



asian and pacific census newsletter east-west population institute

philippines and taiwan report preliminary census figures

Preliminary results from two 1975 censuses have been released. News of the 1 May Philippines census came from Ms. Dolores Mortel and Mr. Hidalgo Chaves of Manila's National Census and Statistics Office. Mr. Tun-yih Lu, Senior Statistician in Taiwan's Bureau of Statistics, provided the data from the Republic of China.

Both countries last conducted censuses in 1970. Taiwan's 1970 and 1975 Censuses have been 5 percent sample counts, whereas the Philippines enumerated the whole population in both years.

TAIWAN

The total population of the Taiwan-Fukien area of the Republic of China as of 16 December 1975 was 16,264,198. This figure represents a 10.1 percent increase from the total of 14,796,702 persons in 1970. The number of households increased by 16.7 percent, from 2,638,190 in 1970 to 3,079,292 in 1975. Nonfamily households numbered 2,720; all others were family households. The average number of persons per household has declined since 1970, but the number of square meters of living space per household increased. In 1970 the average household consisted of 5.60 persons and occupied 45.60 square meters. The 1975 figures were 5.28 persons and 64.85 square meters.

Taiwan's population is made up of 8,421,232 males and 7,842,966 females, giving a sex ratio of 107.37 males per hundred females. In 1970 this ratio was 109.60. About 63.4 percent of the population are 15 years old or over, compared with 59.46 percent in 1970. Of those 15 and over, 56.69 percent are employed, 2.89 percent are seeking work, 11.32 percent are students, and 23.72 percent keep house. The remaining 5.4 percent include invalids, those in jail or charity institutions, those not interested in paid employment, and others.

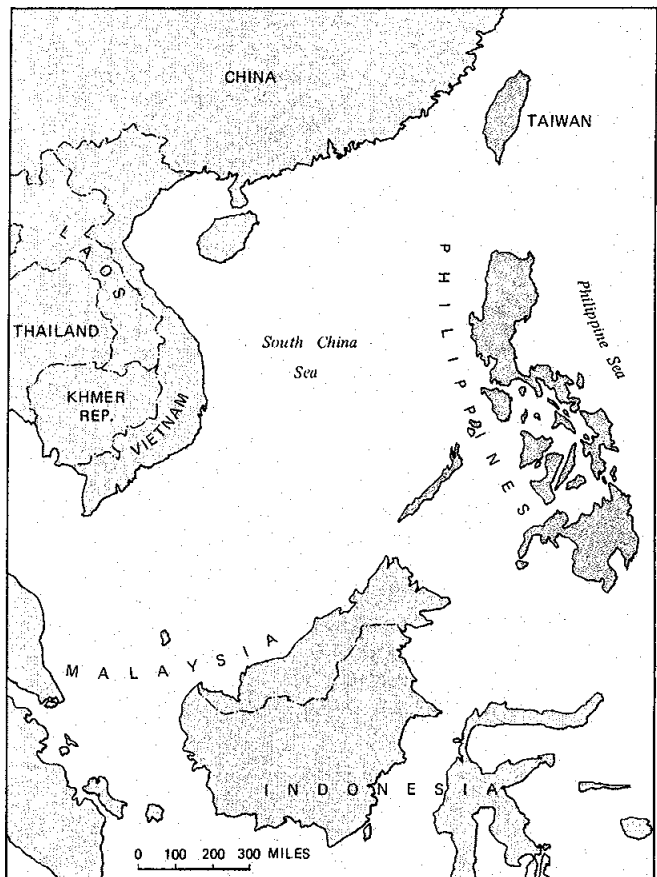
The housing portion of the census schedule included items on main use of building, category of building (separate house or apartment), number of rooms and total floor space, date constructed, how dwelling was obtained, and whether government-owned or private. The results showed an increase since 1970 in the number of dwellings owned by their occupants (70.13 percent in 1975 compared with 66.89 percent in 1970). The proportion of housing units provided by government or private employers decreased from 11.16 percent in 1970 to 9.43 percent in 1975.

Taipei City is the largest city in Taiwan with a population of 2,063,389. The *hsiens* (counties) with the greatest

number of persons are Taipei (1,625,184), Chungwha (1,102,066), and Kaohsiung (950,068).

PHILIPPINES

The preliminary population figure for the Philippines as of 1 May 1975 is 41,831,045, of which 21,018,265 are males and 20,812,780 are females. The population has more than doubled since 1939. In 1970 there were 36,684,486 persons; during the 1970-75 period, 5,146,559 persons have been added to the population, an annual growth rate of 2.66 percent. The 1970 growth rate was estimated at 3.01 percent, so the current figure represents a decrease of 0.35 percent in the five-year period. *(continued on page 4)*



CARTOGRAPHY BY GREGORY CHU

VOLUME ON 1970 ROUND OF ASIAN AND PACIFIC CENSUSES PUBLISHED BY EWPI

Introduction to Censuses of Asia and the Pacific, 1970-74, edited by Lee-Jay Cho with the assistance of David B. Johnson and Milann Gannaway, has just been published by the East-West Population Institute. The 212-page volume contains chapters about the most recent census in each of 15 countries of Asia and the Pacific. Many of the chapters were written by senior census officials who have attended the Institute's population census workshop-conferences, held annually in Honolulu since 1972. Plans for the volume were discussed at the 1973 and 1974 conferences, and work on compiling the book has been under way since that time. David Johnson and Milann Gannaway, then EWPI research assistants, conducted preliminary research, solicited materials from the authors, and assisted in organizing the contents.

Each chapter of the book follows a common outline to facilitate comparisons. A short history of census taking begins each country's chapter. The governmental agency that is responsible for the census in each country is described and in some cases illustrated by an organizational chart or figure. A section on the design and execution of the census gives information about the planning and initial stages of organization, coverage, contents of schedule, maps prepared in conjunction with the census, publicity undertaken to alert the public to the coming census, training of enumerators and actual enumeration procedures, and data processing operations.

Definitions of terms used in different countries may vary, and a section of each chapter tells precise meanings of such terms as *de facto* and *de jure*, economic activity and labor force, occupation and industry, urban and rural, literacy, and race or ethnicity. Another section describes the publications planned or already produced by each country and lists the tables that will be generated from census data. Also contained in each chapter is a description of the postenumeration survey or other methods of evaluation used to measure content and coverage errors in the census. Actual census forms from most countries are reproduced in appendices.



Examining the new book on Asian and Pacific censuses are (left) Resource Materials Specialist (and newsletter columnist) Mrs. Alice D. Harris and Miss Saeeda Karim of Pakistan's Statistics Division.

In the introduction, Dr. Cho discusses the essential features of a population census, uses for census data, and the development of techniques to evaluate censuses. He reviews some of the recommendations approved by participants in the Institute's census conferences. The foreword is by Philip M. Hauser, Director of the Population Research Center at the University of Chicago.

Authors of the chapters and the countries they wrote about are: Anthony L. Hart (Australia), Bahauddin Ahmad (Bangladesh), Htain Lin (Burma), Tun-Yih Lu, Ching Chuan Lee, and Milann Gannaway (Republic of China), Joseph M.K. Lee (Hong Kong), K.K. Chakravorty (India), Sam Suharto, Geoffrey McNicoll, and Lee-Jay Cho (Indonesia), Sadanoni Nagayama and Tadatoshi Sakai (Japan), Shin-Kyu Chang, Jae Young Park, and Nam-II Kim (Republic of Korea), Ramesh Chander, Dorothy Z. Fernandez, and David B. Johnson (Malaysia), Abdul Latif and Mohammad Hafiz Sheikh (Pakistan), Tito A. Mijares, Lagrimas Abalos, and Hidalgo V. Chaves (Philippines), Chian-Kim Khoo (Singapore), Thambiah Nadarajah (Sri Lanka), and Ektritra Kohkongka and Anuri Wanglee (Thailand).

The book should prove a valuable reference for students and scholars who want to find out how a census was conducted and what information is available from it. As Hauser says in his foreword, "Laymen interested in obtaining population information will find this volume a convenient substitute for what could otherwise be many frustrating hours of searching for desired data. Professional demographers and other social scientists will find that it provides a time-saving way of gaining access to population census procedures as well as tabulation and publication plans."

Interested readers may purchase the book for US\$6.00 from the University Press of Hawaii, 2840 Kolowalu Street, Honolulu, Hawaii 96822, U.S.A. A limited number of copies are available without charge to libraries of universities, institutions conducting research in population, and related organizations in Asia, the Pacific, and developing countries of other regions. Requests for complimentary copies should be directed to the Publications Office, East-West Population Institute, 1777 East-West Road, Honolulu, Hawaii 96822, U.S.A. □

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enumerations . . .

AUSTRALIA

- Congratulations to Correspondent Anthony L. Hart, who has become the first State Statistical Coordination Officer in Australia's most populous state, New South Wales. Mr. Frank Parsons, Acting Director of the Evaluation and User Service Section of the Australian Bureau of Statistics, will serve as newsletter correspondent beginning with this issue.

The new Australian Government has been reviewing public expenditure, and Tony Hart reported that rumors were rife that the 1976 Census, scheduled for 30 June, might be postponed or even abandoned. A more recent report from Frank Parsons says "the Government has announced, as part of an overall cost-cutting drive to reduce the expected large budget deficit, that although the 1976 Census would be held as scheduled, the main processing would be deferred for at least one year." This delay in processing is expected to save about A\$7 million in the 1976-77 fiscal year. It is recognized, however, that the cost of processing the census in the following financial year would undoubtedly be greater. "The other problem," continues Parsons, "is, of course, that if processing is deferred for any longer than one year, it will have detrimental effects on preparations for the 1981 Census." Parsons says that although the main processing has been deferred, the two stages of decentralized processing will still be carried out as planned, and output will be available for all geographic levels down to collection districts.

MALAYSIA

- A letter from Ms. Jean Paul of Malaysia's Department of Statistics brings news that Mr. Harbans Singh, a statistician from the Census and Demography Division of the Department of Statistics, left for the U.S. in December to take a course on population statistics and demographic analysis at the U.S. Bureau of the Census. Mr. Singh's particular field of interest is migration; he specializes in this area of demography in his work in Malaysia, and he plans to pay special attention to analysis of migration data in his Census Bureau course. Mr. Singh will return to Malaysia in August 1976.
- A 2 percent sample tape of the 1970 Population Census has been made available by the Department of Statistics. Every fiftieth household was selected, and all persons within the selected households are included. The tape may be purchased for M\$1,200, not including tape cost, freight, and insurance. Detailed documentation is provided with the tape. Users are required to agree to certain conditions for the use of the sample tape before clearance can be given for its sale. Interested researchers should write to the Department of Statistics for more information.

PAKISTAN

- Joint Census Commissioner G. Mujtaba Mirza reports that Pakistan is conducting an eight-week in-service training course on demographic data collection and analysis for junior officers of the Census Organization. The course began in March and is designed to provide background information about demographic data collection and the scope for analysis of data from censuses and surveys.

BANGLADESH



A.K.M. GHULAM RABBANI Ghulam Rabbani is the Secretary and Director-General of the newly created Statistics Division, which comprises the former Census Commission, Bureau of Agriculture Statistics, and Agriculture Census, as well as the old Bureau of Statistics.

Dr. Rabbani majored in statistics at the University of Dacca. He earned a master's degree in public administration from Harvard University in 1963 and a Ph.D. in economic statistics from the London School of Economics in 1964. Before assuming his present post, Dr. Rabbani was Economic Minister to the Embassy of Bangladesh in Tokyo. He has also served as Secretary of the Ministry of Planning.

Mr. Bahauddin Ahmad, who was Census Commissioner, is now Additional Secretary in the Ministry of Land Reform and Revenue.

INDIA

- Indian correspondent Mr. K.K. Chakravorty reports that the Registrar General participated in two Zonal Conferences in February. The conferences were concerned with implementing the Sample Registration Scheme. Planning for the next census in India is under way, and suggestions are now being received for the 1981 Census.

NEPAL

- Nepal is undertaking a fertility survey within the framework of the World Fertility Survey (WFS). The Nepal Family Planning-Mother and Child Health Project in the the Ministry of Health will carry out the project. Co-operating agencies are the Central Bureau of Statistics and the Berkeley Group in Nepal. Dr. Badri Raj Pande is National Director, Mr. Jayanti Tuladhar is Survey Director, and Dr. John Stoekel will act as Demographic Advisor.

A sample of 5,000 women will be drawn from the study population of all ever-married women under 50 years of age in Nepal. Three-stage area sampling will be used, with districts, *panchayats*, and wards as successive units. The WFS household schedule with fertility questions and the individual core questionnaire, adapted to local conditions, will be used. Modules to be incorporated are those on abortion, family planning, and factors other than contraception affecting fertility. Seventeen teams, including two outfitted for mountain-region travel, are carrying out the fieldwork from April to June 1976.

(continued from page 1)

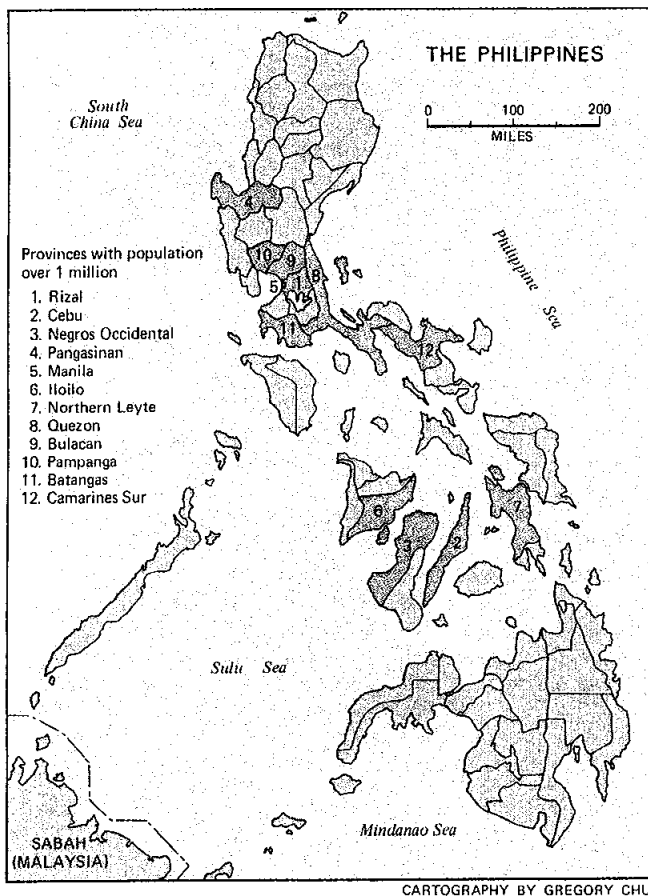
The national sex ratio is 101 males for every 100 females; the 1970 ratio was 99 males per hundred females. The population density is 139 persons per square kilometer, compared with 122 persons in 1970.

The twelve regions of the country have annual rates of growth for the 1970-75 period ranging from 1 percent to more than 4 percent. Central Mindanao, comprising the provinces of Lanao del Norte, Lanao del Sur, Maguindanao, North Cotabato, and Sultan Kudarat, has the lowest annual growth rate (1.28 percent), whereas Southern Mindanao, composed of the provinces of Surigao del Sur, Davao del Norte, Davao Oriental, Davao del Sur, and Southern Cotabato, has the highest growth rate (4.26 percent).

Some 360 of the 42,000 *barangays* (mostly in the Mindanao area) could not be completely enumerated because of the peace and order conditions. Reasonable estimates of the population of those areas were obtained from local government and military sources.

Twelve provinces have now passed the one-million mark (see shaded areas of map below). In order of population size, these provinces are Rizal (3.67 million), Cebu (1.80 million), Negros Occidental (1.79 million), Pangasinan (1.51 million), Manila (1.45 million), Iloilo (1.31 million), Northern Leyte (1.20 million), Quezon (1.11 million), Bulacan (1.04 million), Pampanga (1.03 million), Batangas (1.03 million), and Camarines Sur (1.02 million).

Sixty-nine of the 73 provinces showed growth during the 1970-75 period, with rates from 0.52 percent to as high as 5.79 percent. In the remaining four provinces, the population decreased, with rates of decline ranging from 0.10 percent to 1.00 percent. □



REPORTS ON 1970 THAI CENSUS DATA

A comprehensive program of demographic evaluation of data from the 1970 Population and Housing Census of Thailand has been in progress for some time. In addition, analytical studies of economic characteristics, migration, and fertility are under way. The National Statistical Office (NSO) is producing a series of reports on these research activities, and, according to Mrs. Anuri Wanglee, director of NSO's Population Survey Division, the first two reports are now available.

Revised population estimates

Revised Estimates of the 1970 Population, by Fred Arnold and Mathana Phananimai, is a technical report on the evaluation of the 1970 Census. The study examines Thailand's age-sex distribution and gives revised estimates for the census date (1 April) and for midyear 1970.

Using data based on the evaluation of the 1970 Census, the 1960 Census, and other available sources, the authors estimate that the total population of Thailand as of 1 April 1970 was 36,099,020 persons. This figure implies an overall net underenumeration of 1.7 million persons, or about 4.7 percent of the population. Substantially more males (5.5 percent) than females (4.0 percent) were underenumerated. Analysis of underenumeration by age group indicated that the largest deficits occurred in the early childhood years (ages 0-4) and again in the young adult ages (15-29). Underenumeration of young children, particularly those under one year of age, was not unexpected since they are often missed in censuses. It is also common to expect a high level of underenumeration in the 15-29 age group because of the high mobility of young adults, especially males.

The report also presents the estimated midyear 1970 population by age and sex. This estimate was used to prepare a new set of population projections for the Fourth National Economic and Social Development Plan.

Economic characteristics

The second publication is an analytical report on economic characteristics, based on a 2 percent sample of the total population, or about 800,000 persons. The report includes information on the occupation of the population by region, activity rates by age and sex, the educational level of employed persons, and the type of work done by farmers during agriculture's slack season. In 1970, the report says, approximately 17 million persons in Thailand were economically active, an increase of about 3 million persons between 1960 and 1970. Thailand's economic activity rate is among the highest in the world: three out of every four persons 11 years of age and over were economically active in 1970. Almost all persons who wanted to work were able to do so, and in 1970 only 1 percent were unemployed.

Forty-seven percent of the economically active population was female. Female workers have begun to make significant inroads into many traditionally male-dominated positions such as clerks, professionals, technicians, and construction workers. In administrative and managerial positions, however, 93 percent of all employed persons were still male.

Although the proportion of persons employed in agriculture has declined steadily since 1947, three out of four economically active persons were still employed in agriculture in 1970. This proportion is the highest in Asia, with the exception of Nepal. As the proportion of workers employed in agriculture has decreased, employment in other industries such as manufacturing, construction, transportation, and communication and services, has increased rapidly.

CENSUS DATA ON INTERNAL MIGRATION IN SOUTHEAST ASIA AND AUSTRALIA: LIMITATIONS AND OPPORTUNITIES

by Robin J. Pryor

Population redistribution within countries, particularly in the form of urbanization and the rapid growth of the larger cities in the Third World, has attracted increasing attention in recent years as national governments and city administrations attempt to cope with burgeoning squatter communities, unemployment and underemployment, and the provision of housing, health and educational services, and other infrastructure. There have been other programs designed to keep the population "down on the farm" or to attract rural migrants by opening up frontier lands—highly capitalized agricultural settlement schemes, the transmigration program in Indonesia, and regional development projects which seek to integrate the expansion of urban and rural employment opportunities.

Such trends, problems, and projects place a premium on data on internal migration, and many countries in the region have introduced relevant census questions for the first time during the 1970 census round, or have expanded the range of migration-relevant questions. Some countries have conducted separate or complementary surveys to gain further insights into population mobility. It is important to emphasize, however, that only a very small proportion of all mobility is tapped by censuses: most changes of residence occur within a province, rather than across provincial boundaries; and seasonal movements such as harvesting and fruit picking, circular mobility based on employment in both urban and rural areas, tourism, and some forms of long-term commuting are all ignored by censuses which focus on a somewhat arbitrary definition of what constitutes a significant residential change.

Types of migration statistics from censuses

This paper briefly surveys the actual data enumerated in five countries of Southeast Asia, plus Australia, and assesses the suitability of censuses for collecting such data. The UN recommendations on internal migration statistics have been discussed in detail elsewhere (UN, ECAFE 1967, UN 1970, and Shryock and Siegel 1971); suffice it to say that four main types of information have been recognized as suitable for collection in national censuses:

- place of birth statistics, to distinguish those born in the same province, town, or region as the one in which a particular census enumerated them as resident (nonmigrants), from migrants born in other provinces or overseas. These data have some use where multiple moves are not common, but this has probably never been checked beforehand, and the absence of a definite base year is a serious drawback to analysis.
- place of previous residence statistics, to indicate those who have never lived outside their present locality and those who are international migrants or immigrants from another province or locality which may or may not have been their place of birth; again there is no time base for direct comparisons, and although such statistics have been used with place of birth data to study "return migration" and multiple moves, possible other intervening moves are unknown.
- place of residence statistics for a fixed date, which reveal whether a census respondent was living in the same or an-

other locality at a certain time, for example five or ten years earlier or at the time of the previous census. Children born and persons dying in the intervening period are not accounted for, and, as with place of birth statistics, multiple moves are ignored. Also, if the fixed date does not correspond with an earlier census, accurate estimates of the migration component of the intercensal population growth cannot be made.

- duration of residence statistics, which indicate how long a respondent has lived in the locality of census enumeration. These statistics require cross-tabulation with place of previous residence data to be very useful; such statistics should be controlled for age distribution in any analysis, and, as with age reporting itself, digital preferences have been found to be a problem (for an Indonesian example see Spears, 1975:75).

Apart from the validity and reliability of all census questions, the absence of information on those migrants dying before census enumeration, and the dubious value of statistics that ignore circular and intervening moves, one of the key issues is the geographic level or type of civil division for which previous and present residential locations are recorded, coded, cross-tabulated, and published. A considerable amount of data is normally "lost" during statistical aggregation, and published tables, if any, are very general indeed. Boundary changes among civil divisions create a further problem for accurate comparisons of origins and destinations, and questions attempting to elicit information on the rural/urban nature of the origin are notoriously unreliable, both because of the changing character of places over time and because of subjective perceptions as to what constitutes "urban" or "rural" places. The size of the place of origin is a doubtful surrogate, particularly in developing countries and where the responses cannot be checked against earlier census results.

Another key issue is the selection of the most important variables with which to cross-tabulate migration status, not to mention the functional definition of migration status itself. Five years after the recent censuses, it still proves difficult to obtain (even unpublished) migration matrices for some countries in the Asian-Pacific region, and census data tapes, even on a sample basis, have in most cases not been made public so that researchers cannot generate their own tabulations. We cannot yet ascertain how many persons were classified as migrants leaving one civil division (prov-

Dr. Robin Pryor (right) is a Research Fellow in Demography at the Australian National University, Canberra. He has an M.A. in social geography from the University of Melbourne and a Ph.D. from the University of Malaya, Kuala Lumpur. His current projects include completing the editing of a volume entitled Migration and Development in South East Asia: A Demographic Perspective, and beginning another book, Mobility and Community Change in Australia. One of his recent publications is The Motivation of Migration, a monograph published by the Department of Demography at A.N.U.



ince or district) and moving to another, let alone a finer breakdown of origins/destinations, or a disaggregation by age, sex, race, or occupational and other characteristics of migrants as against nonmigrants. Finally, censuses have generally ignored the motivation of migration and assume that only surveys can investigate this aspect. The author admits the complexity of migration motives (Pryor, 1975a) but argues in the final section of this paper that carefully coded responses to one census question could provide information no less reliable than other factors already discussed.

Migration data enumerated in the 1970 census round

Table 1 contains a brief description of recent censuses in Thailand, Malaysia, Singapore, Indonesia, the Philippines, and Australia. Complete censuses were conducted in four of the six countries. Enumeration was on a *de jure* basis in Singapore and the Philippines, a *de facto* basis in Malaysia and Australia, and on a partial *de jure* basis in Thailand and Indonesia; such differences militate against any close comparison of migration trends and rates, because of the differing treatment accorded "usual place of residence" (*de jure* definition) and actual location/place of residence at the time of enumeration (*de facto* definition). The utility of cross-tabulating *de facto* with *de jure* residence locations has been ignored in most if not all censuses around the world, even though this would help identify patterns of circular mobility such as seasonal agrarian employment and recreational/tourist mobility; the exact timing of a census would, however, be a major consideration in tapping such nonpermanent relocations.

The definitions of internal migrants in Table 1 have been culled directly from the respective census schedules and so represent formal criteria which may have been modified in the course of subsequent coding and computer processing; it is very difficult to obtain information on editing and programming decisions which may have serious implications for

data consistency and which can be made for nondemographic reasons. In each country here except Singapore, lifetime (place of birth) migration could be tabulated at least at some basic civil division such as the province or state level; place of previous residence statistics relate to an "address" in Australia, a "place" (*kampung*, town, etc.) in Malaysia, a province in Thailand, and a municipality or province in the Philippines. Potential sources of qualitative variation between self-administered and enumerator-administered census schedules, and between machine-readable as opposed to postcoded responses are worth bearing in mind also.

The presence or absence of 11 types of migration-related questions is indicated in Table 2 for the six countries. In summary:

1. All countries asked citizenship, giving some indication of the presence of international migrants (before naturalization), but there was considerable variation in the range of response categories allowed.

2. Four countries asked country of birth, the exceptions being Indonesia and the Philippines. Only Australia specifically asked country of birth of the respondent's mother and father as well, because of the importance placed on intermarriage and differential mobility.

3. Due to the small size and short separate history of Singapore, this country did not ask the province or state of birth within the country, whereas all other countries did so.

4. No country attempted to obtain information on the locality of birth, unless this happened to coincide with the place of previous residence (Malaysia and Australia).

5. Because of important links with Malaysia, only Singapore sought information on the country of previous residence, of persons *born outside* Singapore, but in the absence of tabulations of spatial patterns of relocation within Singapore, no relevant internal migration differentials can be calculated for "locals" vis-à-vis immigrants.

Table 1 Brief description of population censuses, 1970 round, Southeast Asia and Australia

Item	Thailand	Malaysia	Singapore	Indonesia	Philippines	Australia
Nature of enumeration	Complete census	Complete census	Complete census	3.81% sample, but varied by region and urban/rural	5% sample of households	Complete census
Place of residence definition	Partial <i>de jure</i> ^a	<i>de facto</i>	<i>de jure</i>	Partial <i>de jure</i> ^b	<i>de jure</i>	<i>de facto</i>
Date of census	1 April 1970	Midnight, 24/25 August 1970	Midnight, 22/23 June 1970	24 September 1971	12:01 A.M., 1 March 1970	30 June 1971
Census instrument for population questions	Form 2, enumerator administered	Form 5, enumerator administered, machine readable	Schedule A, enumerator administered	Form F2, enumerator administered, machine readable	Form 2-A, enumerator administered	Form 1, self-administered
Definition of internal migrants ^c	Persons resident in April 1965 in a province other than that of 1970 enumeration	Persons previously resident in a place (<i>kampung</i> , town, etc.) other than that of 1970 enumeration	Internal migrants not defined	Persons previously resident in a province other than that of 1971 enumeration	Persons resident in a municipality or province in Feb. 1960 or Feb. 1965 other than that of 1970 enumeration	Persons resident in June 1966 at an address other than that of 1971 enumeration
Census population (millions)	34.1	10.4	2.1	119.2	36.6	12.8

a All persons were enumerated at their "usual place of residence" (*de jure*) with the exception of students who were enumerated at the "place where they were residing as of the census date" (*de facto*).

b All persons who lived in a permanent place or house were enumerated by *de jure* method, as were those away for less than six months unless they had intentionally moved their place of residence; those away for more than six months were enumerated on *de facto* basis even if not at their usual place of residence.

c Lifetime internal migrants excluded.

Table 2 Migration-related questions in the 1970 census round, Southeast Asia and Australia

Question	Thailand	Malaysia	Singapore	Indonesia	Philippines	Australia
Citizenship	Yes	Yes [4]	Yes [2]	Yes [6]	Yes [10+]	Yes
Type of identity card	No	Yes	No	No	No	No
Country of birth	Yes [13]	Yes [10]	Yes [8]	No (overseas only)	No	Yes; also for mother and father separately
State, district, or province of birth	Province [71]	State [13]	No	Province [26] + overseas	Province [67] or municipality if in same province	State or territory [8]
Locality, village, town, etc. of birth	No	No	No	No	No	No
Country of previous residence	No	No	Yes [7] for persons born outside	No	No	No
State, district, or province of previous residence	Province [71] for persons five years and over	State [13], district [70]	No	Province [26]	Yes; province or municipality if in same province	State or territory [8], plus overseas, for persons five years and over
Locality, village, town, etc. of previous residence	No	Village, town <i>mukim</i> names	No	No	No	City, town, village
Length of residence in country	No	Yes [9]	Yes [9], for persons born outside	No	No	Yes, residents and visitors
Length of residence in present locality, province, etc.	Yes, village or municipal area	Yes [9], <i>kampung</i> , town, etc.	No	Yes (coded 0-49 yrs., 50 yrs.+), province	No	No
Previous residence at fixed time in past	No, but tabulations of those who migrated to present province in past 5 yrs.	No	No	No	Yes (Feb. 1960 and Feb. 1965)	Yes (June 1966)
Residential status (permanency)	Yes [4]	No	Yes [2]	No	No	Yes [2]

NOTE: Figures in brackets [] indicate number of options given to be coded for response, excluding "not applicable" and "unknown."

6. All countries except Singapore recorded the province or state of previous residence, a fairly gross matrix of origins of internal migrants.

7. Only Malaysia and Australia recorded the locality of previous residence, but subsequent coding reduced this mine of information to 70 districts in Peninsular Malaysia and 136 urban or rural parts of 68 statistical divisions in Australia. Intradistrict and intra-urban mobility, which probably account for a majority of all residential relocations, are effectively concealed by tabulations at these levels.

8. Duration of residence in the country was asked in Malaysia, in Australia separately for residents and visitors, and in Singapore only of those born outside the country. The latter strategy to some extent lessens the problem of separating duration from age.

9. Thailand, Malaysia, and Indonesia asked the duration of residence in the locality or province of enumeration; Indonesia provided the largest number of duration codes, but only at the province rather than locality level of residential change.

10. A fixed-term migration period was used in Australia, with a question on previous residence at the time of the June 1966 Census five years earlier, a very useful provision if detailed tabulations or the sample tape are made available

for analysis. A compromise was adopted in Thailand where, in the absence of a specific question, tabulations have been published on persons' migration to their 1970 province of enumeration during the preceding five years.

11. Questions on the relative permanence of residential status were asked in Thailand, Singapore, and Australia, but these essentially relate to international rather than internal migration.

The importance of the exact form of census questions and of enumerators' instructions should be stressed, and many qualifying statements have to be made in any cross-cultural analyses of migration statistics (Pryor, 1975b). In the Philippines' 1970 Census, question P16 asked: "At the time of his birth, where was his mother's residence? (municipality/province)." The enumerators' manual indicated that the name of the municipality was required only if in the same province as the present residence; and that the municipality/province of the mother's *residence* (*de jure* definition) at the time was required, not that of the hospital or place where the mother had gone temporarily to give birth (Bureau of the Census and Statistics, n.d.: 41-42). In the 1971 Indonesian Census, however, question 12 asked simply for province of birth, not the mother's (or parents') *de jure* residence location, so that migration statistics will reflect mothers who crossed provincial

boundaries in returning to their home villages for births, even if the children subsequently live permanently in a different province.

On previous residence location, the Philippines' Census question P17 asked "Where was he residing in February 1960?" and question P18 asked the same for February 1965. As with question P16, enumerators were instructed to code the municipality if in the same province as the 1970 residence, otherwise to code the province only (published statistics on place of residence at the specific dates are confined to persons in the same municipality, other municipality in the same province, other province, and foreign country). Instructions were also issued that if a person

stayed in one place for six months or more, indicate that place as his previous residence for the particular period; but if he stayed there for less than six months, probably because he was only on a visit, or on business or hospitalised for a short duration, then assume that he did not leave at all his usual place of residence (Bureau of Census and Statistics, n.d.:43).

The cut-off point for duration of residence is a practical one, but may be clouded by the more subjective reference to possible reasons for short stays. No direct guidance was given on this issue in the 1970 Malaysian Census: questions 23 and 24 asked, respectively, "Where did you last live?" (in this *kampung*, town, etc., since birth; some other place in Malaysia, town/other; outside Malaysia) and "What was the name of the place where you lived before?" (*kampung* or town, *mukim*, district, or state). No migration statistics have been published, but unpublished figures have been aggregated to the administrative district level and will incorporate not only once-in-a-lifetime interdistrict migrants but highly mobile civil servants and members of the armed forces and, presumably, short-term visitors, businessmen, and seasonal and other circular migrants whose perception of "last lived" may range from some days to many decades before. The only assistance on this general issue comes from question 22, "How long have you lived in this *kampung*, town, etc.?" Enumerators were instructed that

In marking down the years in the locality you are to ignore moves to different houses within the locality [*kampung*, town, estate, etc.]. In large towns there may be a number of *kampungs* or suburbs within the boundaries of the town. Movements between these *kampungs* or suburbs are to be ignored. . . . NOTE: If the person is only a visitor you are still to mark the appropriate box (Department of Statistics, 1970: 23-24).

Intra-urban and other intralocality moves are thus excluded, but there was no definition of minimum length of residence, nor was any guidance apparently given on the distinction between the place of previous residence as "town" or "other" (question 22).

Other sources of migration data

The increasing need by regional planners and others for data on population redistribution within countries suggests five complementary strategies:

1. The publication of (or at least circulation of unpublished data for) a greater range of tabulations than is presently seen as of high or even intermediate priority by census departments; in some instances planning agencies have been slow to specify their needs and to make these known sufficiently early. The tabulations should include migration matrices, at least at the provincial level in Thailand and the Philippines, the district level in Malaysia, and in Indonesia

preferably at the *kabupaten/kotamadya* rather than the *propinsi* level. Destinations should be divided into locally meaningful rural and urban categories; where possible, separate origin-destination matrices should be produced for males and females, overseas and native born, lifetime and most recent migrants, ethnic communities where relevant (the Chinese, Malays, and Indians in Malaysia, and the main *sukubangsa* of Indonesia), and, ideally, for age, occupational, and educational groups. For completeness, such matrices should contain nonmigrants in the diagonal cells.

2. The publication of (or at least circulation of unpublished data for) summary cross-tabulations of migrant status by age, sex, marital status, family size, ethnicity, occupation, education, and place of birth, all at least at the province level, and preferably by duration of residence. As a minimum, migration status should distinguish inter-provincial migrants, intraprovincial migrants, and non-migrants. (Arrivals from overseas and local movers within communities or urban areas are also desirable distinctions.)

3. The modification of internal migration questions in censuses in light of the comments and more detailed analyses cited above, and the adoption of a minimum set of questions on

- province of birth, and the ability to separate this, where appropriate, from province of previous residence;
- province of previous residence;
- rural locality/village/town of previous residence; and
- length of residence in present locality for those not born in the place of enumeration.

It is arguable that a census could also collect information on causal factors even though migration motives are complex and changeable phenomena. For example, such a question could simply take the following form:

What is the *one main* reason you (this household) moved to this locality/village/town?

- | | |
|---|--|
| <input type="checkbox"/> Job-related reason | <input type="checkbox"/> Education |
| <input type="checkbox"/> Marriage | <input type="checkbox"/> Housing |
| <input type="checkbox"/> Family dependent | <input type="checkbox"/> Other reasons |

There needs to be a much closer assessment than has been possible in this brief paper of the various experiences of countries in the region in asking, coding, processing, and releasing migration data.

4. The implementation of national multipurpose sample surveys that use the census sample frame and aim to complement the very limited set of migration questions feasible in a census. Such surveys could contain more "flesh and blood"—that is, more demographic and socioeconomic variables and behavioral indicators related to the life-cycle context and motivation for migration. Postenumeration and labor force surveys can contain migration "modules" to a limited extent, and the West Malaysia Family Survey 1966-67 is a notable example of a KAP study incorporating some 35 migration-related questions (Malaysia, National Family Planning Board, 1968; Pryor, 1974, 1975c).

5. The investigation of indirect but complementary sources of data on migration which already exist for other administrative purposes. The writer has used electoral roll and identity card changes of address to study patterns of migration in Peninsular Malaysia, and although such sources contain biases and present logistic problems when used constantly to monitor migration, nevertheless for carefully selected periods they can provide data on intercensal trends (Pryor, 1974). Registration data recorded and held at the province level have been used in studies of migration in

Thailand and Indonesia, but again the logistic problem of coping with vast numbers of records low in the administrative hierarchy is a formidable one (Sternstein, 1971; Hugo, 1975).

In conclusion, the 1970 census round, because of the range of new migration questions introduced, should have given considerable impetus to the analysis of mobility, but the early promise is not reflected in actual published results even five or six years afterwards. For the Southeast Asian countries discussed, only the following tables are available.

Indonesian provincial census volumes (Series E)

22. Population by place of birth and age
23. Population 10 years of age and over by place of birth and educational attainment
24. Male migrant population by duration of residence in present province and age
25. Migrant population by province of previous residence and duration of residence in present province

Thailand provincial census volumes

8. Population by *changwat* [province] or country of birth, age group, and sex
9. Migration of population 5 years of age and over by age group and sex (Persons who migrated to *changwat* of present residence after April 1, 1965)

Philippines provincial reports

- IV-9 Population by sex, place of birth [4 classes], and municipality of present residence
- IV-10 Population by sex, age group, place of birth [4 classes], and urban/rural residence
- IV-11 Place of residence in February 1960 [4 classes] and present municipality of the population 10 years old and over, by sex
- IV-12 Place of residence in February 1960 [4 classes] and present municipality of the population 10 years and over by sex and age group, urban and rural
- IV-13 Place of residence in May 1965 [4 classes] and present municipality of the population 5 years old and over by sex
- IV-14 Place of residence in May 1965 [4 classes] and present municipality of the population 5 years old and over by sex and age group, urban and rural

No internal migration statistics have been published for Malaysia though they are available as computer printouts within the Department of Statistics in Kuala Lumpur, and no relevant information was enumerated in Singapore. The Australian Bureau of Statistics publishes only summary figures by local government areas within each state or territory, for 1966 residence and usual residence in 1971, but census data tapes are available for detailed analysis and there have been four supplementary surveys of internal migration between 1969-70 and 1972-73 (Australian Bureau of Statistics, 1974; Rowland, 1975). Census tapes are also available for Indonesia and are believed to be about to be released in Malaysia for use outside the government. Although much more migration information could be collected by censuses than in the 1970 round, and collected more accurately and in more useful forms, even the "available" information has been little exploited owing to the low priority accorded it in processing timetables and the reluctance of governments to release information not first utilized internally. This

situation is understandable in one sense, but the result is that analysis is very limited and redistributive trends remain unmonitored. □

REFERENCES

- Australian Bureau of Statistics. *1971 Census of Population and Housing, Bulletin 7, Characteristics of the Population and Dwellings, Local Government Areas* (series by state and territory). Canberra: Australian Bureau of Statistics, 1973—.
- Australian Bureau of Statistics, *Internal Migration, 1969-70 to 1972-73*. Canberra: Australian Bureau of Statistics, 1974.
- Hugo, Graeme J. "Population Mobility in West Java, Indonesia." Ph.D. dissertation, Australian National University, 1975.
- Indonesia, Central Bureau of Statistics. *1971 Population Census, Series E* (series by province). Jakarta: Central Bureau of Statistics, 1973—.
- Malaysia, Department of Statistics. *1970 Population and Housing Census of Malaysia, Instruction Manual for Forms 4 and 5*. Kuala Lumpur: Department of Statistics, 1970.
- Malaysia, National Family Planning Board. *Report on the West Malaysian Family Survey, 1966-67*. Kuala Lumpur: National Family Planning Board, 1968.
- Philippines, Bureau of the Census and Statistics. *1970 Census of Population and Housing, Enumerator's Manual*. Manila: Bureau of the Census and Statistics, n.d.
- Philippines, National Census and Statistics Office. *1970 Census of Population and Housing, Final Report Volume 1* (series by province). Manila: National Census and Statistics Office, 1974—.
- Pryor, Robin J. *Spatial Analysis of Internal Migration: West Malaysia*. Townsville: James Cook University of North Queensland, 1974.
- Pryor, Robin J. *The Motivation of Migration*. Canberra, 1975a.
- Pryor, Robin J. "The Migrant to the City in South East Asia—Can, and Should We Generalise?" Mimeographed. Canberra: Australian National University, 1975b.
- Pryor, Robin J. *Movers and Stayers in Peninsular Malaysia: A Social and Economic Study*. Kuala Lumpur, 1975c.
- Rowland, Donald T. "Internal Migration in Victoria." Ph.D. dissertation, Australian National University, 1975.
- Shryock, Henry S.; Siegel, Jacob S.; and associates. *The Methods and Materials of Demography*. Washington, D.C.: U.S. Department of Commerce, 1973.
- Speare, Alden. "Interpreting the Migration Data from the 1971 Census [of Indonesia]." *Majalah Demografi Indonesia*, June 1975, pp. 66-85.
- Sternstein, Larry. *Greater Bangkok Metropolitan Area Population Growth and Movement, 1956-60*. Bangkok, 1971.
- Thailand, National Statistical Office. *1970 Population and Housing Census* (series by province). Bangkok: National Statistical Office, 1972—.
- United Nations. *Manual VI, Methods of Measuring Internal Migration*. Population Studies No. 47. New York: United Nations, 1970.
- United Nations, Economic Commission for Asia and the Far East. *Report of the Expert Working Group on Problems of Internal Migration and Urbanization*. Bangkok: UNECAFE, 1967.

PAKISTANI STATISTICIANS AND CENSUS OFFICERS IN EWPI INTERNSHIP PROGRAM

Six statisticians and census officers from Pakistan have been participating in an internship program at the Population Institute since August. They are Mr. Maqbool Ahmad, Mr. Mushtaq Ahmed, Ms. Saeeda Karim, and Mr. Mohammad Rafiq from the Statistics Division in Karachi and Mr. Mast Ali Khadim and Mr. Rana Insaf Ali Khan of the Census Organization in Islamabad. Their training is part of a larger program sponsored by the Ford Foundation that aims to improve demographic data collection and analysis in Pakistan.

The same Ford Foundation sponsorship took EWPI Research Associate Dr. Robert W. Gardner to Pakistan in 1974 for a five-month assignment as demographic consultant. Dr. Gardner gave a course in basic demographic techniques in Karachi, and four of his students were selected to participate in the internship program. Since their arrival in Honolulu, the interns have been taking courses in demographic analysis and estimation methods and the demography of human fertility. They have attended the Institute's weekly seminars on a variety of population topics. They have also been working on special projects of data analysis, in close cooperation with Dr. Gardner and EWPI Research Associate Dr. Robert Retherford, using data from Pakistan and other countries. Each intern has special interests and plans for using the newly acquired demographic expertise after returning to Pakistan later this month.

Mr. Maqbool Ahmad has worked on many aspects of Pakistan's labor force sample surveys, including preparing questionnaires and writing manuals and editing and coding instructions. He supervised and trained the staff for the survey and prepared tables, analysis, and interpretation for the report. His background is in mathematics and statistics; he has earned bachelor's and master's degrees in those subjects.

Mr. Mushtaq Ahmed holds an M.A. in economics and is employed in the Demographic Research Section of the Statistics Division. He is concerned with research, analysis, and interpretation of data collected in various demographic surveys conducted by the Division. He has worked on the publication of population growth survey reports and on population projections and construction of life tables for Pakistan.

Ms. Saeeda Karim has several years' experience in the field of national accounts in Pakistan. She earned a master's degree in statistics at the University of Punjab and hopes to concentrate on demographic statistics when she returns home. A current project is a paper on age at marriage and differential fertility in different socioeconomic groups in Pakistan.

Mr. Mast Ali Khadim is deputy director of Pakistan's Census and Registration Organization. He holds a master's degree in economics and has had training in analysis of migration data and electronic data processing. His experience includes census and survey field operations, construction of national accounts and national income, and analysis of labor force data. For the 1972 Census of Pakistan, he worked on data processing, quality control, editing, and coding. Upon his return to Pakistan, Mr. Khadim expects to work in census planning and execution.

Mr. Rana Insaf Ali Khan is assistant census commissioner in Islamabad. He earned his master's degree in economics at University of Punjab, and he has had field experience in surveys on population growth, labor force, and expenditures. He also worked on the Housing, Economic, and Demographic Survey (HED), which formed the second phase of Pakistan's 1972 Census, and on the census evaluation survey. His job in Pakistan involved evaluating methodology, concepts, and definitions used in the census questionnaire and devising improvements for the next census. He also planned intercensal population growth surveys. Mr. Khan would like to apply the own-children method of fertility estimation to Pakistan census data upon his return home.

Mr. Mohammad Rafiq's job is statistical investigator in the Demographic Research Section of the Statistics Division. He deals with vital statistics and does research on vital events collected in surveys. He has a master's degree in statistics. One of his current projects is a paper about the influence of family planning on fertility in Pakistan. Mr. Rafiq says that he has learned much from his experience at EWPI not only about population techniques but also about the cultures of different Pacific and Asian countries—and about American culture. □



Meeting in the Institute's Resource Materials Collection are (left to right) Mr. Rana Insaf Ali Khan, Mr. Mast Ali Khadim, Miss Saeeda Karim, Dr. Robert W. Gardner, Mr. Mushtaq Ahmed, Mr. Mohammad Rafiq, and Mr. Maqbool Ahmad. The Pakistanis have been participating in an internship program at EWPI since last August.

publications that count . . .

by Alice D. Harris

Migration research in Asia and the Pacific

Fertility, mortality, and migration—these three variables form the balancing equation in population dynamics. Ever since Thomas Malthus raised the specter of population growth outdistancing food production in his famous *Essay*, demographers have concentrated their research on the first two variables—fertility and mortality—and frequently neglected migration. There are two principal reasons for this neglect, one of which (explained by Robin Pryor in this newsletter's feature article) is that the facts of migration are difficult to define, measure, and analyze. The events of birth and death are absolute and occur at specific times and places, but movements of people do not lend themselves to easy quantification. The collection of data on migration is expensive and frustrating; useful statistics are often aggregated in censuses and are not time-specific.

But the paucity of research in migration is not due solely to operational difficulties; the population explosion of the last three decades has shown that fertility is the most important component of population growth. Understandably, then, demographers have devoted most of their energies to measuring it and trying to understand the determinants of fertility behavior as prerequisites for designing policies and programs for fertility control.

The unlimited world migrations, which began long before the rise of civilization, are over. In most regions of the world, immigration and emigration are controlled by nations. In the Asian and Pacific regions more than two millennia of migration have resulted in an unparalleled mix of races, religions, and cultures. After contact with the West, migration persisted as a stimulus to economic development. Only since World War II have the newly independent governments been able to institute formal controls over international migration. Rapid urbanization and economic development have forced these governments to take a closer look at population distribution and mobility in order to plan for decentralization or resettlement where necessary. The need for information on migration has generated new research by government agencies and by academic researchers, principally population geographers.

I cannot list all the relevant migration studies that have appeared in the last few years, but I would like to mention some of particular interest. Mohammad Hemmasi has used data from 1956 and 1966 Censuses of Iran to do a quantitative study, *Migration in Iran* (Teheran: Pahlavi University, 1974). Using the technique of regression analysis, Hemmasi identified migration streams from rural to urban areas and some of the "push" and "pull" factors that cause migration. His results show areas where government programs of decentralization and economic stimulus could balance population distribution throughout the country and alleviate problems of unemployment, density, and pollution in Teheran.

Alice Harris is Resource Materials Specialist at the East-West Population Institute. She and her staff maintain the Institute's collection of documentation and reference works, including a sizable body of census data. Ms. Harris also advises documentation interns from Asian and Pacific countries who may spend several months at the Institute learning how to organize a population library.

Robin Pryor supplements migration statistics from censuses with data from election rolls, identity cards, and the 1966-67 West Malaysian Family Survey for his spatial analysis of migration streams and counterstreams in Peninsular Malaysia for the period 1947-70. His monograph, *Spatial Analysis of Internal Migration, West Malaysia* (Townsville: James Cook University of North Queensland, Dept. of Geography, 1974, A\$3.50), links migration streams to the size of destination and behavior of migrants to the modernization process. Pryor's work is unique because he taps unusual sources of data and explores the characteristics of those who migrate.

Turning from Asia to the Pacific region, I find several examples of new approaches to migration. Michael Baxter bases his monograph, *Migration and the Orokaiva* (Port Moresby: University of Papua New Guinea, Dept. of Geography, 1973, A\$2.00), on a field survey of the Isivita people, located near Mt. Lamington in Papua. His survey, based on interviews with the migrants, reveals an increasing mobility, which is linked directly to economic opportunity outside the village but does not entail a permanent separation from the traditional village. This kind of migration is circular and temporary; eventually, all roads lead back to the village community.

R.D. Bedford also describes the phenomenon of circular mobility in *New Hebridean Mobility* (Canberra: Australian National University, Dept. of Human Geography, 1973, A\$3.00). This kind of migration, found in Africa and the Pacific region, is not readily identified in censuses. Only through extensive field surveys and personal interviews does the pattern of repeated movement from villages to towns emerge. Circular mobility represents a compromise for traditional societies undergoing modernization; it does not lead to the kind of urbanization occurring in Southeast Asia. According to Bedford, "the process of circular migration acts as a brake in such redistribution, but permanent migration of a considerable proportion of the rural-based population to urban areas is usually seen as inevitable" (Bedford, p. 4).

As more research on migration is published we can expect to find new interpretations and models; so far much of the work has been done by population geographers, but more demographers are becoming interested in mobility behavior.

Before concluding my remarks about migration literature, I would like to recommend two bibliographies and one collection of papers that the migration specialist might want to acquire. Robin Pryor prepared an excellent synthesis of the field of migration with emphasis on the urbanization process while he was at the University of Malaya. *Internal Migration and Urbanisation: an Introduction and Bibliography* (Townsville: James Cook University of North Queensland, Dept. of Geography, 1971, A\$2.50) includes a classified list of 1,987 items covering methodology in migration analysis, general migration studies, and case studies for different countries or regions. The volume covers the period up to 1970 and is an indispensable reference tool.

Another useful review and bibliography was prepared by R. Paul Shaw of the United Nations and published by the Regional Science Research Institute, Philadelphia, in 1975 (US\$7.50). Shaw has brought the various topics in migration analysis together in a theoretical framework with mathematical models. This should prove to be a good introduction to the development of migration study since the time of Ravenstein's formulation of the "laws of migration" in

1885. Appended to Shaw's text is a comprehensive list of books and articles on migration theory published between 1960 and 1974. Unfortunately, there is no subject index to the bibliography, so the reader must check all the entries, but this is a minor fault in an otherwise valuable volume.

Because of the increasing interest in migration within a country's borders, the International Geographical Union's Commission on Population Geography organized a Symposium on Internal Migration in Alberta, Canada, in 1972. The papers delivered there were collected and edited by Leszek A. Kosiński and R. Mansell Prothero, who added a commentary to link the various papers. The resulting book, *People on the Move: Studies on Internal Migration*, was published by Methuen and Company, London (1975, £4.25 or approximately US\$9.00). The volume contains four sections: migration theory, data collection, comparative studies on migration in one or more countries or regions, and migration of subgroups within a population. The authors of the papers focus their attention on the processes of migration; they try to find out who migrates and why, the patterns of flow and direction of movement, and the consequences of migration. References are included for each paper, and there are numerous maps and tables. The book also lists migration bibliographies and important journals in the field. The study of migration as an increasingly important component of population should be enhanced by *People on the Move*, and I hope to see more books of this kind appearing.

Malaysian census reports

Ms. Jean Paul of Malaysia's Department of Statistics has written to tell us of several new publications. One is *Population Projections in Single Years, Malaysia (1970-1990)*, a supplement to an earlier report that presented population projections by five-year age groups. The single-year projections are shown by community (ethnic group) and sex and should be very valuable for planners, especially in the field of education. The data used are in two forms: unadjusted figures from the 1970 Census count, or figures from the 1970 Census adjusted for underenumeration. Projections are given for four fertility assumptions—constant, high, medium, and low. The publication is priced at M\$3.00.

Also due soon is another set of projections, *Population Projections at the State Level, Peninsular Malaysia (1970-1980)*. They are based on the assumption that mortality will remain constant and fertility will decline by 20 percent; migration between states is also taken into consideration. The base figures are from the 1970 Census count (unadjusted). No price for the report was mentioned. Two other new releases are Research Paper number 9, *Estimates of the Inter-Censal Population by Sex, Community and Age Group: Peninsular Malaysia (1957-1970)*, prepared by Dr. C. Hirschman (M\$3.00), and *Basic Population Tables—Selangor* (M\$5.00). The latter is the first of the long-awaited state-level reports on the 1970 Population Census. The report for the state of Perak (also M\$5.00) is expected to be published by the time you read this column. The state reports contain a short commentary which highlights the main features of the state's population. Also included are detailed tables on most of the population aspects of the state collected in the census.

Two new books on statistics and demography

For the past three decades the United Nations Statistical Office has been making detailed recommendations to member nations on the collection and analysis of census, survey, and vital registration data. Response has been good, result-

ing in the proliferation of statistical programs throughout the world. Since a great deal of a government's time and money can be spent collecting statistics, the average citizen may wonder to what use the information will be put. Will it be of value to him or her, or will it end up moldering in a file? Is such data collection an invasion of privacy? These queries are answered in a new book, *Social Statistics in Use*, edited by Philip Hauser of the Population Research Center, University of Chicago. Hauser and other statistical experts explain why these data are collected and how they are used in planning economic and social development. National, state, and local governments collect and use social statistics on topics as varied as population, health, marriage and divorce, education, crime and delinquency, consumption and the consumer, housing, transportation and land use, outdoor recreation, Social Security and welfare, and public opinion. In an increasingly complex and interdependent society, a government depends upon social statistics as a basis for formulating its plans for the public's future welfare. This book does an excellent job of explaining the rationale behind statistical fact-finding; it might well be emulated by governments in Asia and the Pacific to inform their citizenry about the use of statistics. The book was published by the Russell Sage Foundation and is available from Basic Books, New York, N.Y. 10017 for US\$12.50.

A very lucid and readable new text on demography has just been published by Houghton Mifflin. *Population, the Dynamics of Demographic Change*, by Charles Nam and Susan Gustavus, is suitable for undergraduate college students in courses where population study is a component. The causes and consequences of demographic change are covered in nine chapters with numerous tables, maps, and illustrations. Current statistics are selected from different countries. Although the book is in English and most useful for American students, it would be an ideal candidate for translation so that it could be used in other countries establishing undergraduate studies in demography. □

THE ASIAN AND PACIFIC CENSUS NEWSLETTER is a quarterly publication of the East-West Population Institute, supported by a grant to the Institute from the Agency for International Development. It is available without charge to governmental agencies, private institutions, and interested individuals. News items and comments are welcomed and should be addressed to: Census Newsletter Editor, East-West Population Institute, 1777 East-West Road, Honolulu, Hawaii 96822.

THE EAST-WEST CENTER is a national educational institution established in Hawaii by the U.S. Congress in 1960 to promote better relations and understanding between the United States and the nations of Asia and the Pacific through cooperative study, training, and research. Each year the East-West Center brings together more than 1,500 men and women from the many nations and cultures of these regions. They work and study together while exchanging ideas and experiences in cooperative programs seeking solutions to important problems of mutual concern to East and West. For each participant from the United States in Center programs, two participants are sought from the more than 60 countries and territories in Asia and the Pacific area. The Center is directed by a Board of Governors as a public, nonprofit educational corporation created by the Hawaii State Legislature in 1975. The U.S. Congress provides basic funding for programs and a variety of academic awards. Five institutes conduct the Center's problem-oriented programs.

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