activities for four countries in the region;

(*b*) To advise on the technical and operational aspects of implementing the national migration surveys for the second phase of the project, including recommendations on resource requirements, time-tables and estimated budgets;

(*c*) To review and advise upon the core questionnaire and other survey documents.

2. Role of the ESCAP secretariat

The role of ESCAP in this project has been and will remain largely that of catalyst and developer of the research instruments for the collection and analysis of data on migration and urbanization. It will also provide technical assistance to the participating countries at their request, in collaboration with international organizations supporting the project. The intention is that the implementation of the national migration surveys and the analysis of the results, at every stage, will be done by the countries themselves to meet national requirements.

The project staff at ESCAP have been and will be carrying out all the regional activities related to the project in collaboration with the countries and other United Nations and outside organizations. These activities are:

(*a*) Development of model research tools, including specification of concepts, definitions and methodology for analysis;

(*b*) Development of survey materials, including questionnaires and other related materials;

(*c*) Providing and/or co-ordinating technical and other assistance activities with respect to sample design, adaptation of materials, computer programming and analysis;

(*d*) Helping countries to formulate project requests to obtain the external funds required to carry out their respective projects;

(*e*) Assisting countries in training their national staffs involved in the project;

(*f*) Organizing workshops on various subjects (as required by the countries) at the national and regional levels;

(*g*) Reviewing materials prepared by the countries;

(*h*) Organizing periodic meetings of the Advisory Committee;

(*i*) Conducting, at a later stage, a comparative study on migration, urbanization and development in the ESCAP region.

B. NATIONAL ORGANIZATION

1. Co-ordinating Committees

To ensure full co-ordination among the different groups executing the activities, a national co-ordinating committee must be established in each country. Each national co-ordinating committee can either execute the survey itself or select from its members a small working group representative of the executing organizations. The primary role of the committee is to monitor the progress of work and guarantee the completion of activities on schedule.

Each co-ordinating committee should include among its members the following three key persons:

(a) *Survey director.* The national survey director will be responsible for survey planning, conducting field-work and data processing and publication of a preliminary report. The survey director should be employed full-time on the project during the planning, field-work and tabulation phases. It will probably be necessary to have a deputy or assistant director who is capable of assuming the director's role when necessary.

(b) *Research leader.* Analysis of the survey data requires a multidisciplinary approach involving demographers, statisticians, economists, sociologists, regional planners, socio-psychologists, etc. The research leader will co-ordinate the work of this analysis team.

(c) *Policy maker.* The policy maker should be a senior member of a national planning organization. The decision maker will be responsible for the preparation of a discussion paper on policy formulation and programme development based upon the analysis of the survey data. He will be assisted by several members of the research team involved in analysing the results.

Organization for the research analysis and formulation of policies to be undertaken by the research leader and the policy maker will be considered in brief in chapters XIII and XIV of this manual. The rest of the manual will deal with survey organization and implementation.

2. Survey organization: general areas of responsibility

The survey organization necessary to carry out the national migration surveys can be broadly divided into four functional areas:

(*a*) Survey management group;

(*b*) Field operations group;

(*c*) Data processing group;

(*d*) Survey reporting group.

While the specific organizational structure to be used is left to the discretion of participating countries, it is important that all survey functions and operations be accounted for by each country. In this sense, the areas of responsibility and organizational structure described here represent a model to be functionally adapted by countries depending upon their characteristics.

(a) *Survey management group.* The survey management group consists of the survey director and assistant director, the director of field operations, data processing director and a senior demographer. At least one member of the group, the survey director, also serves on the national co-ordinating committee. Members of the group are responsible for all the work in their specific areas such as, for example, field operations, data processing and analysis. In addition, and as a group, they are responsible for over-all control of all survey operations. The management group should meet regularly throughout the survey to discuss the status of operations, schedule requirements, potential bottlenecks, etc.

(b) *Field operations group.* This group is headed by the director of field operations. It is responsible for sampling and interviewing and for all field-work-oriented activities, from mapping and listing through office check-in and hand editing of questionnaires.

(c) *Data processing group.* This group is headed by the data processing director. Its work begins with office coding and extends through the production of tabulated results.

(d) *Survey reporting group.* Headed by a senior demographer, this group is responsible for the publication and dissemination of a preliminary report on the migration survey. The report should describe the operational aspects of the survey and also present the basic tabulated results, but with a minimal description of the main issues.

The following organization chart illustrates the relationship of the four "model" groups.

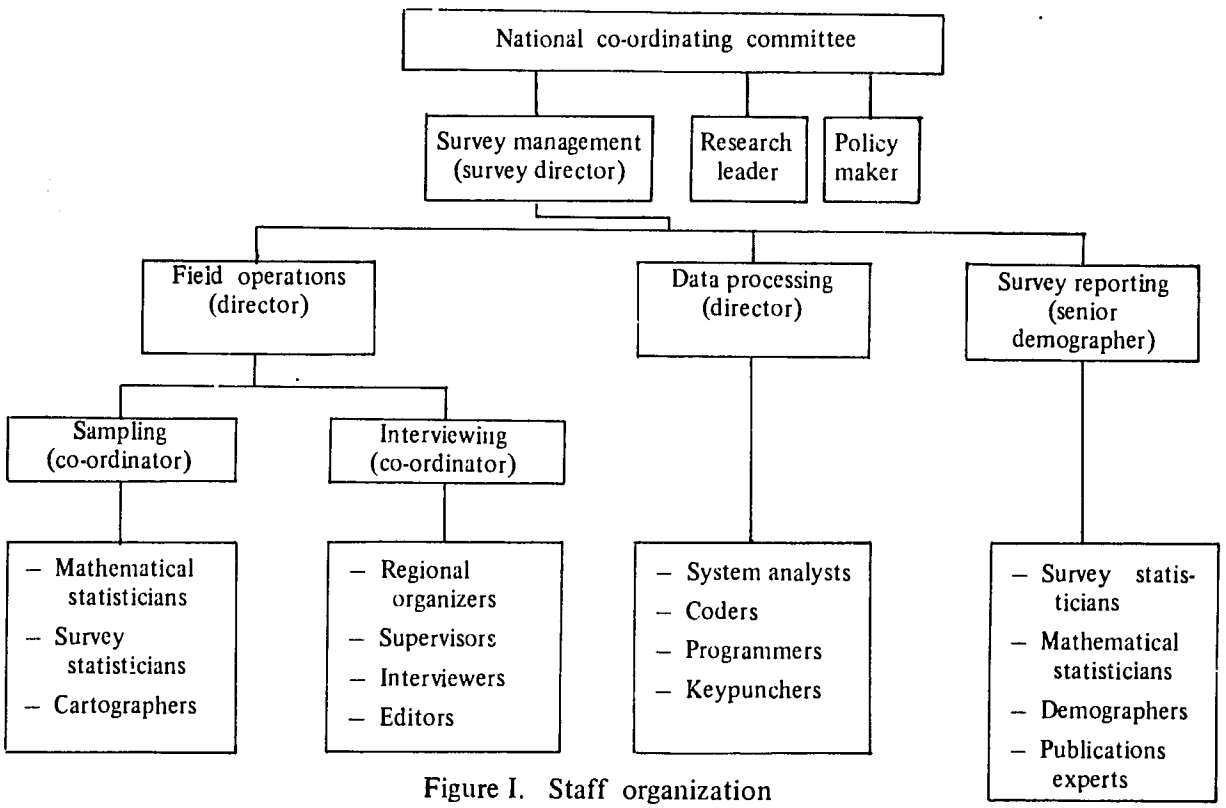

Figure I. Staff organization

3. Staffing levels

The size and area of expertise of the project staff will change as the survey passes through different stages. Initial planning, for example, will probably involve only the members of the survey management group. However, as the field-work stage approaches, the project staff will be increased by the addition of interviewers, supervisors, editors, etc. Subject-matter experts will be needed as well during the final analysis stage. In short, staff levels will fluctuate within groups as the survey progresses from one stage to another.

The following table indicates, by group, approximate staffing levels and duration of the tasks for the survey planning and implementation. The figures are estimates and should in no way be taken as definitive, as there may be considerable variation from country to country. Not included in the estimates is support such as typists, translators, proof-readers and drivers.

Table 1. Staffing levels for the national migration surveys

Management group and title/type of person	*Number of persons*	*Average time per person (person-months)*
Survey management group		
Survey director	1	15[a]
Assistant director	1	15[a]
Director of field operations	1	12
Data processing director	1	9
Senior demographer	1	8
Field operations group		
Sample design and selection		
[Director of field operations	1	Included above (2)]
Sampling co-ordinator	1	4
Mathematical statisticians	2	3
Survey statisticians	2	2
Map evaluators (cartographers)	3	2
Interviewing		
[Director of field operations	1	Included above (8)]
Interviewing co-ordinator	1	7
Regional organizers	5 – 10	4
Supervisors	15 – 20	5.5
Enumerators	75 – 100	4
Enumerator trainers	7 – 10	1
Office edit supervisor	1	4
Office editors	10	2.5
Data processing group		
Director	1	Included above
Systems analysts	2	4
Coding supervisor	1	4
Coders	15	2
Programmers	4	3
Keypunchers	25	2
Punching supervisor	1	2.5
Operator	1	3
Survey statistician	1	4.5
Mathematical statistician	1	2
Survey reporting group		
Senior demographer	1	Included above
[Director of field operations	1	Included above (2)]
Survey statistician	1	5
Mathematical statistician	1	5
Demographers	3	5
Publication preparation specialist	1	6
Publication editor	1	6

Note: Participating countries should also provide for personnel to carry out printing and dissemination of reports.

a These persons must be available throughout the life of the project (approximately 24 months) but their level of involvement will decrease after the first year.

C. COMMUNICATION AND DOCUMENTATION

1. Communication

The part played by effective communication in the over-all success of the survey cannot be overemphasized. Communication during the national migration surveys will take place at two levels:

(*a*) Within each country (internal communication);

(*b*) Country-ESCAP communication.

The most important point to keep in mind regarding communication is that the survey is not taking place in a vacuum, that is, problems discovered at any particular level or stage of the survey may have been encountered elsewhere. Only by communicating problems will they be solved in a logical, consistent manner, both internally and at the regional level.

2. Documentation

A conscious effort has been made to keep the amount of paperwork at a minimum for this survey. None the less, there are forms and reports that have to be completed at virtually every level. The purposes of documentation are:

(*a*) To report on survey progress;

(*b*) To provide a methodological and procedural history of the project;

(*c*) To note problem areas and the resolution of problems;

(*d*) To provide a systematic method of accounting for selected units;

(*e*) To report survey results.

Documentation requirements are generally included in the manual for a specific task. (For example, interviewers' reporting requirements are in the manual for interviewers.) The exceptions to this are the reporting and documentation requirements of the survey management group and national co-ordinating committees. These requirements will be specified when the agreement between ESCAP, the national co-ordinating committees and the funding agency is finalized.

III. TECHNICAL ASSISTANCE

Because of the nature and complexity of the survey, a comprehensive programme of technical assistance has been developed by the ESCAP secretariat in collaboration with the International Statistical Programs Center (ISPC) of the United States Bureau of the Census; the assistance is funded by USAID. Additional technical assistance is being provided by the Australian National University and the Australian Development Assistance Bureau. The ESCAP secretariat will invite other international research organizations to contribute to the project by providing technical assistance as required. The purpose of this chapter is to detail the planned role of technical assistance in the development and implementation of the national migration surveys.

A. PREPARATION OF PROTOTYPE MATERIALS

A key component of the project design is the collection of high quality data that is comparable across countries, in so far as comparability is possible. This calls for a degree of uniformity in sample design, survey design, field materials, field procedures, editing and other computer processing and tabulation plans. This, in turn, requires sample design, field procedures, etc., that are of sufficiently high quality and relevance that the individual countries will not need to make modifications other than those required by national differences and characteristics.

Within this context, initial technical assistance input was necessary in the preparation of provisional survey materials. The provisional materials serve as a comprehensive guide to carrying out the national migration surveys and cover the range of survey operations from sampling through fieldwork and data processing. They should be the basis for country-specific adaptation.

Several of the provisional documents were drafted by the ESCAP secretariat. These include the core questionnaire, the manual for interviewers and the tabulation plan. In addition, ESCAP and the United States Bureau of the Census have prepared the following materials, which were considered necessary:

(*a*) Sample design manual;

(*b*) Manual for interviewer trainers;

(*c*) Manual for supervisors;

(*d*) Manual for office editors and coders;

(*e*) Data processing system manual;

(*f*) Survey organization and monitoring (the present manual).

B. PILOT SURVEYS

One of the recommendations made at the first session of the Advisory Committee was that one or two pilot surveys should be conducted in 1980. The pilot surveys will be a test of the surveys' operation and procedures and of the questionnaire. A significantly higher level of effort will have to be expended than was the case for the questionnaire pre-tests conducted in 1979.

The goal of the pilot surveys is to test the training materials, questionnaire, field procedures and the manual for office editors and coders. The pilot survey will put four or five teams of well trained field-workers and supervisors into the field for a two-week period. The field-workers will carry out mapping, listing and interviewing. Afterwards, the listing sheets, maps and questionnaires

will be returned to the office for hand processing. Thorough debriefings will take place following each step.

Technical assistance will be made available to the pilot survey countries throughout the planning, implementation and evaluation stages of the activity.

C. ADAPTATION OF MATERIALS

It is recognized that the materials will need to be adapted to the national characteristics and requirements of the participating countries prior to full fielding of the survey. Technical assistance will be made available to design a country-specific sample and to adapt the questionnaire, data processing system and other survey materials.

D. OTHER AREAS OF TECHNICAL ASSISTANCE

Technical assistance will not necessarily end with the adaptation of the survey documents. Additional technical assistance will be available and provided upon countries' request. The potential areas of assistance (beyond those outlined above) include:

(*a*) Survey planning;

(*b*) Mapping and listing;

(*c*) Design of survey forms;

(*d*) Training of field personnel;

(*e*) Survey monitoring;

(*f*) Quality control;

(*g*) Flow of materials;

(*h*) Machine editing;

(*i*) Tabulation;

(*j*) Analysis;

(*k*) Survey reporting.

E. MANAGEMENT AND CO-ORDINATION OF TECHNICAL ASSISTANCE

In order to guarantee the relevance and timeliness of technical assistance, countries are requested to inform the ESCAP secretariat of all requests for technical assistance. In this manner ESCAP, the United States Bureau of the Census and the other sources of technical assistance can most effectively co-ordinate their activities.

IV. SURVEY PLANNING

A. IMPORTANCE OF PLANNING

The national migration surveys are a large and complex operation. Good planning and careful advance preparation are vital to the successful achievement of the surveys' basic objectives, namely, to obtain as complete and accurate information as possible while staying within the budgeted cost and meeting the survey time-table. Everything necessary for each step must be planned sufficiently in advance so that it will be carried out at the appropriate time and in the proper sequence. Even small oversights in planning can lead to serious defects and insufficiencies which can affect the quality as well as the cost of the operation.

National characteristics and survey requirements mean that the planning process will be somewhat different from country to country. None the less, there are basic operations and elements that are fundamental to all surveys, and there are basic principles that should be observed in survey planning. This chapter describes the planning process from the point of these common principles to follow and decisions to make.

B. INITIAL PLANNING

Survey planning usually takes place in two stages. The first consists of making initial decisions, that is, establishing broad outlines in order to provide a framework for the detailed plans to follow. There are seven basic steps or decisions that must be considered very early in the planning period. (As is the case with most survey operations, technical assistance is available, at a country's request, to aid in the planning process.)

1. Establishing national co-ordinating committees and executing agencies

This step has already taken place in most of the countries participating in the project. The national co-ordinating committees should oversee all the initial planning and co-ordinate and review the detailed survey plans.

2. Setting a tentative survey date

This decision has also been made. Most countries have decided to conduct the migration survey after their national population censuses have been completed. This is advantageous since it potentially allows the migration survey to draw upon the experience, personnel, materials and data (for sampling purposes) from the population census.

3. Estimating resource requirements and personnel

General staffing levels for the project were discussed in chapter II. The survey director in each country must, very early in the planning process, develop an outline oriented to their country's situation (taking into consideration factors such as geography, previous experience with nation-wide surveys and levels of expertise).

4. Estimating resource requirements and facilities

The space requirements for each of the operations will be determined on the basis of the size of the staff and the type of equipment or furniture needed. To minimize the movement of

the materials and facilitate co-ordination and control, a single location for all the survey's operations is preferable. Ideally, suitable space may be obtained from the National Statistics Office or other government agency. Given the sample size and expected duration of field-work, it is doubtful whether regional or provincial offices will be absolutely necessary, although they are desirable in most countries. This step also includes estimating resources such as automobiles, data processing equipment, duplicators, pens and clipboards.

5. Inventory and evaluation of maps

Maps are needed during virtually all phases of the survey. They are necessary during survey planning in order to establish work areas, estimate travel time and costs and identify segments. A mapping programme can be an expensive, time-consuming operation. For this reason, the need to implement mapping programmes as part of the national migration surveys must be determined very early in the planning period. However, since the surveys as currently planned will be undertaken after the 1980 round of population censuses, the possibility exists that the updated maps for the census can be used. This option should be examined immediately. Irrespective of source or age, the maps should be evaluated. In most cases, evaluation consists of assessing the reliability of the map-maker or mapping agency and their feelings regarding the quality of the maps. Some field testing of the maps should be done. This involves taking the maps into the field to verify specific features and determine whether a supervisor or interviewer could be expected to locate the segment.

6. Drafting a budget and arranging financing

Preparation of a preliminary budget is a high priority activity. The budget should be drafted by the national co-ordinating committee in consultation with the Government, ESCAP and UNFPA. It is probable that the preliminary budget will have to be re-examined and revised as the survey activities progress. There should be a clear-cut division of responsibilities within the co-ordinating committee with regard to financial matters. Every effort should be made to develop a preliminary budget that is an accurate reflection of the nature and scope of the survey activities. Countries may seek funds for their surveys from UNFPA or other sources subject to the procedures regarding obligations, disbursement and expenditure of funds. Project requests to UNFPA must be submitted officially by Governments after obtaining the technical concurrence of ESCAP. The application for funding from UNFPA has to be submitted well in advance through the UNDP resident representative or UNFPA co-ordinator. (Funds granted by UNFPA are granted to the Government, with ESCAP acting in an advisory and liaison role.)

7. Planning the publicity programme

The publicity programme should be planned well in advance of field-work. Effectively managed and co-ordinated publicity is a good way of obtaining co-operation from the public in general and respondents in particular. Publicity can serve to dispel respondent anxiety about the purposes of the survey and to eliminate concerns about confidentiality. Copies of press releases and newspaper articles may aid interviewers in the field in converting refusals and potential refusals.

Publicity is the responsibility of each national co-ordinating committee, which should appoint one person (preferably the survey director) spokesman for the survey. The spokesman should distribute press releases and be available to answer questions raised by the press.

C. DETAILED PLANNING

Immediately after making initial decisions, the national co-ordinating committee should turn its attention to the detailed plans for each step of the survey operation. Detailed planning will require

the input of the survey management group and, in some cases, the help of ESCAP and other sources of technical assistance. Detailed planning consists of two activities.

1. Specifying areas of responsibility

Responsibility for each survey activity should be assigned to a specific group in the survey organization. For example, the field operations group should be assigned responsibility for all the field activities. Within that group, responsibility will be further detailed between the sampling and interviewing teams. In addition, the technical assistance required to implement the activities successfully should be considered.

2. Developing a time schedule

At the same time areas of responsibility are being specified, the survey calendar should be finalized. Preparation of the survey calendar is one of the most important aspects of planning, since careful timing of each major activity is essential if the survey is to be a success.

V. SURVEY CALENDAR AND WORK PLAN

The importance of planning was discussed in the previous chapter. It was mentioned that the two initial activities in the "detailed planning" stage are specifying areas of responsibility and developing a time schedule. These two activities are represented in the form of a survey calendar and a survey work plan. This chapter will examine both of these documents in detail.

A. THE SURVEY CALENDAR

The preparation of a calendar of activities is a relatively simple process, provided care is taken to make sure that the activities are arranged in the proper order and that realistic workloads and production rates have been determined for each activity. A useful method of presenting the survey calendar is shown in figure II. Activities or tasks are listed in order on the left side and the time intervals are indicated across the top. The time required for each activity is shown by a bar drawn across the time axis in the appropriate relation to previous events.

The management group member or other responsible person should develop a calendar for his specific activity. The calendar developed in this fashion for each major survey activity should be compared to reconcile inconsistencies in the time determined for certain activities. Many activities will have some calendar time overlap for efficient and timely accomplishment of the total effort. It may be necessary to revise and adjust the calendar several times to eliminate inconsistencies before the individual calendars can be summarized into a single calendar of major activities.

The product of the calendar/scheduling process is a series of "activity" calendars (one for each component activity) and a master survey calendar showing the timing and interrelationship of the various activities. For example, the activity calendar for recruitment and training of the field staff would look something like figure II (note that the calendar follows the format discussed above and is divided into weekly segments of time):

Task	*Number of weeks*									
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Identify and select regional organizers										
Select supervisors and enumurators										
Train supervisors										
Train trainers										
Train enumerators										

Figure II. Survey calendar: recruitment and training of field staff

According to this calendar, recruitment and training of the field staff will take approximately eight weeks from beginning to end.

The next step is to integrate this "activity" calendar into the master survey calendar. This is done in figure III, which contains a model survey calendar for the entire project. Note that the calendar is divided into months. The recruitment and training of field staff occur in months 12 and 13 on the master calendar.

It is extremely important that each country develop a set of survey calendars, as they are an effective means of visually illustrating the interrelationships of the large number of discrete operations that comprise the survey. While the calendars developed by the countries are expected to differ somewhat from the model calendars presented here, it is important that all the survey activities and operations be accounted for in a logical and consistent fashion.

B. THE SURVEY WORK PLAN

The second aspect of detailed planning is the development of a survey work plan that specifies areas of responsibility for the completion of a task. Development of the work plan for an activity should be done at the same time that the calendar for that activity is prepared. The work plan is usually presented as a chart. Tasks are listed down the left side. Indicated along the top are the scheduled and actual beginning and ending dates, the person responsible and comments on task status. The important points in preparing the work plan are that all the component tasks for any activity are accounted for and that the persons responsible know precisely what their roles are during the activity.

The work plan differs from the survey calendar in that it specifies the people responsible for a task and establishes dates for the task; the work plan is a working document and, as such, should be circulated and updated regularly.

Table 2 is a hypothetical activity work plan, again using recruitment and training of field staff as the example. (The final version would have a name in the "person responsible" column.)

Table 2. Survey work plan: recruitment and training of interviewing field staff

Task	*Begin*		*End*		*Person responsible*	*Comments on status*
	Scheduled	*Actual*	*Scheduled*	*Actual*		
Select regional organizers	1 Feb.		7 Feb.			
Reproduce materials for selecting interviewers and supervisors	1 Feb.		7 Feb.			
Select interviewers and supervisors	8 Feb.		28 Feb.			
Reproduce materials for all training sessions	7 Feb.		21 Feb.			
Supervisor training	22 Feb.		28 Feb.			
Trainer training	1 Mar.		7 Mar.			
Classroom interviewer training	8 Mar.		22 Mar.			
Classroom and field practice for interviewers	23 Mar.		28 Mar.			

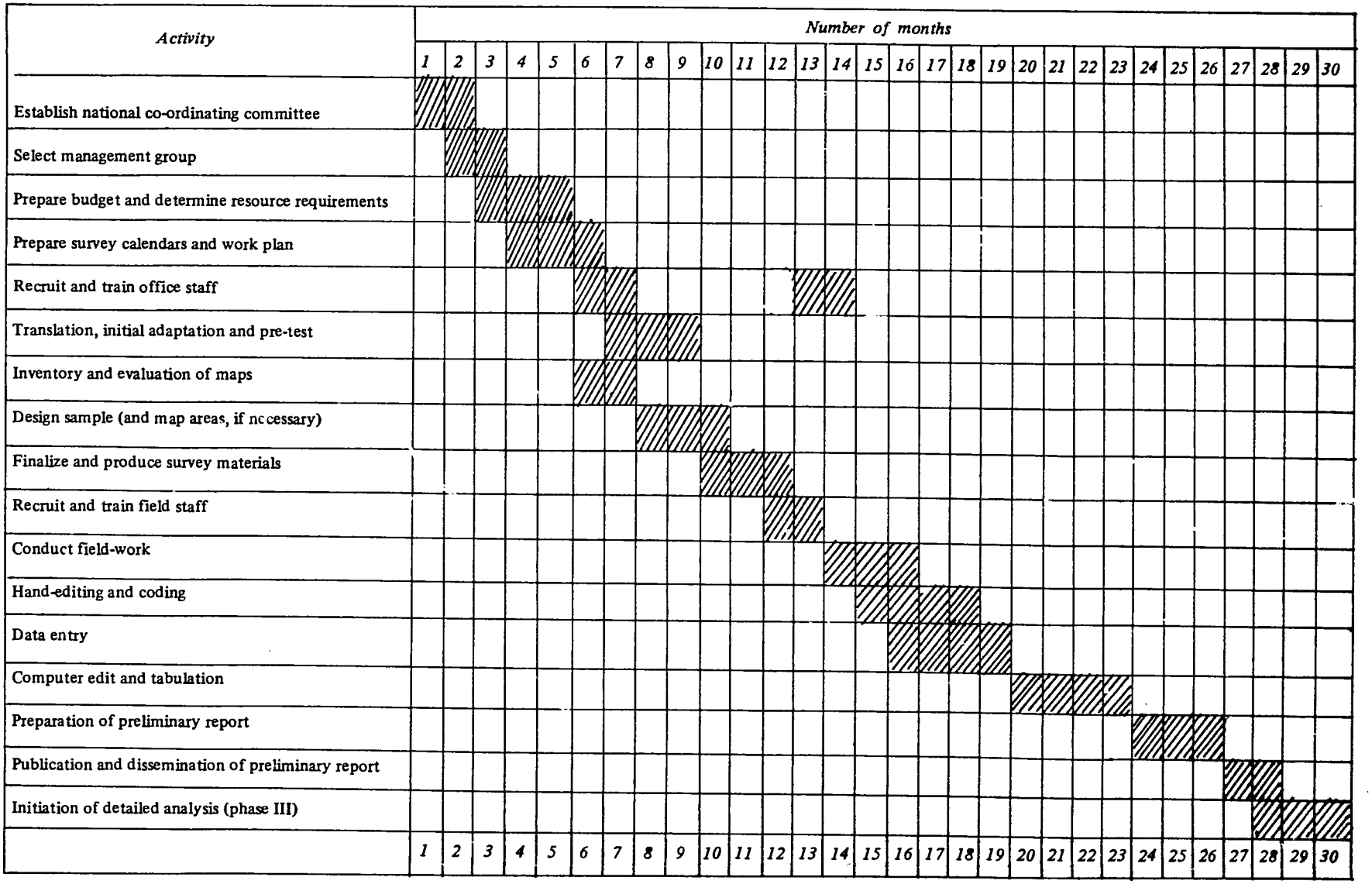

Figure III. Model survey calendar: national migration surveys

PART TWO

SURVEY IMPLEMENTATION

VI. PRELIMINARY SURVEY OPERATIONS

A. INITIAL ADAPTATION

The first task is the initial adaptation of the survey materials that will be used in the questionnaire pre-test. These consist of the household schedule and individual questionnaire. The core questionnaire has already been pre-tested a number of times in the ESCAP region and it is felt that the version distributed to the countries is usable in its present form. Only those items that are clearly inappropriate should be deleted during the initial adaptation stage, since all survey documents will undergo final adaptation following the pre-test. However, any questions or modules that are going to be added should be introduced at this point to permit testing in the field. (ESCAP can provide assistance in assessing the need for these modules and in developing them.)

B. TRANSLATION OF PRE-TEST MATERIALS

Interviews must be conducted in the language of the respondents. This means that it is necessary to translate the household schedule, individual questionnaires and any modules developed by the country prior to conducting the pre-test. It may also be necessary to translate the manual for interviewers and the manual for interviewer trainers if pre-test training is to be in a language other than English. The other survey materials should not be translated until after the pre-test, that is, until the questionnaire is finalized.

Care must be taken to guarantee that all translations are accurate. The most effective translation procedure is first to translate the document from English into the local language and then to have a second person translate the local language back into English. The two English versions are then compared and any difficulties in the translation resolved. The translated questionnaire should be tested several times just to ensure its accuracy.

There are two important points to keep in mind regarding questionnaire translation. First, it is not necessary to translate a question word for word; but it is essential that the intention (that is, the concepts) of the question be clear. Secondly, translation of the questionnaire is a technical operation which should involve persons who are not only bilingual but also familiar with the terminology of demographic research.

C. QUESTIONNAIRE PRE-TEST

Following initial adaptation and translation, the questionnaire should be pre-tested in the field. The pre-test, although important, is not a major logistic operation. Usually, a total of 100 questionnaires completed with representative respondent types (migrants, non-migrants, upper and lower socio-economic classes, rural and urban areas, etc.) will be sufficient. The pre-test interviewers should generally be experienced personnel, that is, supervisors or senior enumerators with previous survey experience. (If possible, the persons who will be supervisors for the full-scale survey should be used as pre-test interviewers. In this manner, they will gain invaluable experience and, potentially, could be used as interviewer trainers later.) This type of person will be able to provide better comments regarding how well the questionnaire works under actual interviewing conditions. Pre-test interviewers must be thoroughly debriefed and care must be taken to ensure that all difficulties encountered are discussed and resolved before the actual field-work.

D. OTHER ITEMS TO PRE-TEST

The questionnaire is the only item that all countries are required to pre-test. However, the decision may be reached by a country to test other procedures and operations. These probably would

include listing and perhaps hand editing and coding. While countries should feel free to pre-test any of the operations, it should be borne in mind that all of the survey operations except machine processing will be thoroughly tested in the pilot surveys.

E. FINALIZING SURVEY MATERIALS

Following the pre-test, all the survey field documents can be finalized. These materials include the:

(*a*) Questionnaire;
(*b*) Manual for interviewers;
(*c*) Manual for supervisors;
(*d*) Manual for interviewer trainers;
(*e*) Manual for office editors and coders;
(*f*) Data processing system manual.

Top priority should be given to the questionnaire, as it is the document that will have been pre-tested most extensively; many of the other materials are dependent on it and it is the single most important component of the national migration surveys.

The finalization of the questionnaire should include input from the data processing group in order to ensure that the data can be processed. Great care must be taken to guarantee that all necessary adaptations are made to the questionnaire before the final survey and that the ultimate product is in fact a final version.

Finalizing the other survey documents involves three tasks:

(*a*) Adapting the materials to correspond with national characteristics;
(*b*) Translating the documents that need to be in the native language;
(*c*) Making sure that the questionnaire-dependent materials are consistent with the final ver n of the questionnaire.

In order to adapt the materials, several persons familiar with the activity should read through a cument and assess its relevance to the characteristics of the country. For example, the inter- vie ng co-ordinator and one or two regional organizers and supervisors should review the manual fo upervisors. Their observations on the field operations in the country as opposed to the ideal or m d presented in the original document should be incorporated into the final version of the manual fo upervisors. While many of the topics (e.g., communications, dealing with non-responses) will pr bly not differ at all from the original document, other sections (e.g. travel and accommodation, sc ule and reporting requirements) may require substantial adaptations.

The participating countries should determine which documents other than the questionnaire ne to be translated, although it will almost certainly be necessary to translate the manual for inter- vi rs and the manual for interviewer trainers. The same general translation procedure used for the q ionnaire should be followed and, again, the important point is that the translation should be an a rate reflection of the intention and concepts of the English version.

The last step in finalizing the survey materials is a check to guarantee that they are internally sistent and consistent with the final version of the questionnaire. This check must be done with t care and attention to detail. It should be borne in mind that changing just one question in the stionnaire will affect the manuals for interviewers, interviewer trainers, editors, coders and data cessors. It will also necessitate changes in the tabulation plan and tabulation specifications. Like- e, changing a supervisory procedure could make the manual for supervisors internally inconsistent. good procedure to follow is to have several people from each group review the questionnaire and ir specific manual at the same time. This is detailed, time-consuming work, but an item-by-item ck and comparison is the only way of ensuring that the final materials are correct.

VII. SAMPLE DESIGN AND SELECTION

A. SAMPLE DESIGN

The sample design manual provides a set of guidelines for countries to use in designing and selecting an appropriate national sample. Issues discussed include stratification, sample allocation, sample size, stages of selection, weighting, imputations and variance estimates.

The sampling group, with technical assistance, should revise and adapt the prototype sampling plan to correspond with national needs and characteristics. The product of this process in each country will be a paper providing a detailed description of the sample design. Although the sample design may vary somewhat from country to country, the operations involved in implementing the guidelines will not differ greatly, if at all.

B. SAMPLE SELECTION

Multiple stages of selection will be used, with the final stage consisting of listing an enumeration area and then selecting the sample households from the listing and individual questionnaire respondents from the household schedule. The goal is to accomplish all field-work in one trip to the field. The specific activities involved are:

(*a*) To select enumeration areas: this will be done in advance of field-work by the central office sampling staff;

(*b*) To list sample enumeration areas: this will be done by the enumerators;

(*c*) To select households to be interviewed: this will be done by the supervisors based upon the enumerators' listings;

(*d*) To select persons to be interviewed for the individual questionnaire: this will be done by the interviewers, using information from the household schedule.

VIII. PREPARING FOR FIELD-WORK

A. PRODUCTION OF MATERIALS

Production of the materials to be used during interviewing can begin as soon as the materials are finalized. The decision may be made to contract some or all of the printing, especially since some items (particularly questionnaires and manuals for interviewers) will be needed in large quantities. Every effort should be made to locate a competent, reliable local printer. Any printing contracted out in this fashion should be carefully monitored to ensure legibility, correct collation, etc., of the finished product.

The materials that should be produced well in advance of the first training session are:

(*a*) Questionnaires (at least three per interviewer for use during training);

(*b*) Manual for interviewers;

(*c*) Manual for interviewer trainers;

(*d*) Manual for supervisors.

All of the above items, and for that matter, all survey materials should be produced in sufficient quantity to permit distribution to all interested persons.

B. RECRUITMENT AND TRAINING OF FIELD STAFF

By "field staff", this manual is referring to four groups:

(*a*) Regional organizers;

(*b*) Interviewer trainers;

(*c*) Supervisors;

(*d*) Interviewers.

These are the people who will train, monitor, co-ordinate and carry out the actual field-work. The ultimate success of the survey depends greatly upon how well these persons perform their duties. They should be carefully recruited and thoroughly trained.

1. Regional organizers

Field-work will probably be divided according to geographical region, with several teams of supervisors and interviewers working in each region. The regional organizers are responsible for monitoring and co-ordinating all the interviewing in their regions. The need for regional organizers will largely be determined by the size of the country and accessibility. The persons recruited for this job should have the following attributes:

(*a*) They should be familiar with their regions;

(*b*) They should have previous survey management experience;

(*c*) They should be well educated;

(*d*) They should have a reputation for producing high-quality work on schedule;

(*e*) They should be able to follow instructions and have sufficient strength of character to guarantee that subordinates follow instructions;

(*f*) They should be able and willing to travel.

Regional organizers are the eyes and ears of the survey director and interviewing co-ordinator during field-work. They should communicate with the central office by telephone, telegraph, radio or whatever means are available on a regular basis to report on the status of interviewing. Regional organizers will assist in developing, and be responsible for, the timely execution of region-specific work schedules. They will travel extensively throughout their region while interviewing is in progress.

Additional activities that the regional co-ordinator may be responsible for (at the discretion of the survey director and interviewing co-ordinator) include:

(*a*) Arranging travel and accommodation for interviewing teams;

(*b*) Payment of interviewers and supervisors;

(*c*) Handling distribution, receipt and transportation of questionnaires.

The national organization sponsoring the survey should be able to provide the regional organizers or at least provide a list of experienced personnel from which the regional organizers can be selected.

Training of the regional organizers will be largely in the hands of the survey director and interviewing co-ordinator. They should make sure that the regional organizers are fully aware of the range and scope of their responsibilities. In addition, the regional organizers should receive elementary training on the questionnaire, interviewing procedures and supervisory procedures. This means attending the training for supervisors and (probably the best approach) part of the training for trainers.

2. Supervisors

Each supervisor will be responsible for a team of between four and six interviewers during field-work. Supervisors will monitor and evaluate the performance of their interviewers and, on a day-to-day basis, serve as the field representatives of survey management. Supervisors may also be called upon to perform administrative and organizational tasks such as arranging travel and accommodation.

In general, supervisors should have the following characteristics:

(*a*) Maturity;

(*b*) Familiarity with the region in which they will work;

(*c*) The ability to relate to the survey management team as well as to their interviewers. Supervisors must be able to get interviewers to follow instructions.

As with regional organizers, it is hoped that the national sponsoring agency will be able to provide supervisors.

Since supervisors will also have to be competent as interviewers, a two-stage training programme is recommended. First, supervisors should be trained in their supervisory and administrative functions, including their role in sample selection. This training should be conducted by the interviewing co-ordinator and the regional organizers. Secondly, the supervisor should participate in interviewer training (supervisors who seem particularly competent may even serve as trainers of interviewers).

Care must be taken to recruit more supervisors than will actually be needed, since some will undoubtedly drop out or not measure up to survey standards.

3. Interviewer trainers

The identification of the interviewer training staff is an important part of the survey, since the quality of field-work is directly related to the quality of training. The persons who serve as trainers

should have previous training or teaching experience and be able to convey information in a logical and meaningful fashion. In general, there should be one trainer for every ten or twelve interviewers.

Trainers will only be needed for about five weeks, so they can be recruited from staff involved in other activities. For example, the office edit supervisor, coding supervisor or senior interviewer supervisors could be used as trainers.

The trainers themselves should undergo a training programme of approximately one week. The purpose will be to discuss general training techniques and practice using the interviewer training materials. To make the "practice" sessions more realistic, regional organizers, supervisors, editors, etc., should attend and play the role of interviewers.

4. Interviewers

The interviewers' task is central to the whole survey. They collect the information and the quality of their work directly determines the quality of the survey. In most cases, interviewers are the largest single group to be recruited for the survey. Furthermore, in countries where there is cultural and linguistic diversity, interviewers will have to be recruited locally and it may prove to be particularly difficult to obtain an adequate number of suitable candidates from every region of the country. Therefore the survey organizers should be especially careful while recruiting interviewers. The recruitment needs to be well organized in order to guarantee sufficient numbers of suitable candidates. The requirements for interviewers should be the following:

(*a*) Interviewers should be mature and responsible, qualities which are not always related to age;

(*b*) In order to understand the work and be able to carry out to the tasks required, candidates should have completed at least four years of secondary education or have had equivalent employment experience;

(*c*) They should be able to perform simple calculations, such as working out ages of respondents from dates of birth;

(*d*) They should have neat and legible handwriting;

(*e*) They should have a high level of motivation and interest in the survey. Given the amount of hard work required, this may be the most important characteristic;

(*f*) They should be able, when required, to stay away from home during the field-work, though this may not be necessary for every interviewer;

(*g*) Interviewers should be willing to work full-time on the survey and for the whole period of field-work. Employing part-time interviewers is discouraged;

(*h*) They should be in good health, especially those assigned to rural areas who will have to walk long distances, and be willing to live under a variety of conditions. Also, it would be advantageous if some were able to drive;

(*i*) The personal characteristics of the interviewer should be such that they are able to establish rapport easily. They should be sympathetic, well mannered, patient, clear speakers and good communicators;

(*j*) They should be familiar with the local language and culture;

(*k*) As interviewers may have to live together for some time, they should be able to adapt to group life and thus avoid personal difficulties during their time in the field (for this reason residential or in-house training, where trainees live together at the place of training, is beneficial);

(*l*) They should be methodical and able to keep records up to date as well as taking care of the materials issued to them;

(*m*) Candidates do not have to have previous interviewing experience. Although the use of candidates with relevant experience will certainly reduce the burden on senior staff, there is the danger that interviewers who have previously worked for organizations with poor standards and controls could have a bad influence on other candidates.

It is desirable to test and screen interviewer applicants thoroughly before inviting them to training. This process should consist of a written application, a personal interview and a short test. Even then, more persons should be invited to training than are necessary to allow for voluntary and involuntary attrition. Final selection of interviewers should be made contingent upon their successful completion of training.

Interviewers should be trained immediately prior to field-work. Their training should last about three weeks and include the following areas:

(*a*) General project background and description of their role in the survey;

(*b*) Listing procedures;

(*c*) General interviewing techniques and procedures;

(*d*) Question-by-question examination of the questionnaire;

(*e*) Practice using the questionnaire and listing procedures, including going into the field and listing and interviewing one or two households not in the sample. (The questionnaires completed in the practice can be used during office editor and coder training, so they should be kept after being evaluated by the training staff.)

Specific interviewer training techniques and approaches are discussed in detail in the manual for interviewer trainers.

C. ASSIGNMENT PACKAGES

A final activity is preparing the first set of assignment packages. These are the interviewing materials that the supervisors will take to their groups' first work areas upon completion of interviewer training. Each package should include the following items:

(*a*) Listing books;

(*b*) Questionnaires;

(*c*) A work area time schedule;

(*d*) Control forms;

(*e*) Maps of the entire work area plus the interviewer's individual enumeration areas;

(*f*) Copies of press releases or other publicity materials;

(*g*) Writing materials;

(*h*) Extra briefcases, clipboards and any other materials necessary to ensure that the work can be completed while the group is out of reach of the central office.

The assignment packages can be prepared by clerical staff, but they should be carefully checked before the supervisors leave the central office to ensure that all materials are included in sufficient quantity.

IX. FIELD-WORK

A. LOGISTICAL ASPECTS

An important determinant of how smoothly events flow in the survey will be the care taken with respect to administrative and logistical details. Matters such as running out of pencils, not being paid on time or not having transportation to the next work area can become major irritants, seriously affecting morale and undermining the field staff's confidence in their supervisors and, ultimately, the project.

There are no specific procedures that can be discussed here for dealing with administrative and logistical matters. The individual procedures will have to be developed by each country. The important point, however, is that the following aspects of field-work should be planned well in advance.

1. Payment of field staff

Interviewers can be paid on an hourly or a piece-work basis. For reasons of quality, the hourly rate appears more advisable. It should be clear to the interviewers how and how often they will be paid. If a group of interviewers is going to be in the field for an extended period of time, they should be told how their pay will be administered (i.e., by the supervisor in the field, held at the central office or mailed to their homes). Whatever procedure is adopted must be followed exactly.

2. Subsistence allowance

When working away from the central office, each interviewer will be given a subsistence allowance to cover basic necessities such as food and lodging. Rules governing the distribution and use of these funds must be well thought out in advance of field-work.

3. Transportation

Interviewers and supervisors will need transportation to their work area and, later, between work areas. It is hoped that the national sponsoring agency can provide cars and drivers for an extended period of time, but if this is not feasible other possibilities must be examined. Public transportation is one such alternative, or it may be preferable for all supervisors to have cars. (Cars are virtually a necessity for regional organizers.) However the transportation issue is resolved, it should be remembered that adequate transport facilities save time, make the interviewers work more willingly and prevent many problems.

4. Distribution of materials

Initial interviewing supplies (questionnaires, maps, pencils, brief-cases, etc.) will be given to supervisors and interviewers before they leave for their first work areas. However, plans must be made for resupplying the teams as they move around in the field. It is a tremendous waste of time to have interviewers in the field ready to work, but unable to do so because of insufficient listing books, questionnaires or pencils. Resupplying can be done by the regional organizer, by the central office staff making field visits or, less satisfactorily, by mailing supplies.

B. MONITORING PROGRESS

Each interviewing team should work according to the same standards and instructions regarding production, quality and reporting. This entails extensive supervision and means that critical

emphasis must be placed upon the supervision of supervisors and effective communications. Monitoring of field-work will be done in five ways.

1. Regional organizer

The regional organizer will be responsible for monitoring progress in each work area in his region. This means frequent visits to the work areas and careful definition of time schedules. He should check that sample selection and quality control procedures are being followed and assist in resolving any problems that the supervisors may be having. In addition, the regional organizer may be called upon to handle distribution of materials, funds and arrangement of transportation and accommodation. Good communications with the interviewing co-ordinator are essential lest field-work be delayed.

2. Supervisor

Supervisors will be responsible for day-to-day monitoring of the survey within a work area. They will monitor interviewers' productivity and quality and are the representatives of survey management in the areas where interviewing is taking place.

3. Central office

Staff from the central office should make periodic visits to the field. These visits will provide office personnel with the opportunity to obtain first-hand knowledge of survey operations. Ideally, each team should be visited at least twice during the course of the survey and the visits should be long enough to be able to evaluate each team's performance.

4. Formal progress reports

The progress of field operations should be documented by means of written reports. The reports should be comprehensive and completed on a regular basis. It is recommended that supervisors (in addition to their document control forms) and regional organizers should be responsible for periodically filing written reports on the progress of field operations.

5. Quality control

A systematic programme of quality control is another mechanism for monitoring survey field-work. Supervisors are responsible for the following quality control activities:

(*a*) *Field edit.* Each completed questionnaire will be edited by the supervisor. The purpose of this edit is to provide feedback to interviewers on the quality of their work and to be able to return easily to respondents if missing or inconsistent information is discovered.

(*b*) *Observation.* Supervisors will also be required periodically to observe their interviewers conducting interviews. Supervisors will record their observations and, following the interview, review their comments with the interviewer.

(*c*) *Reinterview.* Supervisors will reinterview the original respondents in a small percentage of cases. Key questions will be asked and discrepancies between the first and the second interview will be resolved by the supervisor by checking with the respondent.

There are, in addition, a wide range of "quality control" functions that supervisors will carry out in the normal execution of their duties. These range from assisting interviewers with difficult respondents and hard-to-locate units to giving and receiving assignments. The important point is that supervisors should always be on the watch for procedural errors and should correct interviewers when errors are committed.

Supervisors themselves should be checked to ensure that they are following the quality control procedures mentioned above. This is the responsibility of the regional organizer or central office personnel. Supervisors' quality control records should be cnecked and interviewers asked if the edit and observation guidelines are being followed. It should be borne in mind that field quality control is only as good as the persons carrying it out.

C. CLOSE-OUT OF OPERATIONS IN A WORK AREA

1. Return of materials to the central office

When all the interviewing in a work area has been finished, the completed listing books, questionnaires, control sheets and other related materials should be promptly returned to the central office. Each work area is composed of a number of enumeration areas (EAs). All the cases for each EA should be bound or boxed together and the appropriate document control sheets completed. The separate EA packets should then be aggregated into one set of materials representing that specific work area. (These procedures will facilitate office check-in.)

Transport of completed materials will have to be developed on a country-by-country, area-by-area basis. In general, however, it is best if the questionnaires remain in the possession of someone connected with the survey. This can be a regional organizer, staff member of the central office or even a driver returning to the office.

2. Transportation of field staff

Well before interviewing is completed in an area, the central office should arrange for the transportation of the interviewers and supervisors to the next work area. Arrangements should be agreed upon, discussed with the regional organizer and supervisor and then rechecked prior to the completion of work. A great deal of time and money can be wasted if transportation is not available at the required time.

X. INITIAL OFFICE WORK

A. CHECK-IN OF MATERIALS

All materials for a work area should be checked in and verified immediately upon receipt in the central office. This involves going through the work area documents and making sure that every selected unit is accounted for and has been evaluated as either "complete" or "non-interview" (the latter for a specific reason). Checking and accounting are essentially clerical tasks, but accuracy is a high priority since discrepancies can potentially result in additional trips to the field. From an organizational standpoint, this task should be done in the editing department.

B. OFFICE EDITING

The editing operation begins in the field when supervisors review their interviewers' work. Even if this field edit is of high quality, the need exists for a separate office edit. This is because the enumeration process is very complex and often results in the recording of inconsistent, incomplete and sometimes obviously erroneous data. Office editing is more systematic than field editing; it is done by specially trained personnel and is a valuable task for facilitating the work of coders.

Editing for this survey consists of two distinct operations:

(*a*) The receipt, check-in and verification of materials returned from the field (discussed above);

(*b*) A review of every questionnaire for accuracy, consistency, completeness and legibility.

Step-by-step instructions for carrying out the office edit can be found in the manual for office editors and coders.

C. CODING

Coding is converting open-ended questions into numerical responses. Instructions for this can be found in the manual for office editors and coders.

Transcription is often part of the initial office work but has been excluded from this survey as transcription of data is generally viewed as a time-consuming and unnecessary process which leads to errors. Questionnaires should be designed so that data can be punched directly and transcription avoided.

D. RECRUITMENT, TRAINING AND MONITORING OF STAFF

1. Recruitment

Questionnaires will come into the office and should be processed on a flow basis. This means that office staff must be present from the beginning. It is not possible, for example, to wait until the conclusion of field-work and then use interviewers as editors or coders.

The sponsoring agency may have sufficient clerical and office personnel to eliminate the need for a special recruitment effort. However, even if this is the case, all candidates should be tested and interviewed before being hired. Another potential source of personnel is high-quality applicants who, for some reason, are unable to accept the job of interviewer (for example, persons who are unable to travel for extended periods).

2. Training

Training of editors and coders is best done in three steps. First, they should attend interviewer training. Since they are the persons who will be checking and working with the completed questionnaires in the office, it is important that they have an understanding of interviewing procedures.

Secondly, editors and coders should have a separate training session that emphasizes their particular survey tasks. Included in this phase of training should be:

(*a*) A general description of the survey and its operations;

(*b*) Definition of the editing and coding tasks;

(*c*) A thorough review of the relevant manual;

(*d*) Practice using the various control forms;

(*e*) A description of the flow of materials through the office.

Finally, there should be extensive practice and on-the-job training using the questionnaires completed during interviewer training and additional examples prepared especially for this phase of training. The best trainees should then be made coders since it is the more demanding task. (Further coder specialization, for example, coders working exclusively with geographical coding, may be desirable.)

The survey managers profit in two ways from training the staff on both operations before assigning them the specific roles of editing or coding. First, they can make a close evaluation of performance during training, and can subsequently modify initial impressions. (For example, a person originally hired as an editor may prove to be a good coder during the training session.) Secondly, if the staff is trained in both functions the survey manager will have greater flexibility in dealing with backlogs or bottlenecks. For example, an editing backlog could be countered by having several coders work as editors for a period of time.

3. Monitoring

The work of the editors and coders must be carefully monitored. A percentage of each person's work should be verified, and meetings should be held frequently to discuss common problems and changes in procedures.

XI. MACHINE PROCESSING

A. MAJOR ELEMENTS OF THE TASK

After the questionnaires have been hand edited and coded, they are ready for machine processing. This operation involves several steps, which are explained in detail in the data processing system manual. It is important to remember that the "human factor" does not end when editing and coding are completed. Considerable human resources are necessary throughout the machine processing phase.

1. Data entry

Data collected in the questionnaires are converted into machine-readable form (on tapes, discs or punch cards) and then entered into the computer.

2. Editing

The computer edit is intended:

(*a*) To verify previous manual processing operations;

(*b*) To ascertain that all questionnaires and record types are present;

(*c*) To ensure that data are internally consistent and complete;

(*d*) To assign values in cases of non-response.

Errors discovered during the computer edit will require hand correction, so close collaboration between the programmers/systems analysts and the survey statisticians/hand editors is vital.

3. Recoding

Recoding is the combining of codes for several related items into a single code for convenience and efficiency in tabulation. Recoding specifications will be developed by subject matter experts in collaboration with mathematical and survey statisticians and systems analysts. Recoded (derived) variables that will be used frequently in this survey include measures such as migration status, commuter status and degree of satisfaction in present place.

4. Tabulation

Tabulation refers to the tallying of questionnaire responses into categories according to predetermined specifications. The tabulation process itself, however, can be quite time- and resource-consuming. The tabulation plan contains a layout of the proposed tables, but additional aspects of the task include:

(*a*) Establishing general guidelines for the format of tables and methodology to be followed;

(*b*) Preparation or modification of detailed specifications for individual tables;

(*c*) Establishing deadlines and distribution;

(*d*) Reviewing the output and, if necessary, repeating the three above activities.

B. STAFF AND EQUIPMENT

Detailed requirements are discussed in the data processing system manual. The most important consideration from a management perspective is planning, especially with respect to:

(*a*) Staffing levels;

(*b*) Computer time;

(*c*) Time required to verify data entry;

(*d*) Budgeting sufficient time to allow for corrections to programmes;

(*e*) Securing survey and mathematical statistician support to review the edit, tabulations and statistical aspects of the processing;

(*f*) Guaranteeing that supplies needed by the machines are available.

C. QUALITY CONTROL

Quality control should be an integral part of each of the machine processing tasks. As with quality control on other aspects of the survey, quality control in machine processing involves several steps:

(*a*) Rechecking and verification of work;

(*b*) Giving feedback to the person responsible for any errors discovered;

(*c*) Maintaining records documenting selected units, their status and who worked on them.

XII. PRELIMINARY REPORTING OF RESULTS

The preparation of a preliminary survey report is the responsibility of the survey reporting group. Current plans call for this report to be the final activity of each National Statistics Office (or other survey-executing agency) prior to the detailed analysis stage.

The preliminary report should describe the operational and methodological aspects of the survey, including field-work and general estimates regarding the quality of the data. In addition, it should present the basic results of the survey and the tabulation of data. As illustrated by the model survey calendar (see figure III), it is hoped that this preliminary report can be published within ten months of the completion of the field-work.

The preliminary report is the first attempt to describe population mobility in the country. Basic tables should be prepared and published in the report in accordance with the tabulation plan manual. The report should include the following chapters:

PART ONE. SURVEY METHODOLOGY

I. BACKGROUND OF THE SURVEY

(*a*) Introduction;

(*b*) Distribution of the population, by region and by section;

(*c*) Demographic and socio-economic background;

(*d*) Objectives of the survey;

(*e*) Organizational responsibilities of the survey.

II. SURVEY DESIGN: ORGANIZATION AND IMPLEMENTATION

(*a*) Outline of survey design;

(*b*) Organization of the technical staff;

(*c*) Time-table of survey implementation;

(*d*) Publicity;

(*e*) Adaptation of the survey materials (if necessary);

(*f*) Pre-test;

(*g*) Training of staff;

(*h*) Sample design;

(*i*) Mapping and listing operations;

(*j*) Field-work;

(*k*) Quality control;

(*l*) Office editing and coding;

(*m*) Data processing;

(*n*) Production of tabulations.

III. SURVEY MATERIALS AND EVALUATION

(*a*) Household schedule;

(*b*) Individual questionnaire;

(*c*) Special modules (if developed);

(*d*) Other survey instruments;

(*e*) Evaluation of the data.

PART TWO. SUBSTANTIVE FINDINGS OF THE SURVEY

I. MIGRATION STREAMS

(*a*) Inter- and intra-regional streams;

(*b*) Inter- and intra-settlement class streams;

(*c*) Patterns of commuting.

II. RECENT EVOLUTION OF MIGRATION

(*a*) Sequence of movements;

(*b*) Types of movements.

III. FUTURE MOBILITY

(*a*) Potential migrants;

(*b*) Likely directions.

IV. DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS

(*a*) Migrant *versus* non-migrant differentials: age, sex, marital status, fertility and economic activity.

V. REASONS UNDERLYING MOBILITY BEHAVIOUR

(*a*) Demographic factors;

(*b*) Socio-economic factors;

(*c*) Decision-making process;

(*d*) Linkages between migrants and their relatives.

VI. IMPACT OF MIGRATION

(*a*) Remittances exchanged through the migration networks;

(*b*) Socio-economic impact of out-migrants on their previous households;

(*c*) Degree of adjustment of migrants in their place of destination.

VII. SUMMARY AND CONCLUSIONS

PART THREE. PRESENTATION OF MIGRATION TABLES

PART THREE

SURVEY ANALYSIS AND POLICY FORMULATION

XIII. ANALYSIS OF THE RESULTS AND DISSEMINATION OF INFORMATION

The primary analytical purpose of the survey is to identify the pattern and types of population movements, the factors affecting mobility behaviour and the impact of migration on socio-economic development.

A series of technical papers will be produced in which appropriate techniques will be used in detailed analysis of the data for different issues. Emphasis will be placed on the interpretation of the significance of the findings for policy formulation. It is expected that the survey materials will provide important information on the role of migration in the development process. Among the issues which will be studied are the following:

(*a*) Volume of the migration streams between metropolitan areas, cities, towns and rural localities; this will include attention to rural-rural, urban-urban, urban-rural and rural-urban movements;

(*b*) Identification of the different types of movements, ranging from permanent migration at one extreme to daily commuting at the other, with provision for intervening categories such as single movement, multiple movement, return movement and circular movement;

(*c*) Characteristics of various types of migrants and movers and how they differ from non-migrants;

(*d*) Causal factors underlying different types and directions of movements, including migrants' attitudes and motivations;

(*e*) Study of the interrelations between the state of socio-economic development in urban and rural localities and the types of movements;

(*f*) Factors governing the decision-making process of the movement;

(*g*) Degree of adjustment and assimilation of migrants to urban/rural life, including social, psychological and cultural factors;

(*h*) Interrelations between population movement and family structure;

(*i*) Interrelations between population movements and changes in fertility levels;

(*j*) Impact of rural development, including factors such as irrigation projects, the green revolution and the location of industry, on settlement patterns;

(*k*) Impact of agricultural systems on seasonal movements;

(*l*) Impact of the development of low-cost transportation networks on the volume of commuting;

(*m*) Assessment of the links established through migrants with the place of origin, including the amount of remittances exchanged, and the impact of rural-to-urban migration as a potential stimulus for social change and rural development;

(*n*) Extent to which migrants contribute to the cities' problems in such areas as housing, education and health facilities, public utilities, transportation and pollution;

(*o*) Role of migration in changes in the volume of the urban and rural labour force;

(*p*) Implications of international migration from and to the country;

(*q*) Extent and characteristics of potential migrants and estimation of future patterns of migration.

The technical analysis of the survey data will be carried out by a multidisciplinary research team to be set up in each country. Every effort will be made to assist the national experts in the preparation of these technical papers, either by ESCAP project staff or by international consultants who have experience in the subject areas. The detailed guide outline for the technique and methodology of analysis will be prepared and published by ESCAP as a separate manual.

Rapid publication of results is clearly a goal, but not at the expense of accuracy. Every effort should be made to ensure that identifiable errors are discovered and corrected. This requires careful review of the reports to be published. It is hoped that the detailed analysis can begin immediately after the preliminary report is finalized.

Dissemination of information will take place in three ways:

(*a*) The published materials will be circulated among a wide range of persons for their information and comments;

(*b*) A leading planning agency in each country will host two workshops during the life cycle of the project. National policy makers will be invited to discuss the papers submitted by the survey reporting and analysis groups;

(*c*) The ESCAP secretariat will sponsor periodic seminars and workshops to discuss the findings of the surveys both at the national and regional levels.

XIV. USE OF THE DATA: POLICY FORMULATION

The data will be utilized by a national planning agency in each country for policy development and programme formulation related to population redistribution. It is hoped that, in this fashion, the data will be an impetus for action rather than research.

In the third phase, empirical evidence derived from the first and second phases will provide guidelines on a wide range of policy issues, including the following:

(*a*) The first major issue which emerges from migration research concerns identification of the problem. Is rural-urban migration primarily a manifestation of population explosion and spill-over from rural to urban areas, or is it a symptom of the stagnation of rural life, the lack of any significant improvement in agriculture or the modernization factors in the big cities that operate to attract rural migrants? Or again, is such migration the consequence of both poverty and population explosion? In other words, can migration in Asia be a mechanism through which population adjusts more effectively to changing demographic and economic conditions?

(*b*) Are rural-urban migration and increasing urbanization inevitable and irreversible in the developing countries of Asia?

(*c*) In most countries in the region, migration is not determined by the interplay of the forces of supply and demand in the labour market, but by the individual's initiatives, often based on inadequate or erroneous information which is usually provided by relatives and friends; the individual is motivated by their assistance to resettle in the new place. The lack of adequate information on the employment market makes the situation of labour movements unsatisfactory. Is it possible for the Government to replace the role of relatives and friends and to direct the flow of migration in a more realistic manner? This would make migration a positive element in the process of economic growth.

(*d*) One of the major problems connected with urbanization is the population of squatters' settlements and the provision of housing for the poor. Since the majority of these squatters are migrants, this problem must be considered an issue concerning migration and not merely housing, and not only in the limited context of land-use patterns, housing space and infrastructure costs, but also in the context of human settlement policies.

(*e*) An issue which has received considerable attention from the point of view of policy and empirical study concerns the development of growth poles and small and medium-sized towns in order to counteract the "evils" of big city-based conglomerations. There has been an enormous amount of literature on this issue and yet there are not many examples of migration and urbanization policies which have really succeeded in counteracting metropolitan growth. In other words, what is the role of small and medium-sized towns in providing alternative destinations for rural to urban migrants and for migrants leaving big cities?

(*f*) The extent to which circular (temporary) migration and commuting should be encouraged as an alternative to permanent movement needs to be assessed much more fully. In particular, attention needs to be given to the cost-benefits of alternative forms of movement, both as they relate to the burden imposed on cities by temporary *versus* permanent migrants and the impact on places of origin, judged by the volume of remittances and introduction of modern ideas and practices.

The close interrelationships between population movements and the actual disparities in economic opportunities and social amenities between different regions of the country, and between rural and urban areas in particular, underlines the urgent need for more integrated homogeneous national population redistribution strategies. Research results at the macro-level on migration and

urbanization and at the micro-level on population mobility behaviour would allow each Government to take into account the net effect of policies intended primarily for the development of rural and urban areas on population movements and urbanization, or vice versa.

The analysis provided at macro- and micro-level will be used by a leading national planning agency in each country in the preparation of a discussion paper on policy formulation and programme development related to population redistribution at the national and subnational levels.

Among the alternative policies to be discussed in this paper in relation to the research findings are:

(*a*) Policies intended to affect population distribution in relation to land use, resettlement programmes and agrarian reform;

(*b*) Policies to influence location of industries, decongestion of cities and redistribution of population;

(*c*) Policies to restrict or encourage migration to cities;

(*d*) Policies for the development of medium-sized cities or establishment of new satellite towns as counter-magnets to the growth of big cities;

(*e*) Policies regarding regional economic planning in relation to migration and urbanization;

(*f*) Policies for promoting harmony between urbanization and other components of modernization, including the solution of environmental problems;

(*g*) Policies intended to apply modern technology and its impact on employment and population movements;

(*h*) Policies to spread educational facilities to the rural sector as a social goal and their impact on migration and urbanization.

As a final stage, the ESCAP secretariat will prepare a comparative study based upon the separate research findings in each country.

The value of the results will be very much enhanced if they can be discussed on a comparative basis. Countries in the region represent different levels of development and urbanization and are characterized by different policies with respect to migration and urban growth. Migration as a tool in the development process will be better achieved if the population redistribution is assessed in relation to different levels of development. For this purpose, ESCAP is planning to conduct an inter-country comparative study on the relationships of migration and urbanization to development. The analysis of the comparative study will integrate, whenever possible, the findings of the analysis at the macro- and micro-levels to be completed by the national experts in their respective countries. Its content will be focused on the following major issues:

(*a*) Comparative analysis of the causal factors underlying different types and directions of population movements;

(*b*) Comparative analysis of the impact of rural development on the population movements;

(*c*) Comparative analysis of the impact of urban development on the population movements;

(*d*) Comparative analysis of the impact of population movements on urbanization;

(*e*) Comparative analysis of the impact of the size and structure of urbanization on national development.

The detailed outlines of the comparative study will be decided upon at a later stage.

At the end of the third phase of the project, a regional seminar will be arranged to discuss the policy papers prepared by the countries in connexion with the findings of the comparative study to be presented by the ESCAP secretariat. The regional seminar will provide an opportunity for decision makers to examine their policies in the light of the experience of other countries. It will assist them to modify the conclusions they reach so as to formulate a more comprehensive, realistic and effective population redistribution policy as an integral part of their national development plans. The final version of the policy papers, together with the monograph on the comparative study and the seminar report, will be compiled and published by the secretariat.

Comparative study on migration, urbanization and development in the ESCAP region

Survey manuals

I. Survey organization and monitoring
II. The core questionnaire
III. Manual for interviewers
IV. Manual for supervisors
V. Manual for interviewer trainers
VI. Sample design manual
VII. Manual for office editors and coders

Country reports

No. 1. *Migration, Urbanization and Development in the Republic of Korea (Bangkok, ESCAP, 1980).*

No. 2. *Migration, Urbanization and Development in Sri Lanka* (in press)

No. 3. *Migration, Urbanization and Development in Indonesia* (forthcoming)

In preparation

Tabulation plan

Data processing system manual

In preparation

Philippines

Pakistan

Malaysia

Thailand

South Pacific

For further information on the comparative study project, contact: The Chief, Population Division, ESCAP, United Nations Building, Rajdamnern Avenue, Bangkok 2, Thailand.

For publications from the project and other Population Division publications, contact: The Clearing-house, Population Division, ESCAP, United Nations Building, Rajdamnern Avenue, Bangkok 2, Thailand.