

NATIONAL HEALTH ADMINISTRATION

ANTONINO P. SAN JUAN, MNSA, CESO IV
Acting Assistant Secretary for
Personnel Management and Development
Ministry of Health

INTRODUCTION

In order to properly assess the significance in the improvement of the overall health status of the Philippines, it is necessary that the various factors that impinge on the effectiveness of health measures, i.e. social and cultural features, demographic considerations, topography, national economy, climate and a host of related constraints are given as background information. Given these problems of a developing country, the measures undertaken by national health authorities can be placed in the proper perspective.

GENERAL COUNTRY INFORMATION

The name "Philippines" by which the country is known today was given in 1543 by the Spanish navigator, Ruy Lopez de Villalobos, in honor of Prince Philip of Asturias, who later became King Philip II of Spain. Long before the coming of the Spaniards in 1521, the Philippines was said to have been known to ancient navigators and geographers as Ophir, the land which supplied King Solomon with gold, and Maniolas, which appeared in Magini's edition of the geographical works

of Claudius Ptolemy in 150 A.D. In the ancient Chinese records, the Philippines was referred to as Ma-I (Land of the Barbarians) Chin-San (Mountain of Gold), Liu-Sung (Land Adjacent to the Mainland), and San-Tao (Three Islands).

The Philippines is one of the largest island-groups in the world, with 7,100 islands and islets. The archipelago is bounded by the South China Sea in the west, by the Pacific Ocean on the east, by the Sulu and Celebes Seas on the south and by the Bashi Channel on the north. It is situated on the eastern rim of what has been called the "Asian Mediterranean" the warm and shallow sea between the Pacific and the Indian Ocean and between Australia and the Asian mainland. The strategic position finds the Philippines at the cross-roads of international air and travel lanes.

The total land area of the Philippines is approximately 300,000 square kilometers, 93.5 per cent of which is contained within the eleven largest islands. Only 2,773 of the 7,000 islands are named. There are eleven principal islands in the country. There are three major island groups: Luzon, with an area of 141,395 square kilometers; Visayas, 56,606.4 square kilometers; and Mindanao, 101,998.9 square kilometers.

These three island groups are further divided into regions, regions into provinces; provinces into cities, municipalities and municipal districts and the municipalities and municipal districts into barangays. As of May, 1980,

there are 73 provinces, 60 cities, 1,503 municipalities, 21 municipal districts and 39,926 barangays.

The Philippines has the longest discontinuous coastline in the world - 34,600 kilometers, with good bays and harbors and navigable rivers and lakes. Manila Bay, with an area of 1,970 square kilometers and a coastling of 192 kilometers, is the finest harbor in the Far East.

The Philippines has a varied topography with lofty highlands and numerous valleys. Its four major lowland plains are the Central Plain of Luzon, Cagayan Valley, Agusan Valley and the Cotabato Valley. There are also extensive plateaus such as the Bukidnon and Lanao plateaus in Northern and Southeastern Mindanao.

Several mountain ranges form natural barriers in the principal island groups. The most extensive is the Sierra Madre range from Cape Engaño at the extreme northeast of Luzon to a point east of Laguna de Bay in the Southern Tagalog region. Another complex mountain range lying parallel to the west of Northern Luzon is the Cordillera Mountains. Providing a link between the two mountain ranges is the Caraballo Mountains. The highest mountain peak in the country is Mt. Apo in Eastern Mindanao.

The riverine system of the Philippines is made up of about 132 principal rivers in the 73 provinces. Some of

the biggest rivers are the Cagayan River in Northern Luzon; the Pampanga River in Central Luzon; the Pasig River which is the outlet of Laguna de Bay to Manila Bay; the Agusan River in Northern Mindanao and the Cotabato River in Central Mindanao.

There are about 50 volcanoes in the country, most of which are dormant. The most famous is Mount Mayon in Albay, Southern Luzon which erupted last in 1978; the Taal Volcano in Southern Tagalog region which last erupted in 1977; Mt. Bulusan in Southern Luzon, which emitted smoke twice in 1978; Didicas Volcano, which had a series of eruptions in 1978 and Mt. Kanlaon in the Visayas, which had eruptions in 1978.

There are four distinct types of climate in the Philippines. The first type, wet from May to October and dry for the rest of year, is found in all regions on the western part of the islands of Luzon, Mindoro, Negros Occidental and Palawan. The second type, which has no dry season and the maximum rain period very pronounced from November to January, is found along the eastern coast of the country. The third type has no pronounced season, it is relatively wet in the months of May to October and dry the rest of the year, and the dry season lasts from one to three months. The fourth type as rainfall evenly

distributed throughout the year and is found in Batanes province, northeastern Luzon, western part of Leyte in the Visayas and most of the central, eastern and northern Mindanao.

The Philippines lies in the typhoon belt. Around thirty typhoons lash the country every year with varying degrees of intensity. Some typhoons had been clocked at more than 200 kilometers per hour leaving a wide swath of destruction in their wake. The typhoon season is from May to January, but most typhoons form in July, August and September.

There are two railway systems in the country: The Philippines National Railways operates line 740 kilometers long in the island of Luzon, from San Fernando, La Union in the north to Legaspi City in the south. The other railway line is in Panay island in the Visayas which operates on a total line of 116 kilometers from Iloilo City to Roxas City.

The Philippines has a highly developed network of national roads. The Maharlika highway, otherwise known as the Philippine-Japan Friendship Highway, passes through four major islands; Luzon, Leyte, Samar and Mindanao. It has a total length of 2,000 kilometers, traversing 21 provinces and 11 cities costing over ₱ 2 billion,

Expressways are found north and south of Metro Manila to speed up transportation and circumferential radial surface roads and interchanges have been constructed within the city itself. As of December 31, 1978, the total kilometer-age of highways is 63,542. This excludes barangay roads which have a total length of 27,674 kilometers.

There are 82 national airports and 97 privately operated airports in the country. These are administered by the Civil Aeronautics Administration. The national airports include two regular international airports in Manila and Mactan, Cebu City, five alternate international airports, four trunklines and 28 feeder airports. The Manila International Airport, which is being relocated and expanded this year, will be comparable to the world's best airports in size and in terms of navigational facilities when completed.

SOCIAL AND CULTURAL BACKGROUND

The Philippines has two official languages - Pilipino and English. Although Pilipino is the official language and spoken by more than 55.2% of the population, English remains the medium of instruction in most schools and is spoken by 44.7%. Spanish is the language of a small minority, about 3.6% of the total population. There are eight major tongues in the Philippines with Cebuano

dialect predominating, 24.4%, followed by Tagalog which is the basis of the national language, 23.8%. Other major tongues are Hiligaynon-Ilongo, 11.1%, Bicol, 7%, Samar Leyte, 41.6%, Pampango, 3.4% and Pangasinan, 2.3%.

MAJOR RELIGIONS

There are three major religions in the country. They are the Catholic religion, the Moslem religion and the Philippine Independent Church or the Aglipayan Church, Catholics constitute 85% of the population, while Islam ranks second. Protestants ranks fourth, followed by the tightly-knit Iglesia ni Cristo and other religious sects.

CULTURAL MINORITIES

There are 68 ethnolinguistic groups in the country. Of these 38 are found in Luzon, 5 in the Visayas and 31 in Mindanao. They exhibit varying degrees of self-development from the very primitive Tasadays to the self-sufficient Maranaws. They have their own unique organizations usually under the leadership of a group of elders or headman.

Among the more colorful, self-reliant cultural minorities are the T'boli in Cotabato; Matigsalug in parts of Cotabato, Davao del Norte and Bukidnon; Mansaka in Davao del Norte; Alangan in North Central Mindoro; Manunoo in Southern Mindoro; Ifugao in Northern Luzon; Badjaos, seagypsies in Southern and Western Mindanao;

Tagbanua in Palawan, Bontoc in Mountain Province and the Tao't bato in Southern Palawan.

The Filipino culture is basically brought to the islands by the first immigrants and traders from Southeast Asia, Indonesia and India, 500 years before Ferdinand Magellan set foot on Philippine soil in 1521. The Indian and Arabian influences can still be seen in faint races of Hindu-Buddhist belief among the minority groups and in the large number of Sanskrit words found in Philippine languages.

The Filipino is a product of the blending of three racial types; the Pygmies or Negritos, the Indonesians and the Malays. Later, he received blood infiltrations from the Indian, Chinese, Arab, Japanese and from the Occidental people who came as colonizers. Because of the predominance of the Malayan strain, however, the Filipino belongs to the Malayan or brown race.

LITERACY AND EDUCATION RATES

The Literacy and education rates of the Philippine population are very high. The literacy rate among the young Filipinos of ten years old and over with at least four years of education is 75.4% for the entire country. The Metro Manila area registered the highest literacy rate of 92.52% while Region XII in Central Mindanao registered the lowest literacy rate of 55.27%.

The education rate for the entire country among young Filipinos of ten years old and over with at least one year of education is 90.00%. Metro Manila registered the highest education rate of 98.10% and Region XII in Central Mindanao registered the lowest education rate of 68.10%. These figures are found in Tabulation No. 1.

POLITICAL FRAMEWORK

The Philippines is a democratic country with a republican form of government. Its 1973 Constitution provides for a parliamentary system of government patterned after the British system. The legislative power is vested in the Batasang Pambansa, the executive power in the Prime Minister and the Cabinet and the judicial power in the Supreme Court and the lower courts. There is integration of the executive and legislative powers as the Prime Minister and the Cabinet are also members of the law-making body. On April 7, 1981, a plebiscite will determine the final nature of the governmental set-up to make it more responsive to the needs of the people and more adapted to its social, cultural and political values.

The barangay is the smallest government unit. It is usually composed of twenty to 100 houses. The barangay is administered by a Barangay Captain and four Councilman.

A municipality is composed of several barangays, Creeks, rivers and other natural physical structures

LITERACY RATE AND EDUCATION RATE OF THE PHILIPPINES BY REGION: 1975
Based on highest grade completed

Region	Population 10 years old and over	10 plus with at lease 4 years of education	Literacy Rate	10 plus with at least 1 year of education	Education Rate
PHILIPPINES	29,259,257	22,190,558	75.84	26,623,390	90.99
Region I	2,329,995	1,853,296	79.54	2,142,230	91.94
II	1,328,162	966,986	72.81	1,205,515	90.77
III**	3,034,905	2,484,034	81.85	2,887,137	95.13
IV-A*	3,878,955	3,568,385	91.99	3,797,420	97.90
IV-B	3,332,919	2,613,720	78.42	3,094,451	92.85
V	2,139,406	1,640,341	76.67	1,995,270	93.26
VI	2,889,620	2,104,507	72.83	2,650,356	91.72
VII	2,375,548	1,628,557	68.56	2,108,411	88.75
VIII	1,765,746	1,206,314	68.32	1,583,803	89.70
IX	1,395,630	849,887	60.90	1,108,708	79.44
X	1,567,322	1,180,699	75.33	1,459,838	93.14
XI	1,829,526	1,324,763	72.41	1,642,593	89.78
XII	1,391,523	769,069	55.27	947,658	68.10
Metro Manila	3,697,204	3,424,352	92.62	3,627,141	98.10

* Includes Rizal and Manila

** Includes Valenzuela

separate one municipality from another. The most centrally located and densely located barangay is usually selected as the site of the municipal government. This is called the poblacion where the church, the municipal building, public market, movie houses, commercial and industrial establishments, civic facilities and recreational areas are located. It is headed by a Municipal Mayor who is elected into office, together with a Vice Mayor and Councilors who constitute the Sangguniang Pambayan.

Several municipalities make up a province. It is headed by a Governor, a Vice Governor and members of the Sangguniang Panlalawigan.

Cities usually come from the affluent municipalities and are created through legislation. The city is administered by a City Mayor, a Vice Mayor and members of the Sangguniang Panglunsod.

There are also two autonomous regional governments. One holds office in Cotabato City for Region XII and Zamboanga City for Region IX. They are given broad autonomous powers and are considered a high point in the solution of the Muslim problem in Mindanao.

Provinces, cities and municipalities are classified according to income. They are divided into five main classes: first, second, third, fourth and fifth depending on their income for the last four fiscal years.

NATIONAL INCOME

The national income of the country from 1970-1978 is estimated at ₱65 billion, the gross national product at ₱82 billion and the net domestic product at ₱66 billion. Figure No. 2 is the graphic presentation of these statistical data at constant 1972 prices.

FAMILY INCOME

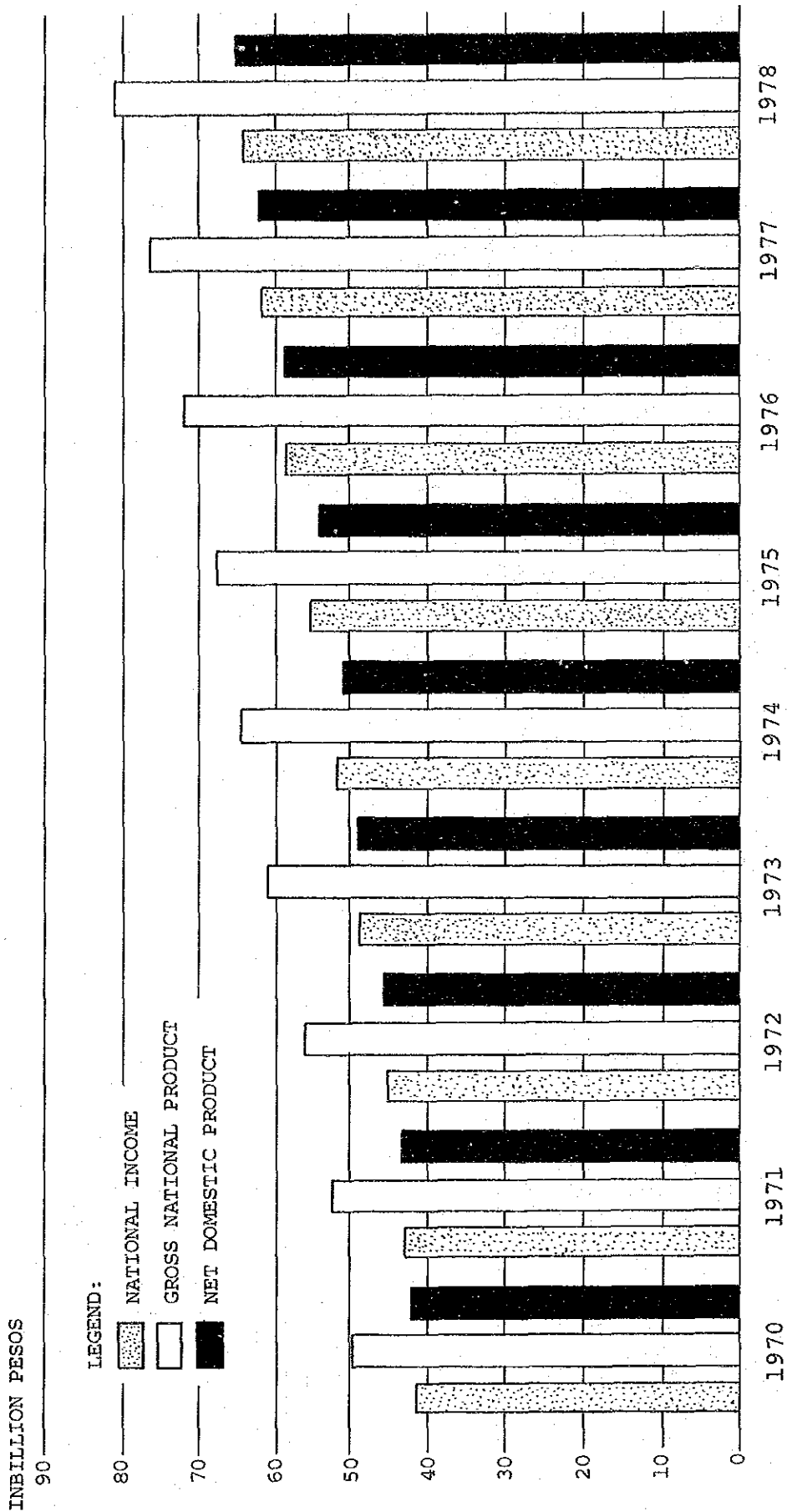
From 1961 to 1971, the bulk of the nation's income remained heavily concentrated in the hands of the higher income group. In 1971, the top ten percent income recipients shared among themselves more than one third of the total income of the country. On the other hand, the lowest 50 percent income recipients received only one-fifth of the said total income. The 1971 and 1975 showed a marked improvement in the distribution of total family income. Tabulation No. 3 show the percent share of the total income by broader groups of income recipients for 1961, 1971 and 1975.

The total family income by source of income and total family expenditure by expenditure group, for urban and rural groups, are likewise shown in Tabulation Nos. 4 and 5.

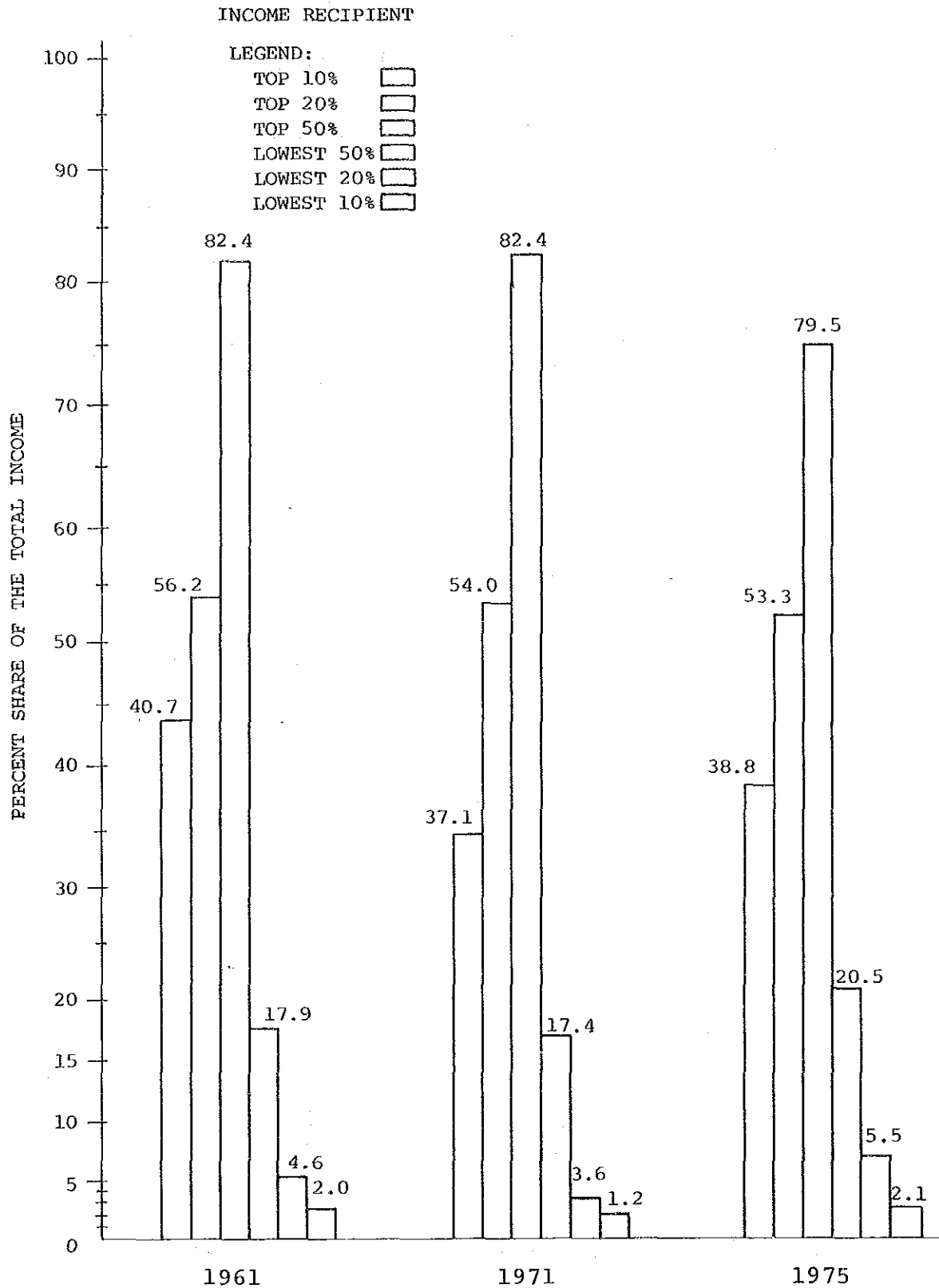
HEALTH STATUS OF THE PHILIPPINE POPULATION

The health picture of the Philippines has changed

GROSS NATIONAL PRODUCT, NATIONAL INCOME
AND NET DOMESTIC PRODUCT: 1970-1980
(AT CONSTANT 1972 PRICES)



PERCENT SHARE OF THE TOTAL INCOME BY BROADER GROUPS OF
INCOME RECIPIENTS: 1961, 1971 & 1975



Total Family Income by Source of Income: 1961, 1965 and 1971
(Income in thousand pesos)

Source of income	1961	1965	1971
Total family income	7,981,666	13,023,610	23,714,284
Percent	100.0	100.0	100.0
Wages and salaries	41.9	43.0	44.3
Agriculture	6.1	7.2	6.3
Non-agriculture	35.7	35.7	38.0
Entrepreneurial activities	41.3	39.1	36.8
Trading	9.8	7.8	7.7
Manufacturing	3.1	2.9	3.1
Transport	1.4	1.2	1.6
Other enterprises	2.5	1.2	1.4
Practice of profession or trade	-	1.8	1.6
Farming	19.8	20.8	18.1
Fishing, forestry and hunting	4.6	3.4	3.4
Production of articles for own use	0.7	0.8	0.6
Other sources	16.1	17.2	18.2
Share of crops, livestock and poultry raised by others	2.8	2.8	2.5
Rent received for lands, buildings or rooms and for other properties	1.4	1.5	1.7
Rental value of owner-occupied house	6.4	7.9	7.0
Interest and dividends	0.1	0.4	0.2
Profit from sale of stocks and bonds	0.1	0.2	0.0
Pension or retirement benefits	1.7	1.6	2.1
Backbay and proceeds from insurance	0.2	0.1	0.2
Gifts, support, assistance and relief	2.0	2.1	3.6
Net winnings from gambling, sweepstakes and lotteries	0.4	0.3	0.5
Inheritance in cash or converted to cash	0.4	0.4	0.3
Others	0.5	-	0.1

Note: Data on source of income for 1975 is not yet available.

Total Family Expenditure By Expenditure Group, Urban and Rural: 1961, 1965, 1971 and 1975 (concluded)

Expenditure Group	1971					1975 ^P				
	Philippines		Total		Other urban areas	Philippines		Total		Other urban areas
	rural	urban	rural	urban		rural	urban	rural	urban	
Total Expenditure (In million pesos)	28,430	15,405	13,025	4,077	8,948	44,766	26,405	18,362	7,887	10,474
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food, beverages and tobacco	58.7	64.8	51.4	45.1	54.3	57.0	61.4	50.7	49.4	51.7
Housing	9.4	6.8	12.5	18.0	9.9	8.5	6.5	11.5	13.1	10.2
Fuel, light and water	3.6	3.6	3.6	3.9	3.5	4.6	4.5	4.7	4.7	4.8
Household furnishing & equipment	2.3	2.1	2.6	2.1	2.9	1.9	1.7	2.1	1.8	2.4
Household operations	2.4	1.9	3.0	3.3	2.8	2.1	2.0	2.2	1.8	2.6
Clothing footwear & other wear	6.2	6.2	6.3	5.9	6.5	7.5	7.5	7.4	7.7	7.2
Personal care	1.6	1.4	1.8	1.7	1.8	1.8	1.6	2.1	2.1	2.1
Medical care	1.8	1.7	2.0	1.9	2.0	1.9	1.8	2.0	1.7	2.1
Transport and communication	2.9	2.0	4.0	4.5	3.7	3.4	2.8	4.3	4.8	3.9
Recreation	1.8	1.5	2.2	2.4	2.1	1.4	1.2	1.8	1.8	1.9
Education	3.7	3.1	4.4	4.7	4.2	4.0	3.5	4.8	4.4	5.1
Gifts, contributions & assistance to outsiders	0.6	0.5	0.7	0.6	0.7	0.4	0.4	0.4	0.4	0.4
Taxes paid	0.3	0.2	0.5	0.9	0.3	1.0	0.9	1.2	1.8	0.7
Special occasions	2.5	2.6	2.3	1.7	2.6	2.0	2.1	1.7	1.3	2.0
Personal effects	0.6	0.6	0.6	0.7	0.6	1.0	0.9	1.1	1.4	1.0
Miscellaneous goods & services	1.5	0.9	2.2	2.5	2.1	1.5	1.2	2.0	2.0	1.9

considerably, and significantly, from 1927-1977 based on statistical data compiled by the National Census and Statistics Office. The population of the country increased from 12,212,000 in 1927 to 45,005,300 in 1977 or an increase of 268.5%. As of May, 1980, the Philippine population was estimated at 47,914,017 with a density of 160 persons per square kilometer. The national sex ratio is 100.6 males to 100 females.

In 1960, the annual growth rate was 3.06%. This was reduced in 1970 to 3.01% and 2.78% in 1975.

The population distribution among the three principal island groups is as follows: Luzon, with 54.40% of the total population and a growth rate of 2.72%; Visayas, with 23.36% of the total population and a growth rate of 1.9%, and Mindanao, with 22.3% of the total population and a growth rate of 3.22%. Southern Mindanao which has a large Muslim Population has the highest growth rate of 4.05% followed by the National Capital Region (Metro Manila) which has a growth rate of 3.58%.

The population structure is predominantly young age groups with 47% under 15 years of age reflecting the population growth of 3.01% during the decade 1960-1970. Those aged 65 years and above constitute 3% and the productive segment less than 50%. This structure is, by and large, the result of two vital life processes—death rates which have declined to some degree and a

birth rate that has shown only a little decline. This situation makes family planning a vital cog in the health as well as in the economic development of the country.

Vital and health statistics show that the state of health of the population may be considered fairly satisfactory for a developing country but still below the health levels of developed nations. Nevertheless, a perceptive shift from communicable diseases to the degenerative and cardiovascular diseases is gradually showing on the health picture of the Philippines. This may be attributed to the industrialization, pollution, urban development and the changing eating habits of the population. By and large, the improvement in the health status reflected the coordinated health work of the government, the private sector, the community and the higher nutritional intake of the population in comparison with previous years.

MAJOR HEALTH INDICATORS

In measuring the country's health status, the following accepted health indicators were used (Illustration No. 6):

1. Life expectancy. The average life expectancy of the Filipino at birth in 1970 was 57.97 years; to 58 years in 1972; 60.96 years in 1977 and 61.6 years in 1980.
2. Crude birth rate. The crude birth rate in 1970

POPULATION GROWTH, CRUDE BIRTH RATE, CRUDE DEATH RATE,
 INFANT MORTALITY RATE, NEO-NATAL DEATH RATE, MATERNAL
 MORTALITY RATE, FOETAL DEATH RATE AND LIFE EXPECTANCY:
 PHILIPPINES, 1970, 1972 & 1977

HEALTH INDICES	1970 RATE	1972 RATE	1977 RATE
POPULATION GROWTH	3.0	3.0	2.6
CRUDE BIRTH RATE (CBR) *	27.4	24.8	29.9
CRUDE DEATH RATE (CDR) *	6.7	7.3	6.9
INFANT MORTALITY RATE (IMR) **	59.3	67.9	56.9
NEO-NATAL DEATH RATE (NDR) **	28.7	31.9	24.0
MATERNAL MORTALITY RATE (MMR) **	1.9	1.4	1.4
FOETAL DEATH RATE (FDR) **	7.3	14.0	10.8
LIFE EXPECTANCY	57.97	58.0	60.96

* PER 1,000 POPULATION

** PER 1,000 LIVE BIRTHS

SOURCE : DIC-MINISTRY OF HEALTH, PHILIPPINE HEALTH STATISTICS.

was 27.4 per 100,000 population; 24.8 per 100,000 population in 1972 and 29.9 per 100,000 population in 1977.

3. Crude death rate. The crude death rate in 1970 was 6.7 per 1000 population; 7.3 per 1000 population in 1972 and 6.9 per 1000 population in 1977.
4. Infant mortality rate. The infant mortality rate in 1970 was 59.3 per 1000 live births; 67.9 per 1000 live births in 1972 and 56.9 per 1000 live births in 1977.
5. Maternal Mortality rate. The maternal mortality rate in 1970 was 1.9 per 1,000 live births; 1.4 per 1,000 live births in 1972 and 1.4 per 1,000 live births in 1977. Maternal deaths accounted for 0.8% of all total deaths in 1970; 0.5% in 1972 and 0.6% in 1977.
6. Foetal death rate. The foetal death rate in 1970 was 28.7 per 1,000 live births; 14.0 per 1,000 live births in 1972 and 10.8 per 1,000 live births in 1977.

The ten leading causes of death for 1977 and the five year period (1972-1976) with the corresponding figures (Illustration No. 7) are as follows:

1. Pneumonias - The mortality rate from Pneumonia in 1977 was 105.1 per 100,000 population in contrast

TOTAL MORTALITY: LEADING CAUSES
 RATE PER 100,000 POPULATION
 PHILIPPINES

5 Yr. Ave. (1972 - 1976) & 1977

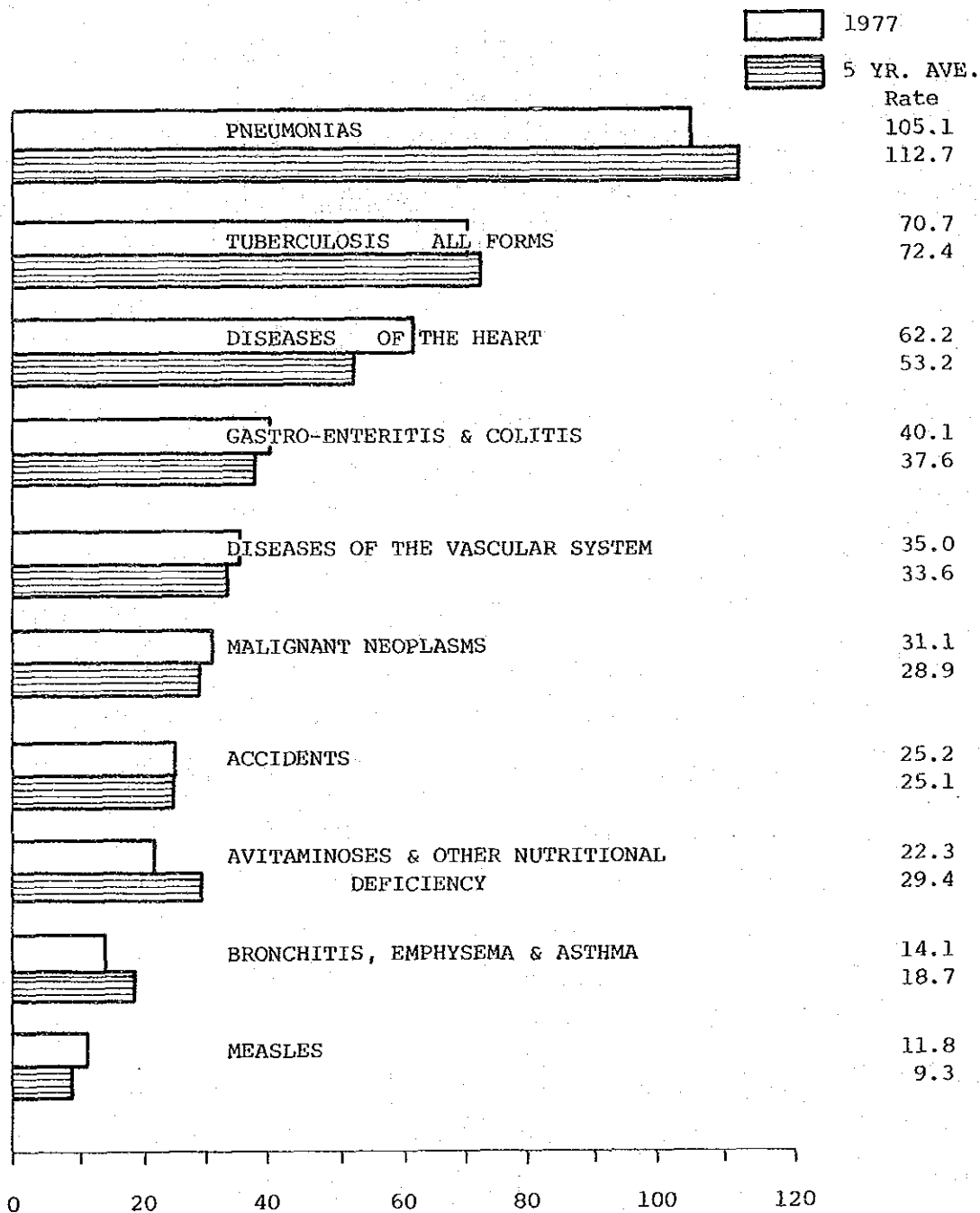


Fig. 16

to the five year average (1972-1976) of 112.7. It is also responsible for 15.3% of all total deaths in 1977, compared to the five year average (1972-1976) of 16.4% of all total deaths.

2. Tuberculosis, All Forms - The mortality rate from Tuberculosis, All Forms in 1977 was 70.7 per 100,000 population as compared to the five year average (1972-1976) of 72.4. It is also responsible for 10.3% of all total deaths in 1977, compared to the five year average (1972-1976) of 10.5% of all total deaths.
3. Diseases of the Heart - The death rate from Diseases of the Heart in 1977 was 6.2 per 100,000 population in comparison to the five year average (1972-1976) of 53.2. It is also responsible for 9.1% of all total deaths in 1977, as against the five year average (1972-1976) of 7.6% of all total deaths.
4. Gastro-enteritis & Colitis - The death rate from Gastro-enteritis & Colitis in 1977 was 40.1 per 100,000 population and 37.6 registered during the five year period (1972-1976). It accounted for 5.8% of all total deaths in 1977 and 5.5% during the past five years (1972-1976).

5. Diseases of the Vascular System - The mortality rate from Diseases of the Vascular System in 1977 was 35.0 per 100,000 population in contrast to the five year average (1972-1976) of 33.6. It is also responsible for 5.1% of all total deaths in 1977 and 4.9% during the past five years (1972-1976).
6. Malignant Neoplasms - The death rate from Malignant Neoplasms in 1977 was 31.1 per 100,000 population as against 28.9 for 1972-1976. It accounted for 4.5% of all total deaths in 1977 as compared to the five year average (1972-1976) of 4.2% of all total deaths.
7. Accidents - The mortality rate from Accidents in 1977 registered a rate of 25.2 per 100,000 population in contrast to the five year average (1972-1976) of 25.1. It is also responsible for 3.7% of all total deaths in 1977 and 3.6% registered during the past five years (1972-1976).
8. Avitaminoses and Other Nutritional Deficiency - The mortality rate from Avitaminoses and other Nutritional Deficiency in 1977 was 22.3 per 100,000 population in comparison to the five year average (1972-1976) of 29.4. It is also responsible for 3.2% of all total deaths in 1977 and 4.3% for the five year average (1972-1976).

9. Bronchitis, Empysema & Asthma - The death rate from Bronchitis, Empysema & Asthma in 1977 was 14.1 per 100,000 population and 18.7 for the five year average (1972-1976). It accounted for 2.1% of all total deaths in 1977 and 2.7% for the five year average (1972-1976).
10. Measles - The mortality rate from Measles in 1977 was 11.8 per 100,000 population in contrast to the five year average (1972 - 1976) of 9.3. It is also responsible for 1.7%.

HEALTH MANPOWER

The nature of the functions of the Ministry of Health in the field of preventive, curative, promotive and rehabilitative services has given the office a variety of substantive services not found on such magnitude in other agencies of the government.

Its personnel complement ranks No. 3 in the executive branch of the national government; the classes of positions reflected in its workforce, 94 out of 257 groups, represents the biggest number of occupational groups in one government agency. It also has the biggest number of position titles, 592, describing the specific positions of its personnel ranging from the Career Executive Service Officer group,

the Medical Group, the Para-Medical Group and the Non-Medical Group which constitutes the supportive services.

A total of 58,292 positions have been authorized for calendar year 1980 for the Ministry of Health. Of this 7575 are medical positions in the technical staff of the Minister, staff bureaus and offices, special projects, special, regional, provincial and emergency hospitals, laboratories and field units.

The organization chart of the Ministry of Health (Illustration No. 8) shows the offices which carry out its various health and medical programs together with their respective personnel force. Since the reorganization of the Ministry of Health in 1972, a total of 468,576 public health workers and 3,668 third participants have undergone various types of professional, scientific, technical and administrative training programs in the Central Office as well as in the regional and local levels.

RURAL HEALTH PRACTICE PROGRAM

An important innovation in the health service delivery system is the establishment of the Rural Health Practice Program in 1974. It was conceived to give practical training to medical and nursing underboard graduates and at the same time harness their expertise to strengthen the hospitals and health units in the rural areas.

As of 1980, a total of 8,771 medical and 84,674 nursing underboard graduates have been assigned to the unserved and underserved rural communities of the country. Table No. 9 shows the summary of medical and nursing underboard graduates who have served in the rural areas from 1974 to 1980.

MEDICAL MANPOWER DEVELOPMENT COMMITTEE

In order to strengthen the medical manpower of hospitals under the Ministry, the Medical Manpower Development Committee has been reorganized by Minister of Health Enrique M. Garcia. Prominent specialists in the private sector as well as in other government medical institutions have been picked to head the various specialities in hospitals. To the residency training program has been added a period of community residency under which those physicians who have completed their terms of office under the program are assigned to various regional and provincial hospitals where they can impart their skills to local physicians.

HEALTH CARE FACILITIES

The delivery of the basic health services through the Restructured Health Care Delivery System established in 1975 centers on the public health midwives in the barangay health stations. There were 9,388 rural health midwives in charge of the 7,101 barangay health stations which con-

stitute the entry points of government health services in the three-level primary health care approach. There were 1,901 rural health units staffed by 1,496 municipal health officers, 1960 public health nurses and 2,246 rural sanitation inspectors. Under Republic Act No. 1082 as amended by Republic Act. No. 1891, rural health units were staffed by municipal health officers of public health nurses depending on the population of the municipality.

There were 407 licensed government hospitals in 1980, (362 under the Ministry of Health) with a total of 39,187 beds. Of those under the Ministry, five are accredited Medical Centers, seven special hospitals, 12 regional hospitals and the rest are provincial and emergency hospitals, hospitals were rendered by 1,974 physicians, 6,569 nurses and allied health personnel.

In addition to these units, there are eight sanitarium, 22 skin leprosy clinics, 701 dental health units, 21 schistosomiasis units, 24 nationally funded and five locally funded social hygiene clinics, 37 mobile and stationary TB clinics, 36 malaria units, three filariasis units, 697 puericulture centers and 1,538 family planning clinics composing the service delivery network of the Ministry of Health.

Two hundred ambulance units have been provided selected main health centers and regional health training centers. Radio communication facilities have been installed in the

twelve regional health offices for effective communications with the central Office.

These facilities, and the delivery of medicines and supplies both from the central and regional levels, have increased population coverage from 27% to 70% in the rural areas. Active community participation in primary health care will further boost this coverage to 85% - 90% of the entire Philippine population.

HEALTH ADMINISTRATION SYSTEM ON CENTRAL AND LOCAL HEALTH ADMINISTRATION

FUNCTIONS

The Ministry of Health is the primary policy, programming, coordinating and administrative entity of the executive branch of the national government in the field of health. Its main functions are:

1. The prevention of diseases through health education and immunization programs;
2. Protection, promotion and preservation of the health of the people especially those in the rural areas;
3. Provision for total medical services to the people through the adoption and implementation of a comprehensive and coordinative medical care program; and

The Minister of Health, in the exercise of his functions, is assisted by a Deputy Minister, three Assistant Secretaries, one on Medical Affairs, another on Finance and Management and one on Personnel Management and Development. In addition, there are medical advisers and consultants from other professions such as those on nursing, pharmacy, dental health services and medical social work who provide staff assistance on policy formulation.

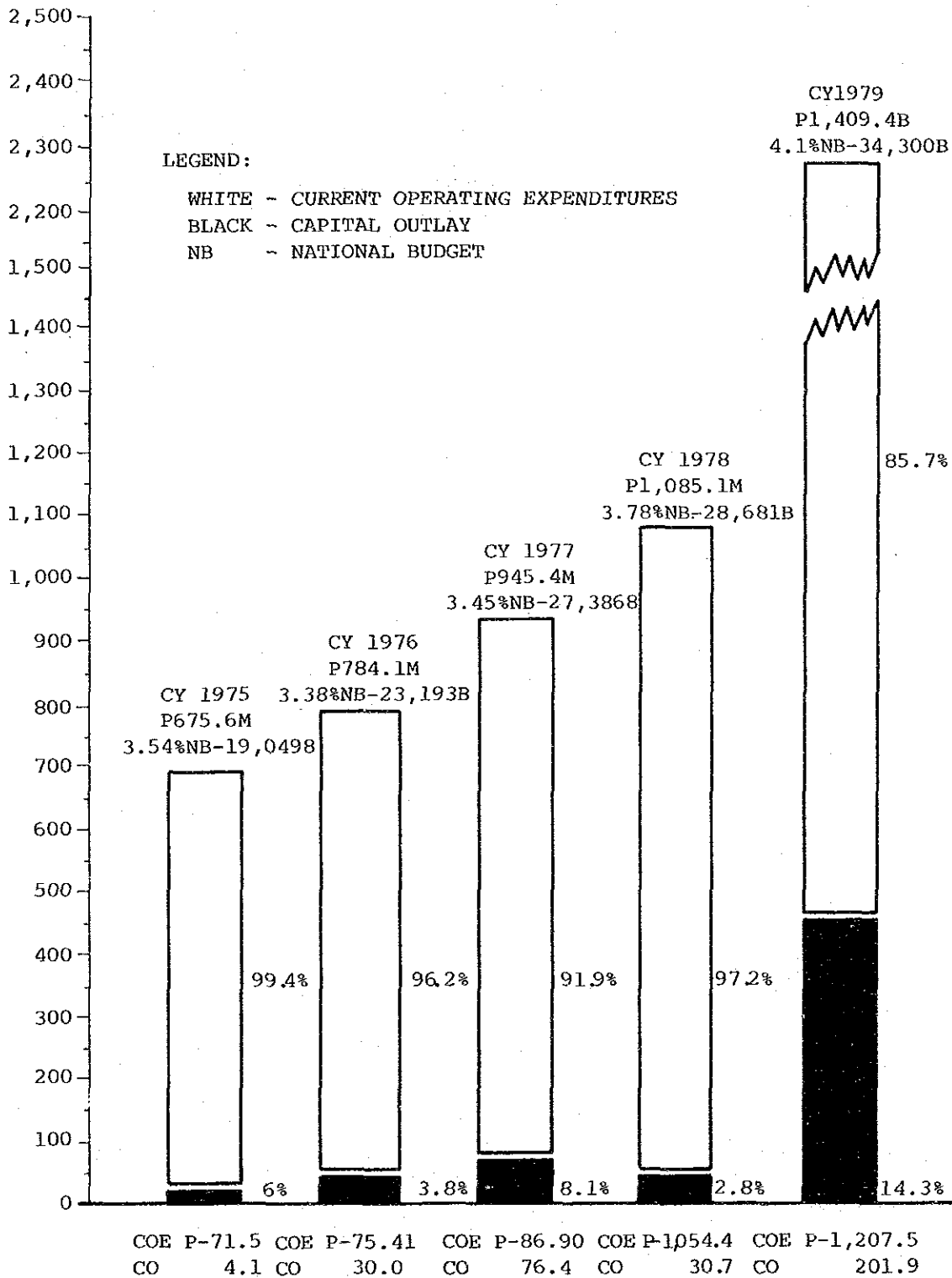
APPROPRIATIONS

For Calendar Year 1979, the Ministry of Health was allocated 4.1%, or ₦1,409 billion of the total national budget of ₦34,300 billion. A comparison of fund allocations by the national government in comparison with the total national appropriations, from 1975 to 1979, is given in Illustration No. 10. For Calendar Year 1980, ₦1,430,940,000 has been appropriated for the Ministry of Health. (See Illustration No. 11).

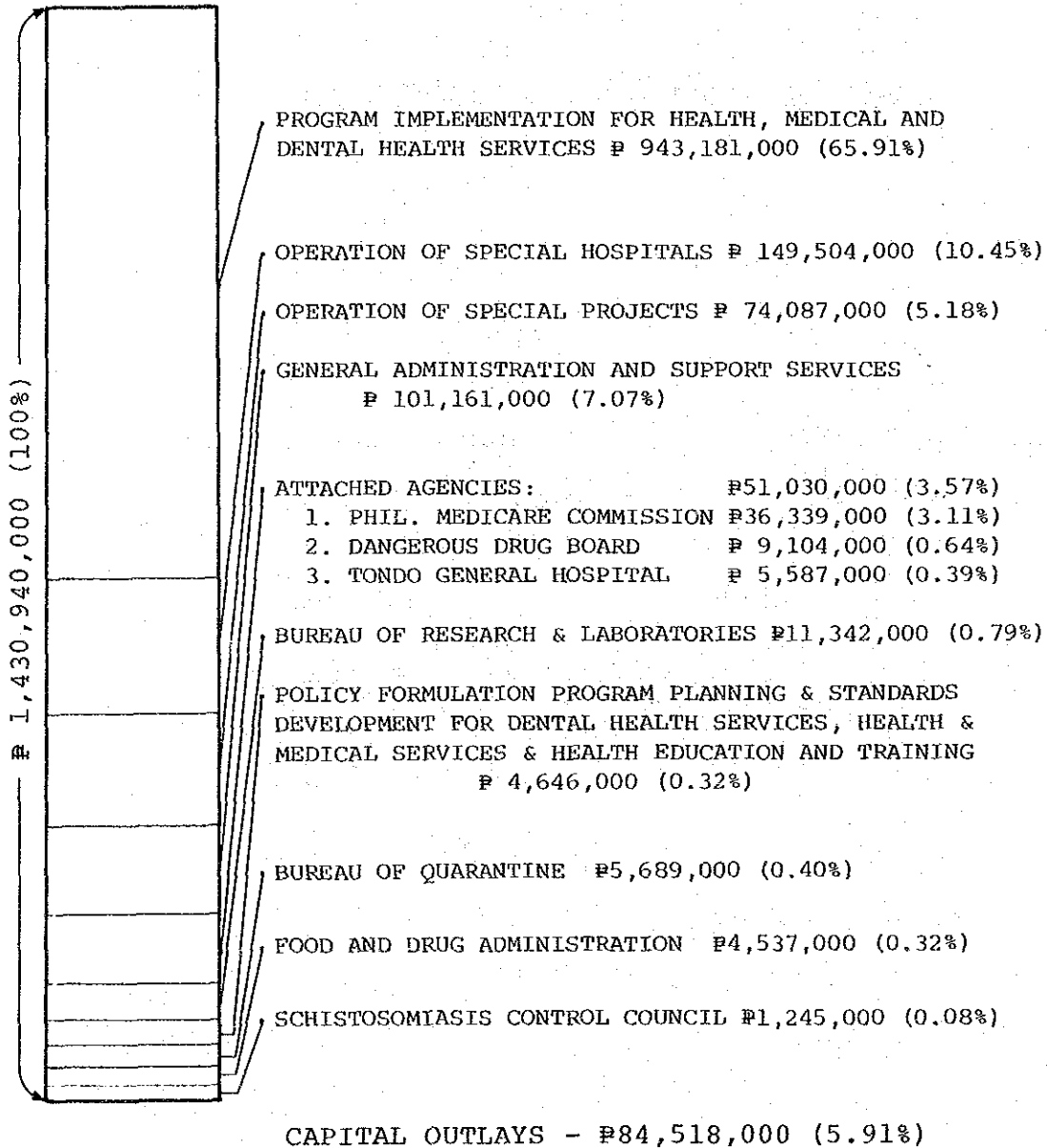
ORGANIZATIONAL STRUCTURE

The Ministry of Health carries out its major functions through a network of central headquarters offices and field health offices. They are broken down into categories as follows:

MINISTRY OF HEALTH
FUNDING HISTORY
CY 1975 - 1979



MINISTRY OF HEALTH
 DISTRIBUTION OF APPROPRIATION
 BY PROGRAM - CALENDAR - 1980



1. Basic Support Offices
 - a. Planning Service
 - b. Financial and Management Service
 - c. Administrative Service

2. Special Staff Offices and Projects
 - a. Disease Intelligence Center
 - b. Office of Health Education and Personnel Training
 - c. Dermatology Research and Training Office
 - d. Rural Health Practice Program
 - e. National Cancer Control Center
 - f. Radiation Health Office

3. Staff Bureaus
 - a. Bureau of Health Services
 - b. Bureau of Medical Services
 - c. Bureau of Dental Health Services

4. Line Bureaus and Offices
 - a. Bureau of Research and Laboratories
 - b. Bureau of Quarantine
 - c. Malaria Eradication Service
 - d. Schistosomiasis Control and Research Service
 - e. National Family Planning Office
 - f. Food and Drug Administration
 - g. National Nutrition Service

5. Special Hospitals

- a. National Orthopedic Hospital
- b. National Children's Hospital
- c. National Mental Hospital
- d. Jose R. Reyes Memorial Hospital and Medical Center
- e. Jose Fabella Memorial Hospital
- f. Hospitaling Bagong Lipunan
- g. San Lazaro Hospital
- h. Quirino Memorial General Hospital

RELATIONS BETWEEN OFFICES

The Office of the Minister has the responsibility for overseeing field operations and exercises direct line supervision over the bureaus, offices, special projects and the regional offices. It formulates and establishes policies initially drawn up by the bureaus and offices along their respective areas of expertise.

The Bureau of Health Services, the Bureau of Medical Services and the Bureau of Dental Health Services perform staff functions and exercise functional supervision over the regional and other field offices.

The Bureau of Quarantine, the Bureau of Research and Laboratories coordinate their functions with staff bureaus and offices, the regional field agencies along their respective areas of expertise.

Vertical programs such as the National Nutrition Service, the Schistosomiasis and Research Service, the Malaria Eradication Service and the National Family Planning Office assign personnel in the field units in coordination with the regional health offices. Some offices such as the National Nutrition Service and the National Family Planning Office assign technical and administrative personnel in the twelve regional health offices who coordinate their work with these offices but remain under their administrative control and supervision.

In the two autonomous regions in Central Mindanao and Western Mindanao, malaria field units have been placed under the administrative control and supervision of the regional health offices for greater effectiveness and operational flexibility.

ADMINISTRATION AT THE REGIONAL LEVEL

The regional health offices constitute the implementing arms of the Ministry of Health in their respective geographical service areas. They are organized as miniature counterparts of the Ministry and vested with administrative and technical supervision and control over health and medical programs in their respective geographical areas except those under the vertical offices. Nevertheless, these vertical programs integrate their activities with the regional field units at local levels, such as those on

nutrition and family planning. See Illustration No. 12.

Provincial and city health offices, sanitaria and regional hospitals fall directly under its supervision and control. National personnel under the regional office are assigned to the provinces and cities by the regional health director. Provincially and city paid personnel who are appointed by their respective governors or city mayors are assigned within their respective geographical areas.

Location of the Twelve Regional Health Offices

The twelve Regional Health Offices of the Ministry of Health are found in major growth centers where the national government has established common regional administrative areas. These are :

Regional Health Office No. 1
San Fernando, La Union

Regional Health Office No. 2
Tuguegarao, Cagayan

Regional Health Office No. 3
San Fernando, Pampanga

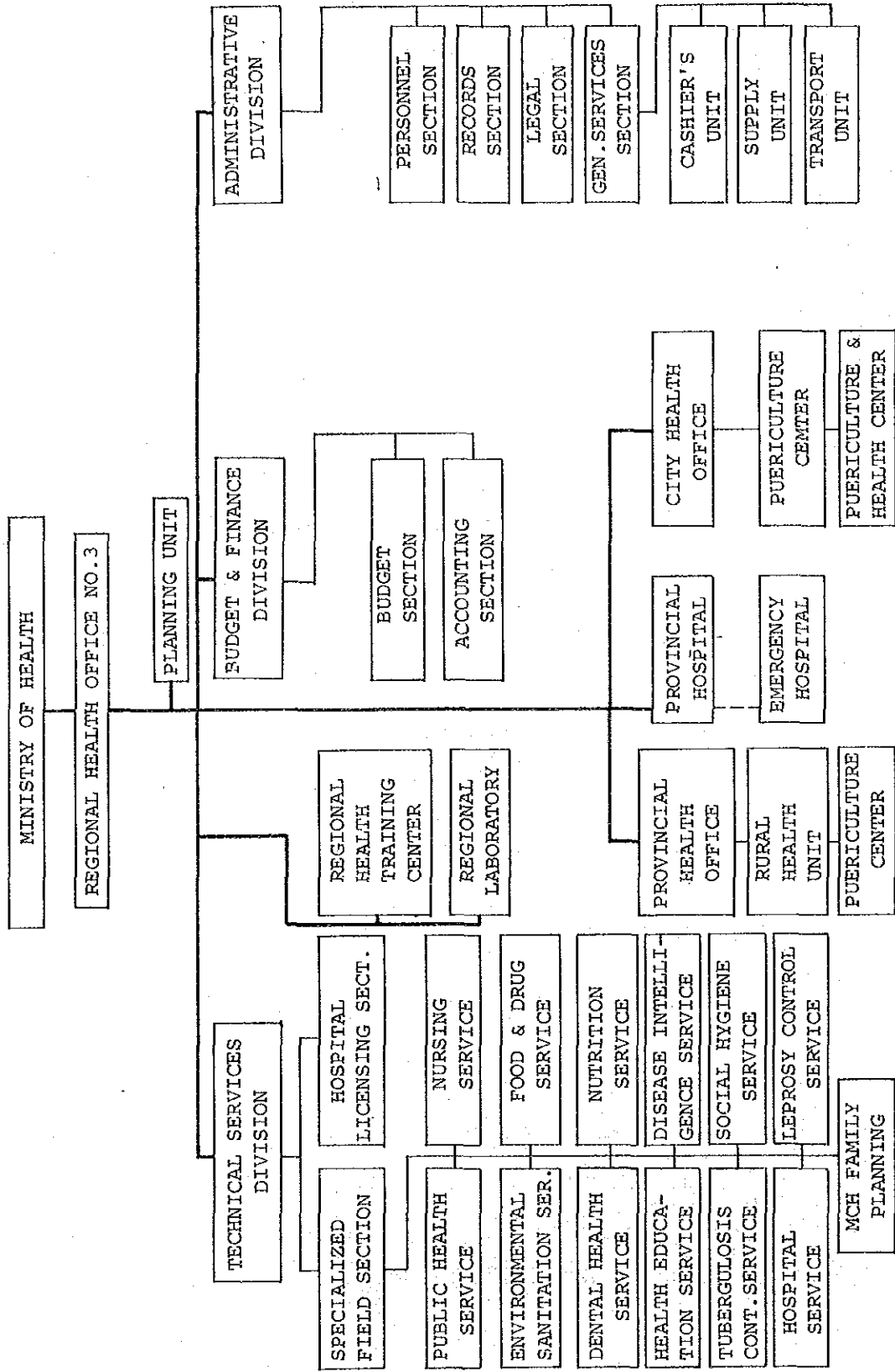
Regional Health Office No. 4
Quezon City

Regional Health Office No. 5
Legaspi City

Regional Health Office No. 6
Iloilo City

Regional Health Office No. 7
Cebu City

REGIONAL HEALTH NO. 3 ORGANIZATIONAL CHART



Regional Health Office No. 8
Tacloban City

Regional Health Office No. 9
Zamboanga City

Regional Health Office No. 10
Cagayan de Oro City

Regional Health Office No. 11
Davao City

Regional Health Office No. 12
Cotabato City















The standardization of field service areas (Illustration No. 13) where the boundaries and regional centers are common to all ministries and agencies, brings public services closer to the people in a more effective manner.

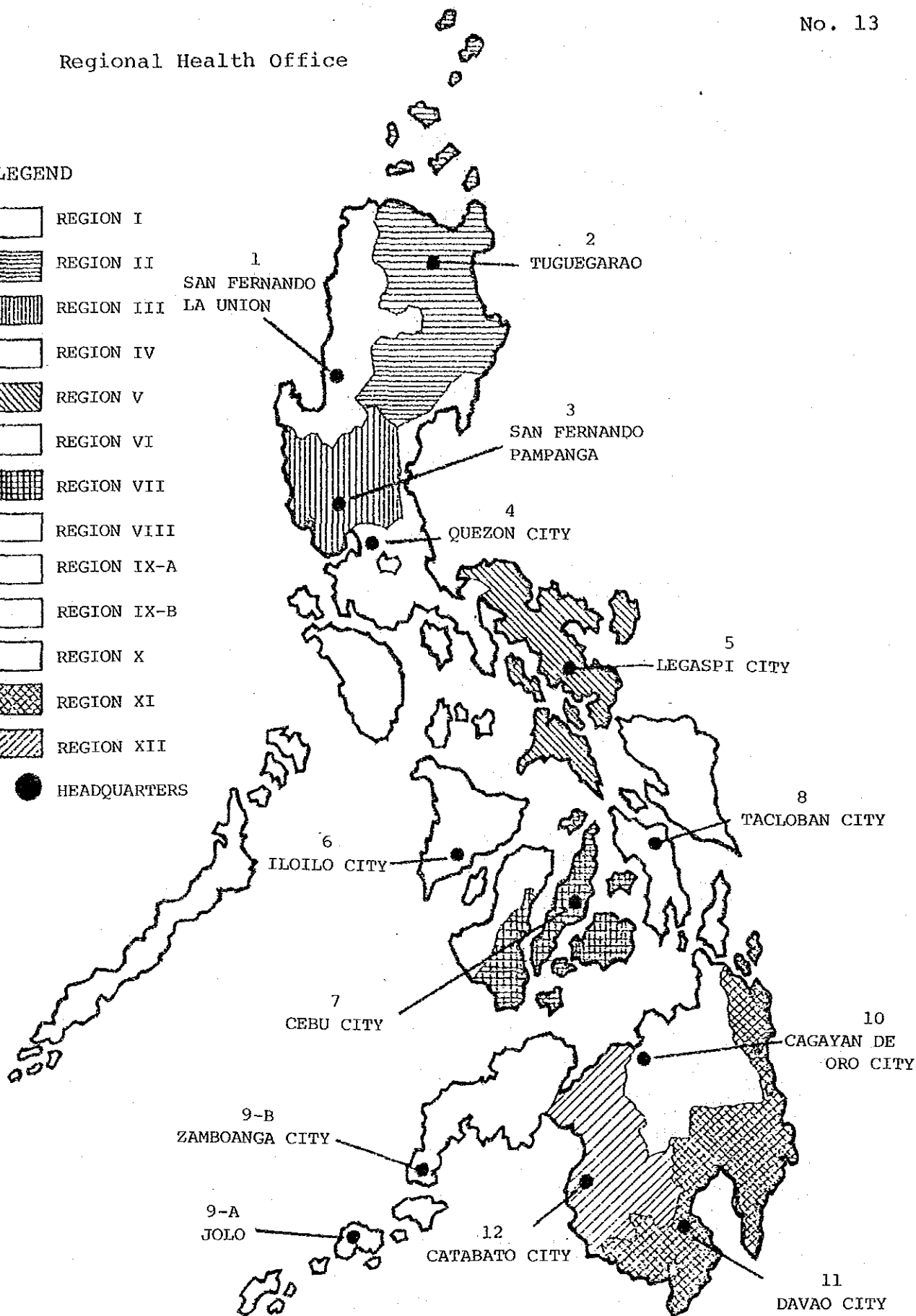
ADMINISTRATION AT THE PROVINCIAL AND CITY LEVEL

By law, the provincial and city health offices exercise administrative supervision and control over the rural health units, hospitals and sanitarium in their respective areas. They coordinate all health activities relative to the preventive, curative and rehabilitative aspects of medicine in these areas. Thus, provincial and emergency hospitals fall under their administrative and technical supervision. National health programs planned and funded by the Ministry and the Regional Health Office are implemented at these levels. See Illustration No. 14.

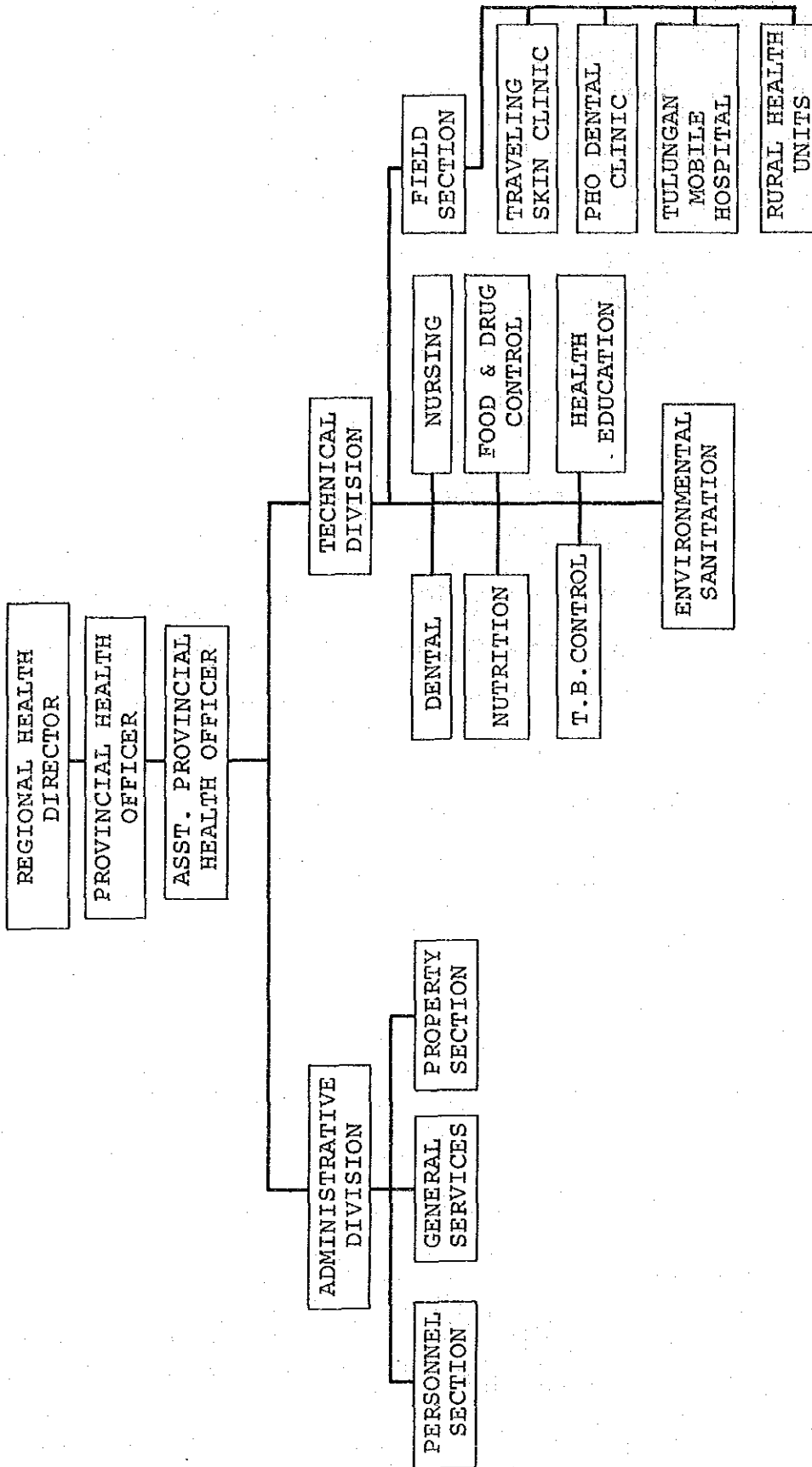
Regional Health Office

LEGEND

-  REGION I
-  REGION II
-  REGION III
-  REGION IV
-  REGION V
-  REGION VI
-  REGION VII
-  REGION VIII
-  REGION IX-A
-  REGION IX-B
-  REGION X
-  REGION XI
-  REGION XII
-  HEADQUARTERS



PHO ORGANIZATIONAL CHART



For greater effectiveness, chiefs of provincial hospitals exercise technical supervision over the chiefs of emergency hospitals. Chiefs of provincial and emergency hospitals and sanitarium however submit their yearly budgetary proposals directly to the regional health office for expediency.

In addition, these provincial and city health offices undertake activities related to, but apart from, those health programs established by national and regional officials. These directives emanate from the provincial and city officials involved with special health projects initiated by agencies other than the Ministry of Health.

Administration at the Municipal or Local Level

The municipal health officer is the head of the rural health unit. He exercises administrative control and supervision over the health personnel in the main health center and in the barangay health stations. The size of the personnel complement in the rural health unit depends on its population as specified under Republic Act No. 1082 as amended by Republic Act No. 1891.

The rural health unit undertakes activities related to environmental sanitation, maternal and child health care, TB control and BCG immunization, nutrition, family planning, epidemiological work. In areas where certain endemic diseases are found, these activities are also

integrated with rural health work.

The barangay health station is the entry point of the community with the health system either by direct access or through referral from a primary health care worker or a community development worker. It is manned by a trained midwife with diagnostic and treatment capabilities in various aspects of health work.

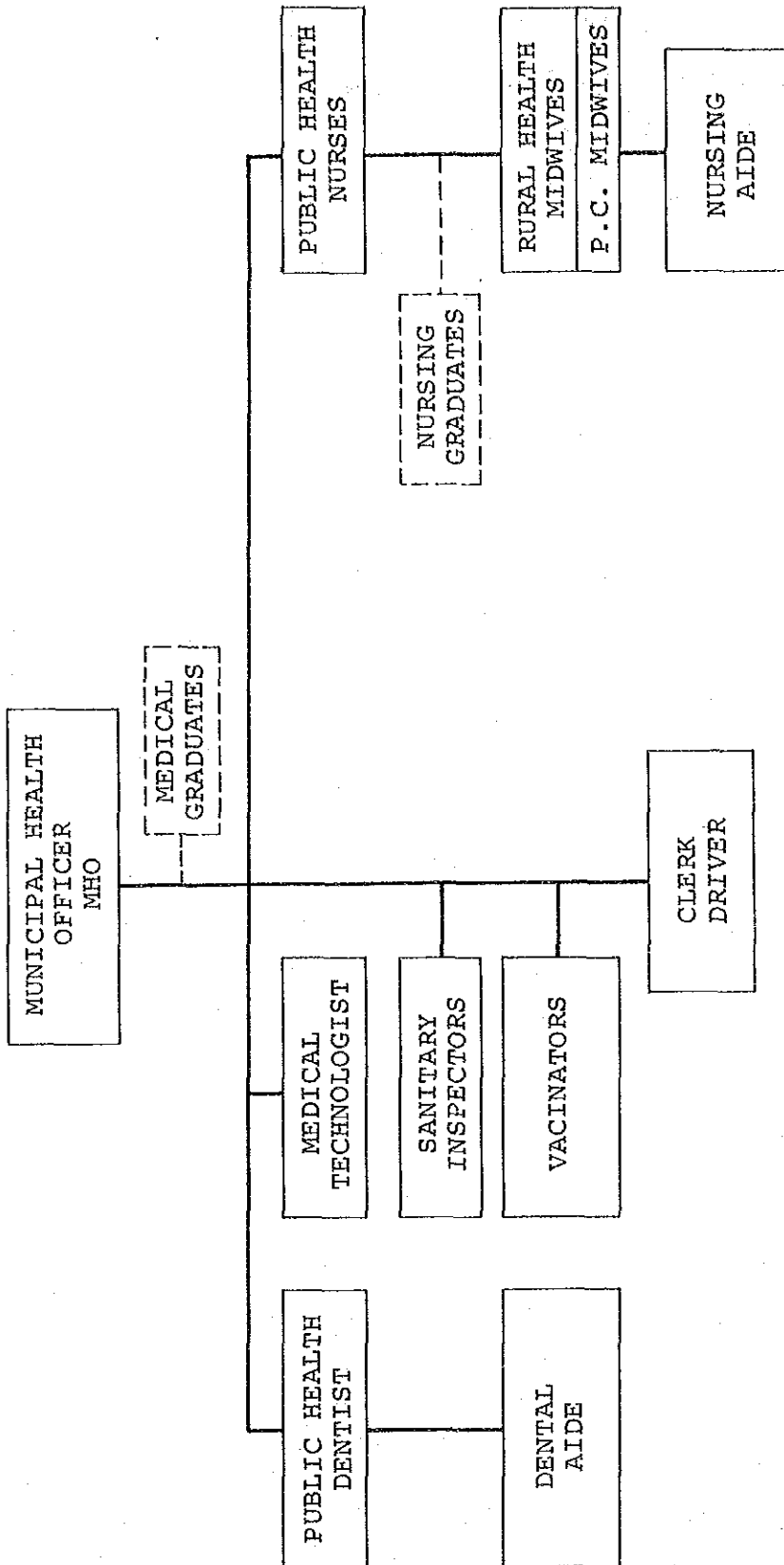
With regard to special units such as those on filariasis, malaria, social hygiene or schistosomiasis, they are headed by physicians with special training and skills in their respective areas of expertise. They coordinate their work with the municipal health officer in the locality, but remain under the direct control and supervision of the heads of their respective vertical programs.

OTHER PROBLEMS OF HEALTH ADMINISTRATION

Rising cost of medicines

Every year, the cost of drugs purchased by the Ministry of Health and its various offices, projects and hospitals have been increasing. In 1980, the amount of ₱150 million was set aside for the purchase of drugs for use in calamities, hazardous areas and field health services. This amount was increased to ₱175 million in 1981 but excludes those purchased by hospitals and

RHU ORGANIZATIONAL CHART



special projects as well as by the regional health offices which have their own budgets.

To optimize fund resources, the Minister of Health has directed that only generic drugs, not brand names, should be purchased to increase the quantity without sacrificing quality.

In addition, a Herbal Medicine Program which emphasizes the use of medicinal plants has been put up in pilot areas in regional health offices and pamphlets on their varied uses distributed to field units.

Preblem of Medical Recruitment

The Ministry of Health is faced with two serious medical manpower problems: that of attracting new physicians to the service and that of holding on to its veteran, experienced medical officers. In 1979, there were 170 vacancies out of 594 medical specialist items; 120 vacancies out of 556 senior resident physician positions; 587 vacancies out of 1861 resident physician items and 352 vacancies out of 1543 positions in the category of rural health physicians.

The Ministry of Health has therefore recommended to national budget officials a minimum of ₱2,000 monthly salary from the present ₱1,272 for new physicians in the entrance category, and a corresponding increase for higher medical positions. In addition, a Career progres-

sion Scheme which rewards seniority, relevant training and satisfactory performance based on a graduated scale has been established. These remain as palliative measures considering the higher financial incentives in private medical practice.

Problem of unserved and underserved rural areas

Because of the topography, varied weather conditions and geographical fragmentation of the Philippines, there are several communities which lack medical assistance. In 1972, before the establishment of a crisis government in the country, only 27% of the people in the rural areas are adequately served by health personnel. With the restructuring of the health care delivery system, where the midwife attends to common ailments at the barangay level, about 70% of the rural population now benefit from health personnel under the Ministry. Nevertheless, the problem of medical assistance in isolated areas, islands and communities troubled by peace and order conditions remain. One stop-gap measure being undertaken by the Ministry is the Medical Outreach Program where specialists are brought to a particular place to perform operations along their own lines of expertise.

Lack of Funds for Hospital Equipment

Hospitals in the Philippines are classified into primary, secondary and tertiary levels. At the base of the pyramid are the 25-bed and 50-bed emergency hospitals, followed in an ascending order by the 100-bed provincial hospitals, then the regional hospitals and, at the apex, the medical centers. While 25-bed hospital may have the medical capability and the staffing pattern, it may not have the physical facilities for varied surgical operations. There is an urgent need to complement scarce medical skills with upgraded diagnostic, laboratory and surgical facilities so that hospitals can maximize their efforts to save lives.

Lack of Community Involvement in Health Work

The funding of health activities are generally supported by national, provincial and municipal governments. Community participation is negligible in health activities. The development and implementation of Primary Health Care Programs in partnership with recipient communities at the barangay level will be in line with the self help and self-reliance concept of the government, whereby the communities become co-responsible for their own health situation.

In addition, the establishment of the Botika sa

Barangay, where common medicines can be bought at cost over the counter under the administration of the barangay council, will synthesize the participation and involvement of community residents in their own health care.

Cultural and Religious Problems

The cultural values and religious affiliations of people affect, favorably or otherwise, the success of health programs. The Catholic church, for instance, favors the rhythm method over the use of contraceptives which are distributed by health personnel. Again, the Islamic religion frowns on the use of artificial birth control methods. Thus, Western and Southern Mindanao where there is a large Muslim population shows a higher growth rate than other areas of the country. An alternative health measure which will provide a happy compromise between the ends of population control and ideals of religious conviction is the need of the time.

S U M M A R Y

From the overall view of socio-economic development of the Philippines, it may be said that the Ministry of Health has significantly contributed to a better quality of life and health of the people. Vast tracts of land have been opened to settlement and migration of population with the control of malarious and schistosoma infested areas. The gradually changing health picture of the country where degenerative and cardiovascular diseases are rising and communicable diseases decreasing show a changing life style of Filipinos brought about by more effective health control measures, better nutritional practices resulting from higher education, urbanization and industrialization.

The major health indicators all point to a better health status for the country now and in the years ahead. Nevertheless, the basic health problems of rapid population growth, environmental sanitation, communicable diseases, maternal and child health, and malnutrition will continue to pose serious problems to health authorities as long as a large segment of the population are still tied to the apron strings of poverty. With active community involvement in primary health care programs and concern for better health of its population, the country faces the decade of the Eighties with optimism and hope.

III. National Flow System of
Health Information

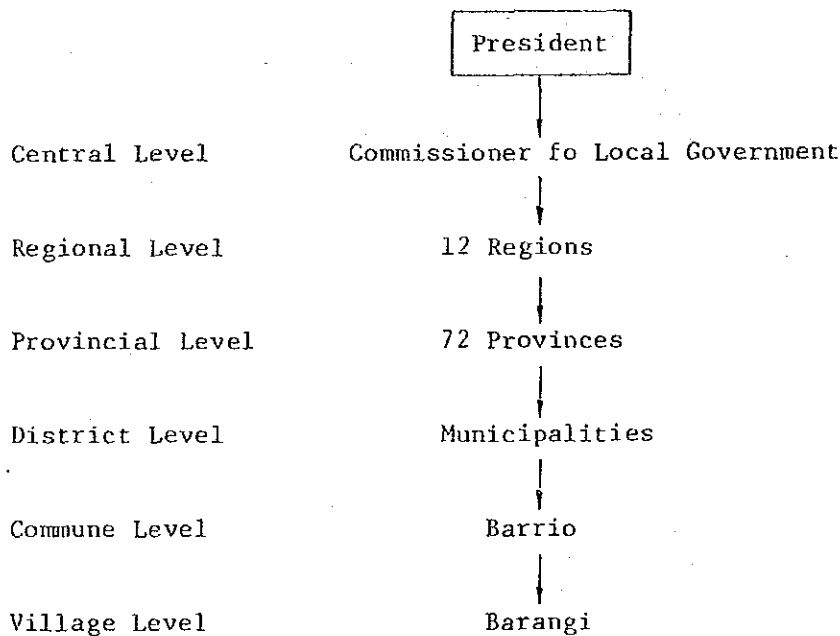
REPUBLIC OF THE PHILIPPINES

Philippines is one of the countries where Information Systems especially for management are of interest. The same as in the previous two countries visited, the Management Information System has been formulated in terms of special development project, because of the difference of organizational structures associated with political assignments, the national flow of Information system seems to be rather complicated.

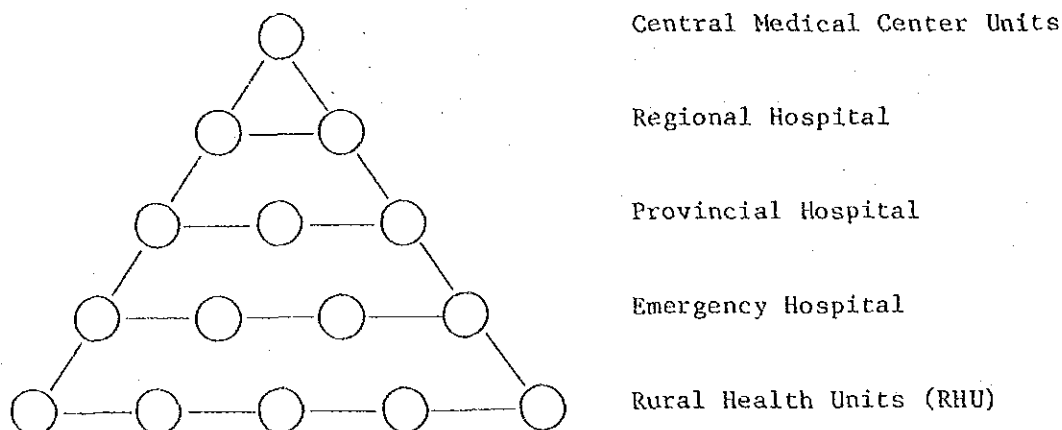
1. The Existing System

The existing organizational structure of the Ministry of Health is shown in following diagram.

The levels of local administrative structure can be defined as follows:



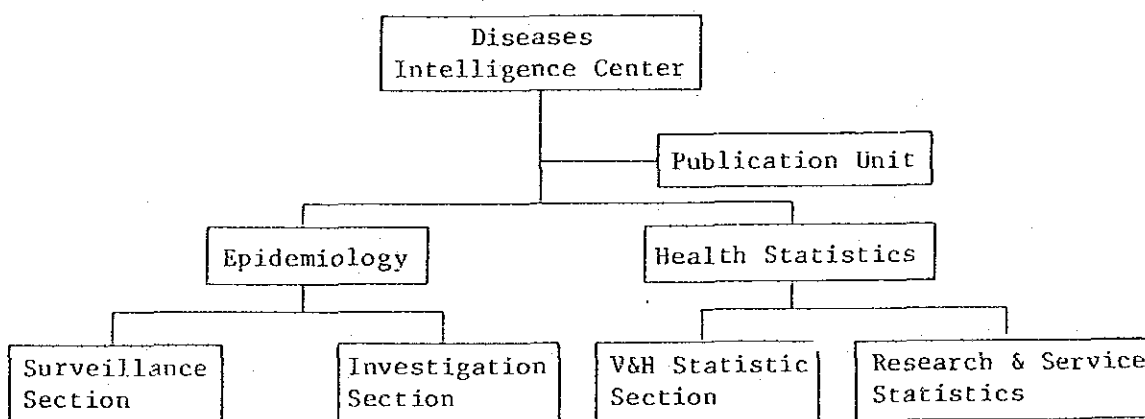
The Health Care Delivery System is provided to the population at each level through the health institutions.



The Philippines is now in the implementation period of 2nd Five-Year Development Plan. The 1st Five-Year Plan was from 1975 - 1978 (actually a 4 years interval).

Together with the 2nd Five-Year Plan, which covers the period of 1978 - 1982, a 10-Year-Plan has been developed. The integration of the social sectors from various Ministries has come into practice since the formulation of 2nd Five-Year Plan. They are of Min. of Health, Min. of Education and Manpower, Min. of Human Settlement, Min. of Local Government and Min. of Social Welfare. The Authorized Planning Body so called "National Economic Development Authority" (NEDA) takes responsible in National Planning Formulation.

As for Min. of Health, the Planning function has been placed into Planning Service Division as the document of authorization referred to. The information provided for planning management and evaluation is supposed to be the responsibility of Diseases Intelligence Center. The internal organizational structure of which can be illustrated in the following diagram.



The national flow of health information system starts from the periphery and moves up to the Center level by level. The Diseases Intelligence Center is supposed to collect all the information including health statistics and epidemiological statistics on the national basis so those information will be ready to serve the purposes of planning, management and evaluation of the Health Services rendered by the Government.

2. Development of Management Information System

In accordance with the World Bank loan with respect to the health field, the Government of Philippines has established a special Development Project of which the main objective is for monitoring and control of some specified Health Development Projects within the scope of the loan. Our independent unit has been assigned the responsibility of management of the concerned projects. The new system of monitoring and control has been established under the name "Project Management System" (PMS). This system developed through various technical stages as below including the preparation of computerization and accompanied with computer feasibility studies.

1. Situation analysis of Health Service System for 2 months
2. System Design for 1 year
3. Development of Strategies and Test-Run for 6 months
4. Modification and further development for 1 year
5. Training for nationwide Implementation for 4 months.

The areas of management authority covers 207 Rural Health Units and 12 Regional Training Center within the scope of following;

1. Training
2. Construction
3. Management Information System
4. Logistics (supplies & equipment)
5. Administration
6. Finance

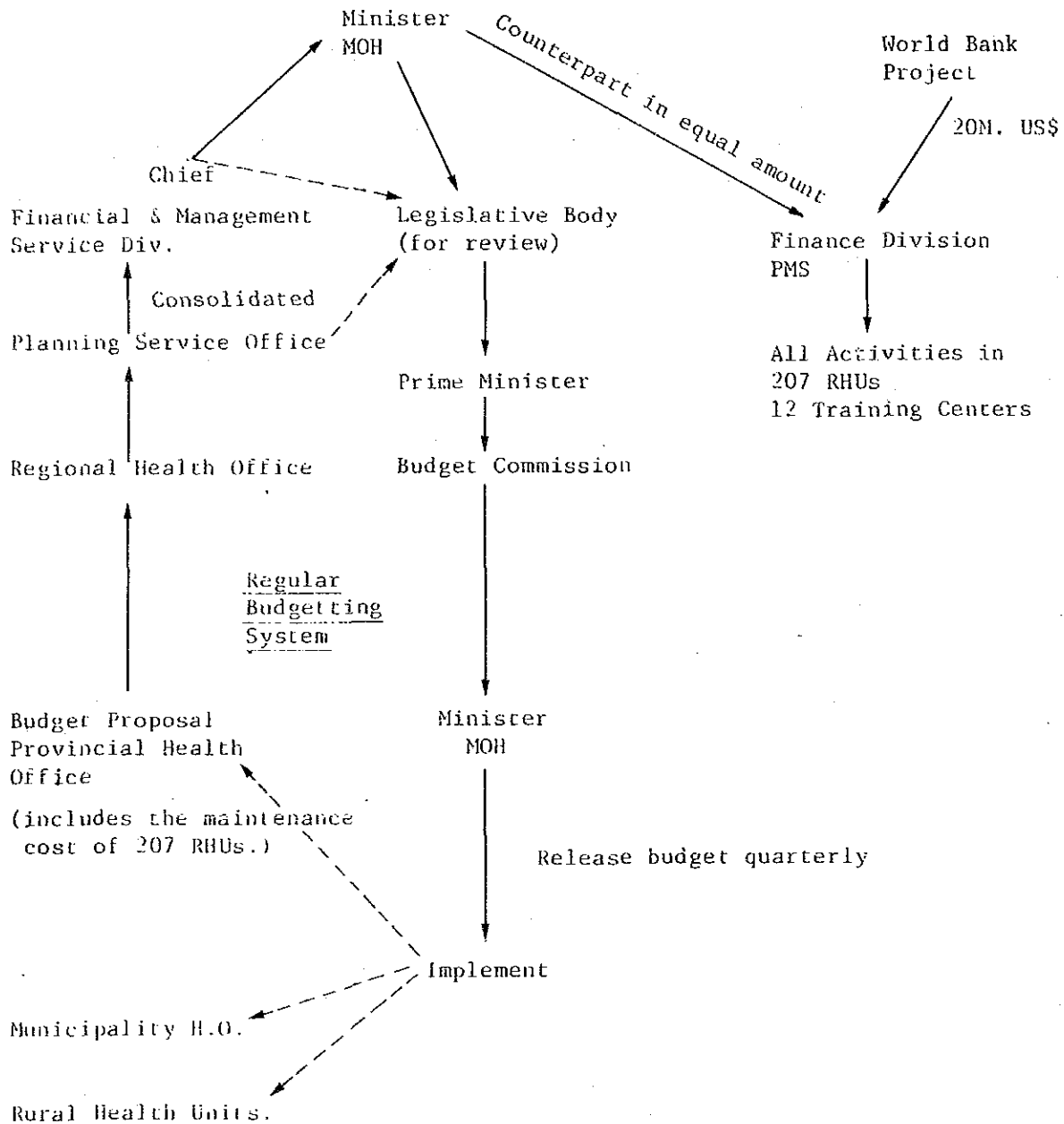
In special reference to Management Information system, the recording and reporting systems have been reviewed. The flow of information are submitted directly to this unit without passing through the Ministry of Public Health. The assessment of Health Care Delivery system within the coverage of Project Area has been periodically performed by the MIS section. Unfortunately, this MIS was set up to serve the purpose of management only for the World Bank Projects so until now, there is no implication to the regular information system as such.

The construction control system seems to have conceptual impact on management, but in real practice there still be some problems that need some further modification. The coverage of management capacity for construction is subject to 207 Rural Health Units and 12 Training centers.

The Logistic unit is responsible for provisions of drugs supplies and equipment to the responsible RHUs, and Training Centers. The control system has been well designed and the expansion of responsibility is subject to be increased to 1172 Barangai which are all satellite to the former 207 RHUs.

The Budgeting System of the PMS unit is completely separated from the Regular Budget System of the Government, because the amount of money has been decided before the plan formulation period. The allocation of the resources is autonomously considered by this unit and is confined to the investment costs. The maintenance costs must be provided by the regular government budget.

The budget cycle of the Ministry of Health and World Bank Project can be illustrated below.



3. The Implementation of MIS

All activities concerned with World Bank Project have been implemented since the beginning of the project in 1974 except the development of MIS which has been rather slowly implemented. The complete separation of the PMS unit from the Ministry of Health may be one causative factors of limited progression. This unit, however, is planned to be closely linked with the Ministry of Health in the near future by becoming the Health Management Information System attached to the Ministry.

In the Ministry of Health itself, the Management Information system has not been properly established. The planning Service Division is hunting for information on their own and some health statistics are provided by the Diseases Intelligence Center. But there are still much information scattering around various Divisions within the Ministry.

4. Influencing Factors

There are many influencing factors unfavourable to the Management Information System. Those can be identified as;

1. The separated organization of PMS in which the MIS is embedded from the Ministry of Health is considered as the greatest constraint.
2. The system designed for MIS is confined to the World Bank project. The nationwide implication cannot be accepted if the Ministry of Health did not take a part in development of the system.
3. PMS has not yet covered the monitoring and control of all activities of the World Bank Project itself. This can be indicated as the Logistic Unit's function to which the allocation of resources is confined but not the utilization of such resources.
4. Within the Ministry of Health, the Diseases Intelligence Center, which is supposed to take responsibility to provide all information included for planning management and evaluation, should be involved in close collaboration with MIS. In reality, they have nothing to do with these new designed systems.
5. To resist change seems to be a natural behaviour and this might a well be the factor that should be overcome by a planned change scheme.
6. Shortage of money in provision of Record and Report formats can be encountered as one of the unsatisfactory factors.
7. Computerization scheme can be considered if it is needed and worthwhile.
8. Lack of skilled manpower, storage facilities, transportation and information flows are the causative factors of the slow progression of PSM.
9. In case of this country, 50% of hospital beds are provided by the Private Sector, so the information that could be obtained from them is highly needed. The present situation is not favourable to achieve this so a strategy concerned with MIS from this part of Health services must be developed.
10. Political support for HMIS of the whole country is required.

CONCLUSIONS

After having gone through the situation analysis of all four visited countries, the conclusive comparison can be shown as below.

	Malaysia	Indonesia	Philippines	Japan
1. Existing System of National Health Information System	The Health Information System is under the responsibility of the Division of Medical Records and Health Statistics. The Information is received by this unit from the operational levels through district and state level.	The Health Information System is more or less concerned with various corresponding health units eg. Bureau of Planning, Community Health Units, National Institute of Health Research and Development. The information are sent to corresponding health units rather than being collected in one center.	The Health Information System is mostly concerned with the Diseases Intelligence Center. The Planning Service Office is also collecting the information serving planning purposes. The MIS was also established in another independent unit.	The Health Information System is mostly under the responsibility of the Statistics & Information Department. Some of them are concerned with the Serological Information sections. The mechanism employed in this country is more advanced by a computerization scheme.
2. Development of MIS, and its implementation	The new system design of MIS has been finished and the test-run is undergoing in Penang.	The development of MIS is established for selected Health Development Projects Reporting and Recording system has been reviewed and new formats are now being utilized.	MIS has been developed within the independent Project Management System. The scope is for World Bank Projects, only 207 Rural Health units are covered. The implementation was proposed to put into action 5 years ago.	MIS has been implemented already under the Statistics & Information Department. Other steps of development would be the strengthening of computer capability.
3. Outstanding Influencing Factors	<ol style="list-style-type: none"> 1. Strongly support from high authorities is required. 2. Training need is indicated for the new system design for MIL. 3. Coordination between managers and providers of the information must continue on a regular basis. 	<ol style="list-style-type: none"> 1. Strongly support from high authorities is required 2. Problems at peripheral level must be considered by the central authorities in reference to MIS. 	<ol style="list-style-type: none"> 1. MIS must be integrated into the Ministry of Health so that the System will be able to be replicated nationwide. 2. Political support for MIS of MOH is needed. 	<ol style="list-style-type: none"> 1. Duplication of information system in some points. 2. Slow dissemination of information should be eliminated.

IV. Statistics

- Population
- Vital, Health, and Nutrition
- Housing

POPULATION STATISTICS

Population, Land Area and Density of the Population By Region and Province: Census Years 1918-80

Population by Age and Sex: 1975

Population and Land Area by Region: May 1980

Population of the Philippines: Census Years 1979-1980

Population Density by Region: May 1980

Sex Ratio of the Population, By Region and Province: Census Years 1960, 1970 and 1975

Population by Age and Sex: May 1, 1975 Census

Literacy of Population by Sex for Urban and Rural Areas and Regions in the Philippines: 1960 and 1970

Inter-regional Migration and Growth, Philippines: 1960-1970

Registered Aliens by Nationality: 1962-1978

POPULATION STATISTICS

Since 1903 population censuses in the Philippines had been conducted at irregular intervals ranging from 9 to 12 years between intercensal periods until recently when these censuses were scheduled to be undertaken on a quinquennial basis by the National Census and Statistics Office (NCSO). The first census to be conducted under the latter frequency was the 1975 Census of Population and Housing, the previous census having been done in 1970. Under Commonwealth Act No. 591, the NCSO is authorized "to prepare for and undertake all censuses of population, agriculture, industry and commerce". Such national censuses are designed primarily to provide authoritative data for use in development planning on the national and local levels. National summary results are presented by province and by municipality and are published in the *Census of the Philippines*.

Internal migration is an important factor that influences regional economics and population growth in a particular locality or region. The geographical patterns of movement of people in terms of intensity and directional flow provide planners, policy makers and researchers a basis for formulating policies and plans towards developing a scheme of internal migration and spatial distribution of population among regions that will promote a well-balanced national development. Statistics on internal migration are published by the NCSO in monographs and in the *Journal of Philippine Statistics*.

Meanwhile, data on the number and characteristics of aliens registered in the country are compiled by the Commission on Immigration and Deportation.

POPULATION, LAND AREA AND DENSITY OF THE POPULATION

Region and province	Population (thousands)						
	1980P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
Philippines	<u>47,914</u>	<u>42,071</u>	<u>36,684</u>	<u>27,088</u>	<u>19,234</u>	<u>16,000</u>	<u>10,314</u>
National Capital Region (Metro Manila)	<u>5,925</u>	<u>4,970</u>	<u>3,967</u>	<u>2,462</u>	<u>1,569</u>	<u>993</u>	<u>460</u>
Manila	1,626	1,479	1,331	1,139	984	623	285
Caloocan City	471	397	275	145	58	39	19
Pasay City	287	255	206	133	89	55	19
Quezon City	1,166	957	754	398	108	39	0
Las Piñas	134	82	46	16	9	7	3
Makati	372	334	265	115	41	34	13
Malabon	190	175	142	76	47	33	22
Mandaluyong	211	182	149	72	26	18	6
Marikina	212	168	113	40	23	15	9
Muntinglupa	137	95	65	22	19	9	5
Navotas	124	97	83	49	29	21	13
Parañaque	208	159	97	62	29	21	22
Pasig	269	210	157	62	35	28	17
Pateros	42	33	26	13	8	7	4
San Juan del Monte	130	122	105	57	32	19	6
Taguig	134	74	55	22	15	12	8
Valenzuela	212	151	98	41	17	13	9
Region I	<u>3,544</u>	<u>3,269</u>	<u>2,991</u>	<u>2,428</u>	<u>1,943</u>	<u>1,728</u>	<u>1,378</u>
Abra	160	147	146	115	87	88	73
Benguet	354	302	264	184	110	122	44
Ilocos Norte	393	372	343	287	251	238	219
Ilocos Sur	444	420	385	338	276	272	247
La Union	453	415	374	293	237	208	178
Mt. Province	103	94	93	86	62	59	49
Pangasinan	1,637	1,520	1,386	1,124	920	742	566

BY REGION AND PROVINCE: CENSUS YEARS 1918-80

Land area (sq. km.)	Density (persons/sq. km.)						
	1980 ^P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
<u>300,000.0</u>	<u>159.7</u>	<u>140.2</u>	<u>122.3</u>	<u>90.3</u>	<u>64.1</u>	<u>53.3</u>	<u>34.4</u>
<u>636.0</u>	<u>9,316.0</u>	<u>7,814.5</u>	<u>6,237.4</u>	<u>3,871.1</u>	<u>2,467.0</u>	<u>1,561.3</u>	<u>723.3</u>
38.3	42,454.3	38,619.2	34,746.4	29,728.7	25,689.5	16,279.2	7,449.2
55.8	8,440.9	7,118.3	4,918.5	2,607.9	1,043.2	695.7	350.4
13.9	20,647.5	18,345.2	14,840.5	9,544.8	6,383.3	3,968.4	1,345.1
166.2	7,015.6	5,757.3	4,539.4	2,394.6	649.7	234.7	0
41.5	3,228.9	1,966.5	1,102.0	387.8	223.6	164.4	69.2
29.9	12,441.5	11,185.5	8,860.1	3,830.8	1,382.4	1,121.4	421.8
23.4	8,119.7	7,473.4	6,047.6	3,266.6	1,985.3	1,422.4	927.1
26.0	8,115.4	7,010.3	5,746.4	2,754.6	1,011.9	700.0	223.3
38.9	5,449.9	4,330.4	2,915.2	1,040.0	600.3	369.9	245.3
46.7	2,933.6	2,024.9	1,393.1	468.8	394.9	198.9	100.9
2.6	47,692.3	37,345.4	32,017.3	18,946.9	11,111.2	8,023.5	5,174.6
38.3	5,430.8	4,150.7	2,538.2	1,616.1	754.2	551.6	577.6
13.0	20,692.3	16,147.3	12,037.8	4,779.2	2,723.6	2,118.5	1,289.8
10.4	4,038.5	3,155.9	2,448.8	1,266.6	805.8	688.5	395.5
10.4	12,500.0	11,778.0	10,053.8	5,467.4	3,028.2	1,814.4	593.5
33.7	3,976.3	2,187.0	1,639.7	648.5	455.2	358.7	249.9
47.0	4,510.6	3,204.4	2,094.8	882.4	356.2	286.6	198.4
<u>21,568.4</u>	<u>164.3</u>	<u>151.6</u>	<u>138.7</u>	<u>112.6</u>	<u>90.1</u>	<u>80.1</u>	<u>63.8</u>
3,975.5	40.2	37.0	36.6	29.0	21.8	22.1	18.4
2,655.4	133.3	113.7	99.3	69.2	41.4	45.9	16.5
3,399.3	115.6	109.4	101.0	84.5	74.0	70.0	64.4
2,579.6	172.1	162.8	149.3	131.1	107.1	105.4	95.8
1,493.1	303.4	277.9	250.3	196.5	159.0	139.3	119.2
2,097.3	49.1	44.8	44.4	40.9	29.6	28.1	23.4
5,368.2	304.9	283.1	258.2	209.4	171.5	138.2	105.4

POPULATION, LAND AREA AND DENSITY OF THE POPULATION

Region and province	Population (thousands)						
	1980 ^P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
Region 2	<u>2,220</u>	<u>1,933</u>	<u>1,691</u>	<u>1,202</u>	<u>775</u>	<u>714</u>	<u>449</u>
Batanes	12	12	11	10	11	9	8
Cagayan	712	644	581	445	311	292	191
Ifugao	112	105	93	77	50	68	64
Isabela	870	730	648	442	284	220	113
Kalinga-Apayao	190	163	136	90	56	47	37
Nueva Vizcaya ¹	324	279	222	138	83	78	36
Region 3	<u>4,794</u>	<u>4,210</u>	<u>3,615</u>	<u>2,525</u>	<u>1,838</u>	<u>1,569</u>	<u>1,039</u>
Bataan	322	263	216	145	93	86	58
Bulacan ²	1,096	900	738	515	394	320	240
Nueva Ecija	1,069	948	851	608	468	417	227
Pampanga	1,175	1,042	907	617	417	375	258
Tarlac	688	641	560	427	327	264	172
Zambales	444	416	343	213	139	107	84
Region 4	<u>6,115</u>	<u>5,214</u>	<u>4,457</u>	<u>3,081</u>	<u>2,085</u>	<u>1,815</u>	<u>1,232</u>
Batangas	1,174	1,032	926	681	510	442	340
Cavite	772	628	520	378	263	239	157
Laguna	973	804	700	472	321	280	196
Marinduque	174	163	144	115	86	82	57
Occidental Mindoro	222	186	144	84	43	39	28
Oriental Mindoro	447	389	328	229	125	93	44
Palawan	371	300	237	163	106	94	69
Quezon ³	1,237	1,116	983	653	417	359	212
Romblon	193	182	167	132	109	99	65
Rizal ⁴	552	414	307	174	105	88	64

BY REGION AND PROVINCE: CENSUS YEARS 1918-80 (continued)

Land area (sq. km.)	Density (persons /sq. km.)						
	1980 ^P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
36,403.1	61.0	53.1	46.4	33.0	21.3	19.6	12.3
209.3	57.3	57.3	54.5	49.3	51.1	43.0	38.2
9,002.7	79.1	79.1	64.6	49.5	34.6	32.4	21.2
2,517.8	44.5	44.5	36.9	30.5	19.8	27.0	25.5
10,664.6	81.6	81.6	60.8	41.5	24.8	20.6	10.6
7,047.6	27.0	27.0	19.3	12.7	8.0	6.7	5.3
6,961.1	46.5	46.5	31.9	19.8	11.9	11.2	5.2
18,230.8	263.0	230.9	198.3	138.5	100.8	86.1	57.0
1,373.0	234.5	191.6	157.3	105.6	67.7	62.6	42.2
2,625.0	417.5	342.9	281.1	196.2	150.1	121.9	91.4
5,284.3	202.3	179.4	161.0	115.1	88.6	78.9	43.0
2,180.7	538.8	477.8	415.9	282.9	191.2	172.0	118.3
3,053.4	225.3	209.9	183.4	139.8	107.1	86.5	56.3
3,714.4	119.5	112.0	92.3	57.3	37.4	28.8	22.6
46,924.1	130.3	111.1	95.0	65.7	44.4	38.7	26.3
3,165.8	370.8	326.0	292.5	215.1	161.1	139.6	107.4
1,287.6	599.6	487.7	403.9	293.6	204.3	185.6	121.9
1,759.7	552.9	456.9	397.8	268.2	182.4	159.1	111.4
959.2	181.4	169.9	150.1	119.9	89.7	85.5	59.4
5,879.8	37.8	31.6	24.5	14.3	7.3	6.6	4.8
4,364.7	102.4	89.1	75.1	52.5	28.6	21.3	10.1
14,896.3	24.9	20.1	15.9	10.9	7.1	6.3	4.6
11,946.2	103.5	93.4	82.3	54.7	34.9	30.1	17.7
1,355.9	142.3	134.2	123.2	97.4	80.4	73.0	47.9
1,308.9	421.7	316.3	234.5	132.9	80.2	67.2	48.9

POPULATION, LAND AREA AND DENSITY OF THE POPULATION

Region and province	Population (thousands)						
	1980 ^P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
Region 5	<u>3,467</u>	<u>3,194</u>	<u>2,967</u>	<u>2,363</u>	<u>1,666</u>	<u>1,347</u>	<u>840</u>
Albay	803	729	674	515	395	334	260
Camarines Norte	308	288	262	188	104	98	52
Camarines Sur	1,100	1,024	949	820	554	386	219
Catanduanes	176	173	162	156	112	99	64
Masbate	580	533	493	336	211	182	67
Sorsogon	500	447	427	348	291	248	178
Region 6	<u>4,532</u>	<u>4,146</u>	<u>3,618</u>	<u>3,078</u>	<u>2,530</u>	<u>2,174</u>	<u>1,347</u>
Aklan	325	293	263	226	197	177	137
Antique	345	308	289	238	233	199	155
Capiz	493	446	394	315	245	229	155
Iloilo ^s	1,432	1,313	1,168	966	816	744	503
Negros Occidental	1,937	1,786	1,504	1,332	1,039	825	397
Region 7	<u>3,789</u>	<u>3,387</u>	<u>3,033</u>	<u>2,523</u>	<u>2,120</u>	<u>1,954</u>	<u>1,486</u>
Bohol	806	759	683	592	553	492	358
Cebu	2,090	1,818	1,634	1,333	1,123	1,068	855
Negros Oriental	823	740	652	538	386	335	216
Siquijor	70	69	63	60	57	60	57
Region 8	<u>2,812</u>	<u>2,600</u>	<u>2,381</u>	<u>2,041</u>	<u>1,764</u>	<u>1,462</u>	<u>978</u>
Leyte ^g	1,302	1,203	1,111	963	819	743	476
Southern Leyte	297	276	251	210	188	173	122
Eastern Samar	321	287	271	238	198	155	117
Northern Samar	383	355	306	261	228	155	94
Western Samar	509	478	442	369	331	237	169

BY REGION AND PROVINCE: CENSUS YEARS 1918-80 (continued)

Land area (sq. km.)	Density (persons/sq. km.)						
	1980P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
17,632.5	196.6	181.1	168.3	134.0	94.5	76.4	47.6
2,552.6	314.6	285.6	264.0	201.7	154.6	130.8	101.9
2,112.5	145.8	136.3	124.1	89.0	49.1	46.4	24.6
5,266.8	208.9	194.4	180.2	155.6	105.1	73.3	41.6
1,511.5	116.4	114.5	107.4	103.4	74.2	65.5	42.3
4,047.7	143.3	131.7	121.8	83.4	52.2	45.0	16.6
2,141.4	233.5	208.3	199.4	162.4	135.9	115.8	83.1
20,223.2	224.1	205.0	178.9	152.2	125.1	107.5	66.6
1,817.9	172.8	161.2	144.9	124.4	108.4	97.4	75.4
2,522.0	136.8	122.1	114.7	94.5	92.4	78.9	61.5
2,633.2	187.2	169.4	149.6	119.7	93.0	87.0	58.9
5,324.0	269.0	246.6	219.4	181.5	153.3	139.7	94.5
7,926.1	244.4	225.3	189.7	168.1	131.0	104.1	50.1
14,951.5	253.4	226.5	202.9	168.7	141.8	130.7	99.4
4,117.3	195.8	184.3	166.0	143.8	134.4	119.5	87.0
5,088.4	410.7	357.3	321.2	261.9	220.7	209.9	168.0
5,402.3	152.3	137.0	120.7	99.6	71.5	62.0	40.0
343.5	203.8	200.9	183.4	174.7	165.9	174.7	165.9
21,431.5	131.2	121.3	111.1	95.2	82.3	68.2	45.6
6,268.2	207.7	191.9	177.2	153.7	130.7	118.5	75.9
1,734.8	171.2	159.1	144.9	120.8	108.1	99.7	70.3
4,339.6	74.0	66.1	62.4	54.8	45.6	35.7	27.0
3,497.9	109.5	101.5	87.5	74.6	65.2	44.3	26.9
5,591.0	91.0	85.5	79.5	66.0	59.2	42.4	30.2

POPULATION, LAND AREA AND DENSITY OF THE POPULATION

Region and province	Population (thousands)						
	1980 ^P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
Region 9	<u>2,447</u>	<u>2,048</u>	<u>1,869</u>	<u>1,351</u>	<u>763</u>	<u>603</u>	<u>320</u>
Basilan	199	171	144	156	110	57	23
Sulu	318	240	316	248	182	201	128
Tawi-Tawi	167	143	110	79	59	46	45
Zamboanga del Norte	584	491	409	281	168	139	57
Zamboanga del Sur	1,179	1,003	890	587	244	160	67
Region 10	<u>2,746</u>	<u>2,314</u>	<u>1,953</u>	<u>1,297</u>	<u>922</u>	<u>706</u>	<u>360</u>
Agusan del Norte	367	301	278	177	89	64	25
Agusan del Sur	261	213	175	94	38	35	20
Bukidnon	630	533	415	194	63	58	47
Camiguin	57	53	54	45	70	41	38
Misamis Occidental	391	356	320	248	208	210	81
Misamis Oriental	694	560	473	344	300	173	82
Surigao del Norte	346	298	239	195	155	126	67
Region 11	<u>3,311</u>	<u>2,715</u>	<u>2,201</u>	<u>1,353</u>	<u>578</u>	<u>451</u>	<u>206</u>
Davao del Norte	693	590	443	263	91	60	24
Davao del Sur	1,134	936	785	498	205	171	46
Davao Oriental	342	299	248	133	68	61	38
South Cotabato	768	587	466	295	103	58	43
Surigao del Sur	374	302	259	165	110	100	55
Region 12	<u>2,212</u>	<u>2,070</u>	<u>1,941</u>	<u>1,383</u>	<u>681</u>	<u>484</u>	<u>221</u>
Maguindanao	542	478	476	377	235	137	76
North Cotabato	550	472	468	279	77	50	16
Lanao del Norte	429	381	350	271	132	99	26
Lanao del Sur	406	500	456	378	212	144	66
Sultan Kudarat	285	239	191	78	25	54	37

Note: Details may not add up to totals due to rounding.

¹Includes Quirino.

²Excluding Valenzuela.

³Includes Aurora.

⁴Excluding cities and municipalities covered by Metro Manila.

⁵Includes Guimaras.

⁶Includes Biliran.

Source: National Census and Statistics Office.

BY REGION AND PROVINCE; CENSUS YEARS 1918-80 (continued)

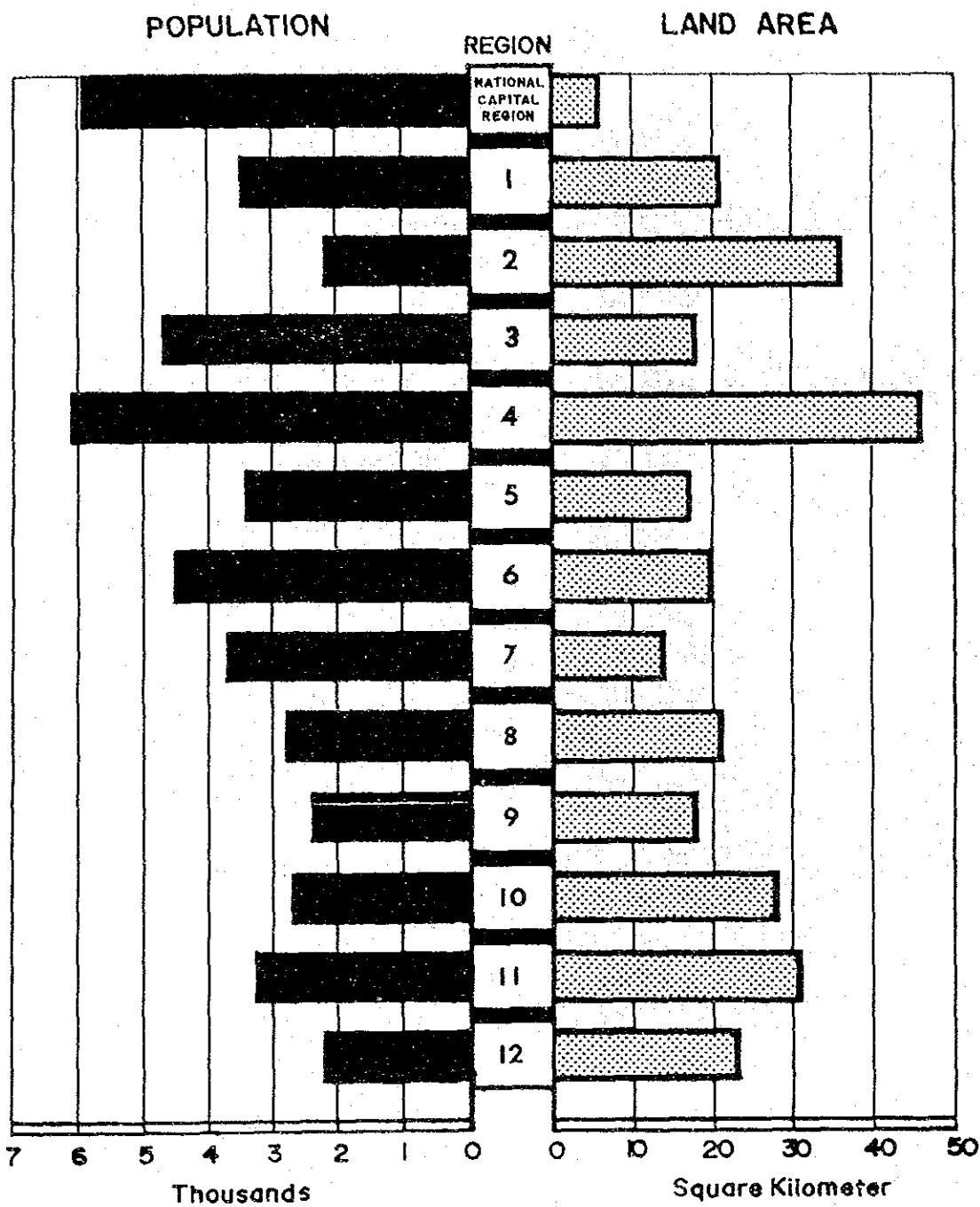
Land area (sq. km.)	Density (persons/sq. km.)						
	1980P (May 1)	1975 (May 1)	1970 (May 6)	1960 (Feb. 15)	1948 (Oct. 1)	1939 (Jan. 1)	1918 (Dec. 31)
<u>18,685.1</u>	<u>131.0</u>	<u>109.6</u>	<u>100.0</u>	<u>72.3</u>	<u>40.8</u>	<u>32.3</u>	<u>17.1</u>
1,327.2	149.9	128.9	108.5	117.5	82.9	42.9	17.3
1,600.4	198.7	150.0	197.5	155.0	113.7	125.6	80.0
1,087.4	153.6	131.5	101.2	72.7	54.3	32.3	41.4
6,075.2	96.1	80.8	67.3	46.3	27.7	22.9	9.4
8,594.9	137.2	116.7	103.5	68.3	28.4	18.7	7.8
<u>28,327.8</u>	<u>96.9</u>	<u>81.7</u>	<u>69.0</u>	<u>45.8</u>	<u>32.6</u>	<u>25.0</u>	<u>12.7</u>
2,590.3	141.7	116.2	107.3	68.3	34.4	24.7	9.7
8,965.5	29.1	23.8	19.5	10.5	4.2	3.9	2.2
8,293.8	76.0	64.3	50.0	23.4	7.6	7.0	5.7
229.8	248.0	230.6	235.0	195.8	304.6	178.4	165.4
1,939.3	201.6	183.6	165.0	127.9	107.3	108.3	41.8
3,570.1	194.4	156.9	132.5	96.4	84.0	48.5	23.0
2,739.0	126.3	108.8	87.3	71.2	56.6	46.0	24.5
<u>31,692.9</u>	<u>104.5</u>	<u>85.7</u>	<u>69.4</u>	<u>42.7</u>	<u>18.2</u>	<u>14.2</u>	<u>6.5</u>
8,129.8	85.2	72.6	54.5	32.4	11.2	7.4	3.0
6,377.6	177.8	146.8	123.1	78.1	32.1	26.8	7.2
5,164.5	66.2	57.9	48.0	25.8	13.2	11.8	7.4
7,468.8	102.8	78.6	62.4	39.5	13.8	7.8	5.8
4,552.2	82.2	66.3	56.9	36.3	24.2	22.0	12.1
<u>23,293.2</u>	<u>95.0</u>	<u>88.9</u>	<u>83.3</u>	<u>59.4</u>	<u>29.2</u>	<u>20.8</u>	<u>9.5</u>
5,305.3	102.2	90.1	89.7	71.1	44.3	25.8	14.3
6,702.4	82.1	70.4	69.8	41.6	11.5	7.5	2.4
3,092.0	138.7	123.2	113.2	87.6	42.7	32.0	8.4
3,872.9	104.8	129.1	117.7	97.6	54.7	37.2	17.0
4,320.6	66.0	55.3	44.2	18.1	5.8	12.5	8.6

POPULATION BY AGE AND SEX: 1975

Age group in years	Both sexes	Male	Female
All ages	42,070,660	21,276,224	20,794,436
Under 1	1,213,577	623,585	589,992
1—4	5,267,189	2,700,837	2,566,352
5—9	6,330,637	3,249,452	3,081,185
10—14	5,681,852	2,895,474	2,786,378
15—19	4,950,580	2,454,432	2,496,148
20—24	3,837,688	1,893,903	1,943,785
25—29	2,982,466	1,491,032	1,491,434
30—34	2,329,462	1,163,945	1,165,517
35—39	2,210,770	1,112,361	1,098,409
40—44	1,728,675	874,089	854,586
45—49	1,478,256	751,499	726,757
50—54	1,151,010	582,036	568,974
55—59	914,420	469,678	444,742
60—64	791,910	408,277	383,633
65—69	494,986	253,244	241,742
70—74	372,737	194,129	178,608
75—79	143,186	72,170	71,016
80—84	86,429	38,969	47,460
85 yrs. and over	104,830	47,112	57,718

Source: National Census and Statistics Office

POPULATION AND LAND AREA BY
REGION: MAY 1, 1980



POPULATION OF THE PHILIPPINES; CENSUS YEARS 1799-1980

Year	Population	Average annual rate of increase over previous data (percent)	Source of data
1799 ¹	1,502,574	n.a.	Buzeta
1800 ¹	1,561,251	3.90000	Zuñiga
1812 ¹	1,933,331	1.79727	Cedulas
1819 ¹	2,106,230	1.23119	Cedulas
1829 ¹	2,593,287	2.10204	Church
1840 ¹	3,096,031	1.62391	Local officials
1850 ¹	3,857,424	2.23312	Buzeta
1858 ¹	4,290,381	1.33859	Bowring
1870 ¹	4,712,006	0.78419	Guia de Manila
1877 ¹	5,567,685	2.41243	Census
1887	5,984,727	0.72492	Census
1896 ¹	6,261,339	0.50329	Prof. Plehn's estimate based on census records.
1903 ²	7,635,426	2.87489	Census
1918 ³	10,314,310	1.89735	Census
1939 ⁴	16,000,303	2.21955	Census
1948 ⁴	19,234,182	1.90601	Census
1960 ⁴	27,087,685	3.05710	Census
1970 ⁴	36,684,486	3.01190	Census
1975 ⁴	42,070,660	2.78572	Census
1980 ^P	47,914,017	2.63528	Census

¹Non-Christians were not included.

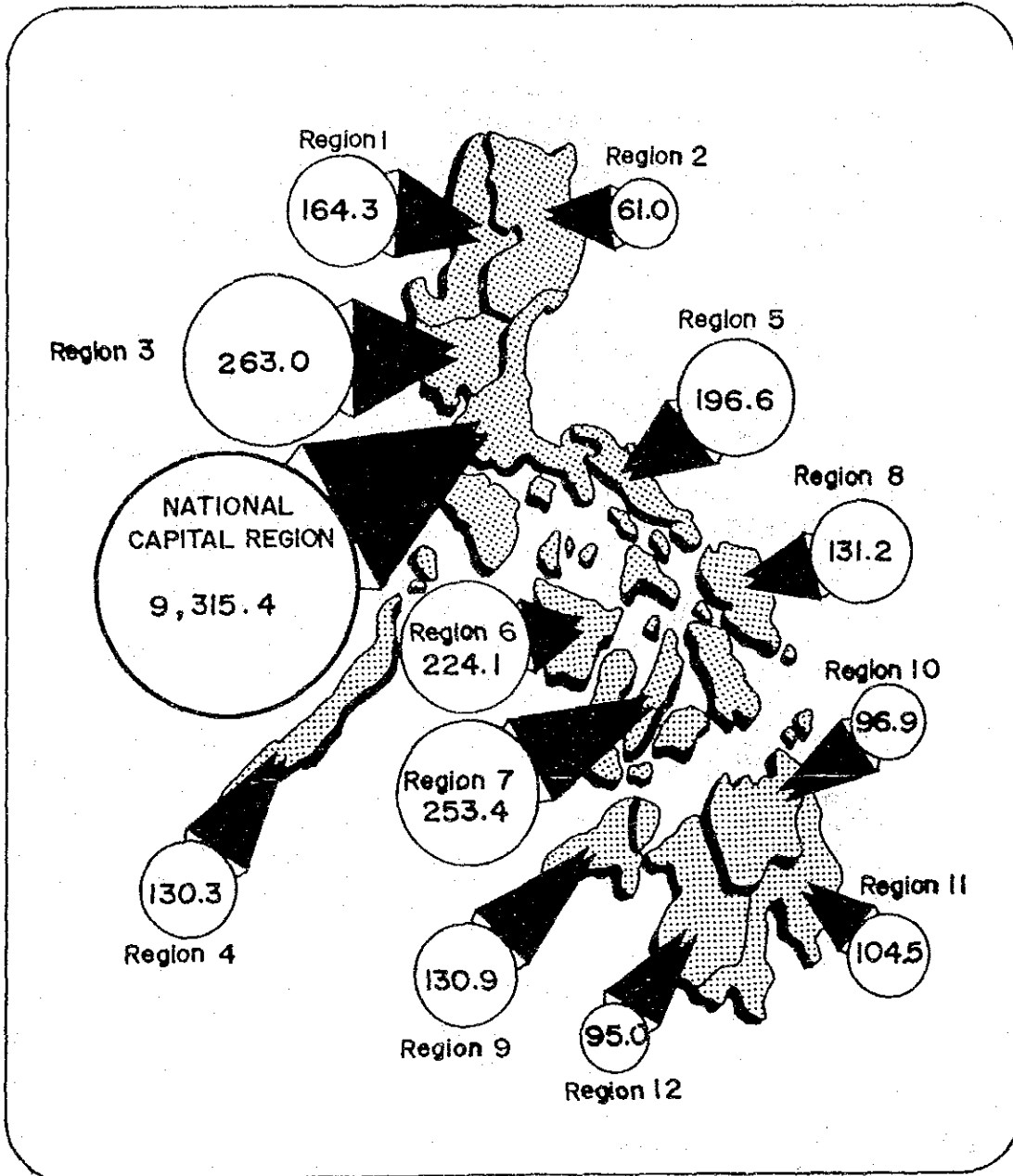
²Includes 647,740 non-Christians.

³Includes 932,953 non-Christians.

⁴Includes Non-Christians.

Source: National Census and Statistics Office.

POPULATION DENSITY BY REGION:
MAY 1, 1980 CENSUS
(person/Km²)



SEX RATIO OF THE POPULATION, BY REGION

Region/province	1960		Males per 100 females
	Male	Female	
Philippines	<u>13,662,869</u>	<u>13,424,816</u>	101.8
National Capital Region	<u>1,194,015</u>	<u>1,268,473</u>	94.1
Manila	549,404	589,207	93.2
Caloocan City	71,821	73,702	97.4
Pasay City	63,586	69,087	92.0
Quezon City	190,375	207,615	91.7
Las Piñas	8,026	8,067	99.5
Makati	55,580	58,960	94.3
Malabon	37,767	38,671	97.7
Mandaluyong	36,378	35,241	103.2
Marikina	20,264	20,191	100.4
Muntinlupa	11,031	10,862	101.6
Navotas	24,433	24,829	98.4
Parañaque	29,709	32,189	92.3
Pasig	30,453	31,677	96.1
Pateros	6,398	6,775	94.4
San Juan del Monte	26,905	29,956	89.8
Taguig	10,837	11,019	98.3
Valenzuela	21,048	20,425	103.1
Region 1	<u>1,285,648</u>	<u>1,308,249</u>	98.3
Abra	58,034	57,159	101.5
Benguet	a	a	a
Ilocos Norte	140,149	147,184	95.2
Ilocos Sur	163,974	174,084	94.2
La Union	144,408	148,922	97.0
Mt. Province	220,505	215,334	102.4
Pangasinan	558,578	565,566	98.8
Region 2	<u>526,857</u>	<u>508,893</u>	103.5
Batanes	5,081	5,228	97.2
Cagayan	225,525	219,764	102.6
Ifugao	a	a	a
Isabela	226,229	215,833	104.8
Kalinga-Apayao	a	a	a
Nueva Vizcaya	70,022	68,068	102.9
Quirino	b	b	b

AND PROVINCE: CENSUS YEARS 1960, 1970 AND 1975

1970			1975		
Male	Female	Males per 100 females	Male	Female	Males per 100 females
<u>18,250,351</u>	<u>18,434,135</u>	99.0	<u>21,276,224</u>	<u>20,794,436</u>	102.3
<u>1,921,912</u>	<u>2,044,783</u>	94.0	<u>2,430,213</u>	<u>2,539,793</u>	95.7
641,656	689,132	93.1	723,091	756,025	95.6
134,947	139,506	96.7	197,756	199,445	99.1
99,695	106,588	93.5	125,234	129,765	96.5
358,817	395,635	90.7	459,081	497,783	92.2
22,248	23,484	94.7	39,582	42,028	94.2
125,806	139,112	90.4	158,880	175,568	90.5
69,786	71,728	97.3	87,127	87,751	99.3
73,215	76,192	96.1	88,732	93,535	94.9
56,118	57,282	98.0	82,852	85,601	96.8
37,329	27,728	134.6	52,110	42,453	122.7
41,544	41,701	99.6	48,912	48,186	101.5
46,581	50,633	92.0	75,525	83,449	90.5
76,756	79,736	96.3	103,870	106,045	97.9
12,492	12,976	96.3	16,386	16,435	99.7
49,815	54,744	91.0	58,158	64,334	90.4
27,183	28,074	96.8	36,852	36,850	100.0
47,924	50,532	94.8	76,065	74,540	102.0
<u>1,470,633</u>	<u>1,519,928</u>	96.8	<u>1,636,953</u>	<u>1,632,438</u>	100.3
71,890	73,618	97.7	74,493	72,517	102.7
130,673	132,877	98.3	153,667	148,398	103.6
167,210	176,217	94.9	185,548	186,176	99.7
186,874	198,265	94.3	208,262	211,514	98.5
182,746	190,936	95.7	207,009	207,626	99.7
45,898	47,214	97.2	47,211	46,885	100.7
685,342	700,801	97.8	760,763	759,322	100.2
<u>853,783</u>	<u>837,676</u>	101.9	<u>990,757</u>	<u>942,420</u>	105.1
5,641	5,757	98.0	5,990	5,880	101.9
292,630	288,607	101.4	329,120	314,955	104.5
45,086	47,401	95.1	52,611	52,096	101.0
329,055	319,068	103.1	377,325	353,061	106.9
68,541	67,708	101.2	83,489	79,736	104.7
112,830	109,135	103.4	108,022	105,129	102.8
b	b	b	34,200	31,563	108.4

SEX RATIO OF THE POPULATION, BY REGION

Region/province	1960		
	Male	Female	Males per 100 females
Region 3	1,263,869	1,261,510	100.2
Bataan	74,032	71,291	103.8
Bulacan ¹	255,235	259,111	98.5
Nueva Ecija	305,358	303,004	100.8
Pampanga	308,304	308,955	99.8
Tarlac	214,467	212,180	101.1
Zambales	106,473	106,969	99.5
Region 4	1,559,013	1,522,214	102.4
Aurora (Sub-province)	c	c	c
Batangas	337,570	343,844	98.2
Cavite	188,125	190,013	99.0
Laguna	237,557	234,507	101.3
Marinduque	57,940	56,646	102.3
Occidental Mindoro	44,013	40,303	109.2
Oriental Mindoro	117,604	111,394	105.6
Palawan	87,232	75,437	115.6
Quezon	335,888	317,538	105.8
Romblon	65,261	66,397	98.3
Rizal	87,823	86,135	102.0
Region 5	1,207,138	1,155,569	104.5
Albay	260,561	254,419	102.4
Camarines Norte	97,459	90,632	107.5
Camarines Sur	419,423	400,142	104.8
Catanduanes	79,839	76,490	104.4
Masbate	170,384	165,587	102.9
Sorsogon	179,472	168,299	106.6
Region 6	1,545,946	1,532,359	100.9
Aklan	110,919	115,313	96.2
Antique	117,666	120,739	97.5
Capiz	156,855	158,224	99.1
Guimaras (Sub-Province)	d	d	d
Iloilo	477,698	488,568	97.8
Negros Occidental	682,808	649,515	105.1

AND PROVINCE: CENSUS YEARS 1960, 1970 AND 1975 (continued)

1970			1975		
Male	Female	Males per 100 females	Male	Female	Males per 100 females
<u>1,790,117</u>	<u>1,825,379</u>	98.1	<u>2,125,706</u>	<u>2,084,430</u>	102.0
108,617	107,593	101.0	134,138	129,131	103.9
358,457	379,518	94.5	453,210	446,319	101.5
424,301	426,993	99.4	481,654	466,341	103.3
449,410	457,865	98.2	524,942	517,222	101.5
279,526	280,182	99.8	324,315	316,584	102.4
169,806	173,228	98.0	207,447	208,833	99.3
<u>2,222,196</u>	<u>2,234,812</u>	99.4	<u>2,651,509</u>	<u>2,562,334</u>	103.5
c	c	c	c	c	c
453,956	472,352	96.1	519,793	512,216	101.5
256,559	263,621	97.3	313,378	314,943	99.5
344,319	355,417	96.9	405,160	398,590	101.6
72,475	71,634	101.2	82,912	79,892	103.8
74,211	69,821	106.3	97,410	88,377	110.2
166,345	162,019	102.7	199,657	189,087	105.6
123,962	112,673	110.0	158,628	141,437	112.2
494,439	488,885	101.1	573,336	542,626	105.7
82,187	84,895	96.8	91,941	90,268	101.9
153,743	153,495	100.2	209,294	204,898	102.1
<u>1,495,394</u>	<u>1,471,487</u>	101.6	<u>1,631,505</u>	<u>1,562,216</u>	104.4
339,698	334,283	101.6	371,535	357,292	104.0
133,805	128,402	104.2	148,611	139,795	106.3
475,842	472,594	100.7	521,690	502,129	103.9
82,104	80,198	102.4	88,412	84,368	104.8
247,148	245,760	100.6	270,806	262,581	103.1
216,797	210,250	103.1	230,451	216,051	106.7
<u>1,778,857</u>	<u>1,839,469</u>	96.7	<u>2,089,470</u>	<u>2,056,920</u>	101.6
128,532	134,826	95.3	147,163	146,186	100.7
140,622	148,550	94.7	155,436	153,048	101.6
191,526	202,515	94.6	224,352	221,364	101.3
d	d	d	d	d	d
572,684	595,289	96.2	658,462	654,587	100.6
745,493	758,289	98.3	904,057	881,735	102.5

SEX RATIO OF THE POPULATION, BY REGION

Region/province	1960		
	Male	Female	Males per 100 females
Region 7	<u>1,246,044</u>	<u>1,276,758</u>	97.6
Bohol	289,429	302,765	95.6
Cebu	654,280	678,567	96.4
Negros Occidental	302,335	295,426	102.3
Siquijor (Sub-Province)	e	e	e
Region 8	<u>1,034,249</u>	<u>1,006,717</u>	102.7
Biliran (Sub-Province)	f	f	f
Leyte	590,257	582,715	101.3
Southern Leyte	f	f	f
Eastern Samar	g	g	g
Northern Samar	443,992	424,002	104.7
Western Samar	g	g	g
Region 9	<u>697,571</u>	<u>653,160</u>	106.8
Basilan	h	h	h
Sulu	167,081	159,817	104.5
Tawi-tawi	i	i	i
Zamboanga del Norte	144,184	137,245	105.1
Zamboanga del Sur	386,306	356,098	108.5
Region 10	<u>747,093</u>	<u>715,268</u>	104.4
Agusan del Norte	140,345	130,665	107.4
Agusan del Sur	j	j	j
Bukidnon	101,641	92,727	109.6
Camiguin	k	k	k
Misamis Occidental	125,126	123,245	101.5
Misamis Oriental	199,032	189,583	105.0
Surigao del Norte	180,949	179,048	101.1
Region 11	<u>468,994</u>	<u>424,029</u>	110.6
Surigao del Sur	l	l	l
Davao del Norte	m	m	m
Davao Oriental	m	m	m
Davao del Sur	468,994	424,029	110.6
South Cotabato	n	n	n

AND PROVINCE: CENSUS YEARS 1960, 1970 AND 1975 (continued)

1970			1975		
Male	Female	Males per 100 females	Male	Female	Males per 100 females
<u>1,486,370</u>	<u>1,546,349</u>	96.1	<u>1,694,131</u>	<u>1,693,143</u>	100.1
333,778	349,519	95.5	378,441	380,929	99.3
796,924	837,258	95.2	905,246	913,164	99.1
355,668	359,572	98.9	375,754	364,663	103.0
e	e	e	34,690	34,387	100.9
<u>1,199,078</u>	<u>1,192,331</u>	101.4	<u>1,328,481</u>	<u>1,271,247</u>	104.5
f	f	f	f	f	f
556,814	553,812	100.5	612,220	590,898	103.6
126,147	125,278	100.7	141,030	135,388	104.2
137,191	133,809	102.5	147,486	139,663	105.6
154,605	151,509	102.0	181,895	172,770	105.3
224,321	217,923	102.9	245,850	232,528	105.7
<u>932,555</u>	<u>936,459</u>	99.6	<u>1,046,853</u>	<u>1,001,029</u>	104.6
h	h	h	87,415	83,612	104.5
209,553	216,064	97.0	121,113	118,888	101.9
i	i	i	73,735	69,752	105.7
205,289	204,090	100.6	252,155	238,360	105.8
517,713	516,305	100.3	512,435	490,417	104.5
<u>984,587</u>	<u>968,148</u>	101.7	<u>1,184,262</u>	<u>1,129,943</u>	104.8
139,680	138,373	100.9	152,757	147,978	103.2
89,914	84,768	106.1	111,461	101,755	109.5
212,271	202,491	104.8	278,057	254,761	109.1
27,122	26,791	101.2	26,823	25,724	104.3
159,302	160,553	99.2	179,589	176,730	101.6
238,062	234,694	101.4	285,432	275,058	103.8
118,236	120,478	98.1	150,143	147,937	101.5
<u>1,1294,33</u>	<u>1,075,793</u>	104.6	<u>1,401,075</u>	<u>1,313,483</u>	106.7
1279,49	128,931	100.6	153,699	148,606	103.4
2331,40	211,203	109.5	309,966	279,731	110.8
1286,78	121,117	104.8	155,044	144,382	107.4
3998,28	386,470	103.2	480,307	455,956	105.3
2308,38	228,072	104.4	302,059	284,808	106.1

SEX RATIO OF THE POPULATION, BY REGION

Region/province	1960		
	Male	Female	Males per 100 females
Region 12	<u>886,432</u>	<u>791,617</u>	112.0
Lanao del Norte	139,737	130,866	106.8
Lanao del Sur	203,644	174,683	116.6
Maguindanao	n	n	n
North Cotabato	543,051	486,068	111.7
Sultan Kudarat	n	n	n

¹Excludes Valenzuela

^aData included in Mountain Province

^bData included in Nueva Vizcaya.

^cData included in Quezon

^dData included in Iloilo

^eData included in Negros Oriental

^fData included in Leyte

^gData included in Northern Samar (formerly Samar)

^hData included in Zamboanga del Sur

ⁱData included in Sulu

^jData included in Agusan del Norte

^kData included in Misamis Oriental

^lData included in Surigao del Norte

^mData included in Davao del Sur

ⁿData included in North Cotabato

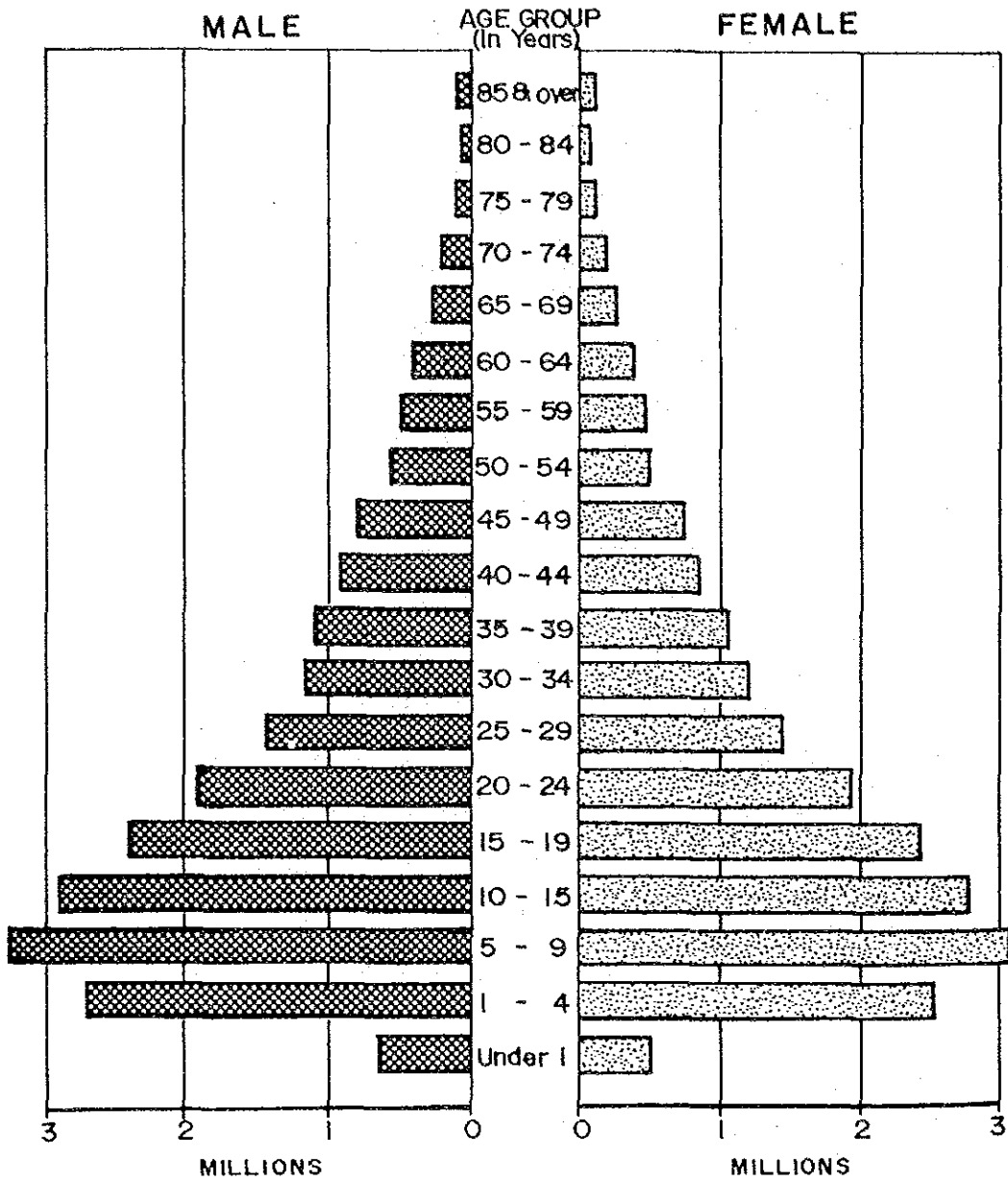
^oData included in South Cotabato

Source: National Census and Statistics Office

AND PROVINCE: CENSUS YEARS 1960, 1970 AND 1975 (continued)

1970			1975		
Male	Female	Males per 100 females	Male	Female	Males per 100 females
989,936	951,521	104.0	1,065,309	1,005,040	106.0
176,448	173,494	101.7	196,098	185,136	105.9
232,644	222,864	104.4	256,153	243,729	105.1
n	n	n	244,704	233,415	104.8
580,844	555,163	104.6	244,535	227,767	107.4
o	o	o	123,819	114,993	107.7

POPULATION BY AGE AND SEX: MAY 1, 1975 CENSUS



**LITERACY OF POPULATION BY SEX FOR URBAN AND RURAL AREAS
AND REGIONS IN THE PHILIPPINES: 1960 AND 1970**
(Figures in percent)

Geographic area	1960 ¹			1970 ²		
	Both sexes	Male	Female	Both sexes	Male	Female
Philippines	72.0	73.6	70.6	76.4	76.9	75.9
Urban	n.a.	n.a.	n.a.	86.6	86.9	86.3
Rural	n.a.	n.a.	n.a.	71.5	72.3	70.6
Region 1 ³	71.5	75.6	67.6	75.1	78.9	73.6
Region 2	71.6	74.2	69.0	71.3	72.6	69.9
Region 3	80.9	83.5	78.5	83.3	84.1	82.5
Region 4	84.0	85.6	82.6	85.2	85.7	84.7
Region 5	75.7	77.2	74.0	77.5	77.8	77.1
Region 6	70.0	70.2	69.9	75.1	74.5	75.7
Region 7	62.8	64.7	61.0	71.9	72.8	71.1
Region 8	65.3	64.6	66.0	69.9	68.5	71.5
Region 9	47.9	50.1	45.5	58.8	60.5	57.2
Region 10	73.4	73.8	73.0	71.9	72.1	71.7
Region 11	59.3	61.7	56.6	68.4	69.8	66.8

¹ Refers to population 10 years old and over.

² Refers to population 6 years old and over.

³ Region 1 includes the provinces of Ifugao and Kalinga - Apayao (for 1960 only).

Source: National Census and Statistics Office, 1960 and 1970 Population Censuses.

INTER-REGIONAL MIGRATION AND GROWTH, PHILIPPINES: 1960-1970
(Population in thousands)

Region	Natural growth	Net migration			Net change
		Both sexes	Male	Female	
1 ^a	787.4	(161.2)	(74.3)	(86.9)	606.2
2	394.6	32.3	24.8	7.5	426.7
3	956.7	190.4	93.4	97.0	1,147.1
4	1,918.7	904.2	434.6	469.6	2,822.9
5	904.9	(300.8)	(146.8)	(154.0)	604.1
6	965.7	(425.6)	(219.5)	(206.1)	540.1
7	749.7	(239.8)	(111.7)	(128.1)	509.9
8	698.4	(358.0)	(165.2)	(192.8)	340.4
9	522.6	(4.3)	(10.2)	5.9	518.3
10	817.7	44.2	21.2	23.0	861.9
11	837.3	318.6	159.2	159.4	1,155.9

^aThe figure includes the provinces of Ifugao and Kalinga-Apayao (both in Region 2).

Source: Net Internal Migration in the Philippines: 1960-1970, National Census and Statistics Office.

REGISTERED ALIENS BY NATIONALITY: 1962-1978

Year	Nationality				
	Total	Chinese	American	Spanish	Hindu
1962	145,829	131,291	7,722	1,600	1,423
1963	135,939	120,027	8,170	1,752	1,404
1964	132,870	117,630	8,049	1,486	1,311
1965	141,586	126,051	8,976	1,404	1,427
1966	131,758	115,501	9,240	1,447	1,487
1967	144,194	126,641	10,067	1,495	1,640
1968	127,659	110,701	10,364	1,292	1,531
1969	134,377	117,864	10,165	1,047	1,512
1970	110,226	94,963	9,554	1,114	1,392
1971	111,811	96,090	9,951	904	1,333
1972	113,243	98,306	9,377	779	1,364
1973	132,608	114,185	11,132	1,020	1,556
1974	122,435	105,453	9,947	780	1,469
1975	108,860	90,401	11,601	757	1,482
1976	104,493	83,144	15,084	583	1,383
1977	82,912	68,195	9,409	484	1,062
1978	62,401	50,306	8,353	295	882

Year	Nationality				
	British	German	Belgian	Mixed nationalities	Stateless
1962	724	540	331	2,143	55
1963	612	526	377	3,013	58
1964	571	511	344	2,917	51
1965	647	536	226	2,261	58
1966	653	526	331	2,502	71
1967	643	580	312	2,770	46
1968	678	512	328	2,213	40
1969	676	517	346	2,216	34
1970	499	462	274	1,939	29
1971	595	487	289	2,135	27
1972	528	462	307	2,094	26
1973	933	531	299	2,907	45
1974	843	441	277	3,191	34
1975	975	417	243	2,932	52
1976	1,160	347	187	2,573	32
1977	874	282	172	2,421	13
1978	745	197	150	1,471	2

Source: Commission on Immigration and Deportation

VITAL, HEALTH, AND NUTRITION STATISTICS

Number of Regional Marriages and Rate by Region: 1957, 1962,
1967 to 1977

Number of Registered Marriages by Region: 1968-1977

Live Births, Total Deaths, Deaths under 1 year, Maternal Death
and Foetus Deaths: 1948, 1953, 1958, 1963, 1968 to 1977

Number of Registered Live Births and Rate by Region: 1953,
1958, 1963, 1968 to 1977

Number of Registered Deaths and Rate by Region: 1953, 1958, 1963,
1968 to 1977

Mortality: All causes by Age and Sex and by Region: 1977

Number and Percent Distribution of Registered Deaths by Age
and Sex: 1977

Number and Percent Distribution of Ten Leading Causes of Death:
1977

Infant Mortality: Ten Leading Causes, Number and Rate per 1,000
Live Births and Percentage Distribution, 1971-1975 and 1976

Number of Registered Infant Mortality under One Region: 1953-
1977

Live Births and Total Deaths: 1968-1978

Mortality: Ten Leading Causes, Number and Crude Death Rates,
1971-1975 and 1976

Expectation of Life at Birth in the Philippines: 1902-1980

Government and Private Hospitals, Number and Bed Capacity:
FY 1963-64 - 1968-69 to CY 1980

Daily Per Capita Available Food Supply, Philippines: 1956,
1961, 1966 to 1976

Daily Per Capita Available Food Supply, Philippines: 1966-1976

Calorie and Nutrient Values by Daily Per Capita Available Food
Supply, Philippines, 1956, 1961, 1966 to 1976

Food Consumption, National and by Area, 1978

Nutritional Status of Children Six Years and Below: 1978

Number of Acceptors by Method of Family Planning: 1977-1980

VITAL, HEALTH, AND NUTRITION STATISTICS

This chapter is concerned with vital, health and nutrition statistics among which are data on births, deaths, foetal and stillbirths, diseases, hospitals, net available food supply etc.

Statistics on births and deaths are compiled by the Disease Intelligence Center (DIC) of the Ministry of Health and the National Census and Statistics Office (NCSO). The DIC publishes in its annual report the *Philippine Health Statistics* such data as the number and rate of total births, deaths, infant and maternal mortality by region, province or city; infant mortality by cause of death, age and sex, by region; and, maternal mortality by main causes and by region.

The National Census and Statistics Office presents data on births by month and by place of birth, classified by sex, legitimacy, order of birth, age of mother, nationality of parents, and attendance at birth. Data on deaths are presented by month and by place of death, classified by cause of death, age, sex, civil status, occupation and nationality of the deceased. Statistics on foetal deaths are tabulated showing number of foetal deaths by month and by place of death, classified by order of birth, age of mother, period of gestation and weight at birth.

Also compiled by the Office are data on marriages showing tabulations by month and by place of occurrence, classified by age and by previous marital status of bride and groom and by type of ceremony. These vital statistics are published in the NCSO annual publication, the *Vital Statistics Report* and quarterly *Journal of Philippine Statistics*.

Other government agencies under the Ministry of Health which compile medical services and health statistics are the Bureau of Medical Services, the Bureau of Dental Services and the Bureau of Quarantine. Such important characteristics as the number of hospital and hospital beds, by type of institution, etc. are compiled by these bureaus by province and by health region.

Statistics on the average daily per capita net available food supply by type of food, and the calorie and nutrient value of the total per capita daily food supply are also presented in the chapter. These data provide a basis for assessing the adequacy of food intake measured in terms of food availability as against nutritional requirements, and are prepared and published by the National Accounts Staff, Statistical Coordination Office of the NEDA.

NUMBER OF REGISTERED MARRIAGES AND
(Rate per

Year	Philippines		National Capital Region		Region 1		Region 2		Region 3		Region 4		Region 5	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1957	122,182	4.9	a		12,443	5.0	5,598	6.0	14,477	6.1	30,838 ^b	6.2	8,854	4.0
1962	156,817	5.4	a		14,812	5.8	6,212	4.8	18,493	6.6	41,439 ^b	6.8	12,675	5.1
1967	189,897	5.6	a		16,894	6.0	6,756	4.4	25,003	7.4	51,793 ^b	7.0	13,264	4.8
1968	210,520	6.1	a		18,000	6.2	8,828	5.5	27,206	7.8	60,912 ^b	7.9	12,675	4.4
1969	231,202	6.5	a		19,279	6.6	8,609	5.2	29,805	8.3	67,647 ^b	8.4	15,413	5.3
1970	255,873	6.9	a		20,111	6.7	9,707	5.7	30,542	8.2	78,928 ^b	9.4	16,828	5.6
1971	252,731	6.7	a		21,800	7.1	10,000	5.7	31,563	8.2	71,893 ^b	8.3	16,384	5.4
1972	248,261	6.4	a		21,008	6.7	11,143	6.2	30,754	7.7	71,826 ^b	8.0	15,137	4.9
1973	263,338	6.6	a		21,490	6.8	9,947	5.4	31,621	7.7	74,223 ^b	8.0	20,307	6.5
1974	287,984	7.0	a		21,485	6.8	11,429	6.1	33,078	7.8	76,495 ^b	7.9	22,495	7.1
1975	299,514	7.1	a		22,323	6.7	13,304	6.9	37,020	8.5	83,676 ^b	8.3	21,707	6.8
1976	303,988	7.0	47,456	8.6	24,563	7.2	12,940	6.5	36,480	7.9	40,638	8.1	20,696	6.2
1977	324,466	7.3	51,661	9.0	24,954	7.2	14,976	7.2	39,478	8.3	44,493	8.6	21,312	6.3

^aIncluded in Region 4.

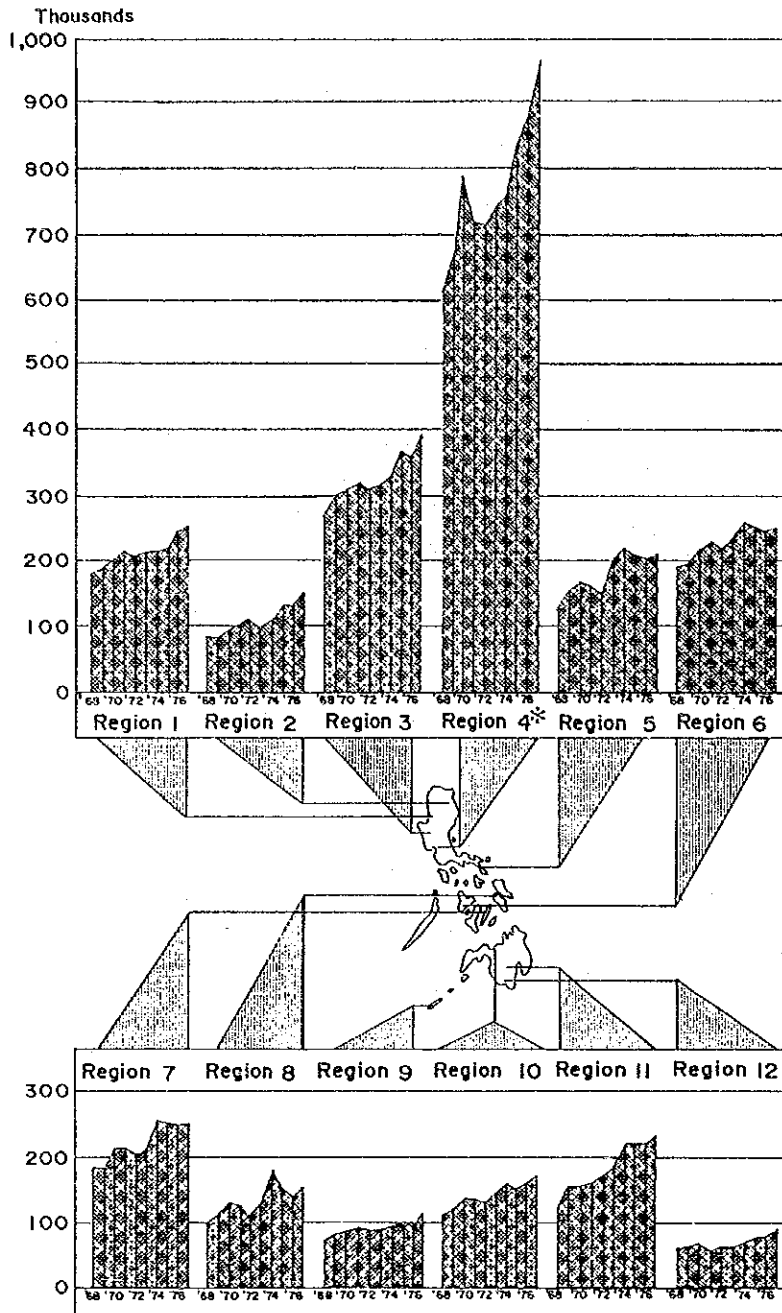
^bIncluding National Capital Region.

Source: National Census and Statistics Office.

RATE BY REGION: 1957, 1962, 1967 TO 1977
 1,000 population)

Region 6		Region 7		Region 8		Region 9		Region 10		Region 11		Region 12	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
10,799	3.7	11,699	4.8	6,596	3.3	4,109	3.5	7,214	6.1	5,124	5.8	4,432	3.1
13,108	4.1	16,842	6.4	9,147	4.3	5,274	3.6	7,373	5.2	6,456	4.3	4,986	3.3
16,789	4.8	16,791	5.8	9,038	4.0	6,720	3.9	10,225	5.9	9,179	4.8	7,445	4.2
19,245	5.5	17,946	6.1	9,615	4.1	6,926	3.6	11,003	6.1	12,460	6.2	5,704	3.1
19,752	5.5	17,998	6.0	10,630	4.5	8,037	4.4	12,058	6.4	15,743	7.4	6,231	3.3
21,776	6.0	20,912	6.9	12,899	5.4	8,349	4.4	13,733	7.0	15,370	7.0	6,718	3.4
23,095	6.3	21,425	6.9	12,510	5.2	8,969	4.6	13,509	6.6	15,798	6.8	5,785	2.9
22,352	6.0	20,542	6.5	10,521	4.3	8,361	4.2	13,080	6.2	17,204	7.1	6,333	3.0
23,940	6.3	21,280	6.6	13,121	5.3	8,432	4.1	14,544	6.6	18,297	7.2	6,136	2.8
25,936	6.8	25,574	7.8	17,558	7.1	8,987	4.2	16,014	6.9	22,166	8.3	6,767	3.0
26,633	6.4	25,391	7.5	15,046	5.8	9,738	4.8	15,174	6.6	22,063	8.1	7,439	3.6
27,567	6.9	24,922	7.2	13,693	5.3	9,058	3.9	15,859	6.2	22,295	7.5	7,821	3.2
26,468	6.5	25,256	7.1	15,111	5.8	11,310	4.7	17,183	6.4	23,277	7.4	8,987	3.5

NUMBER OF REGISTERED MARRIAGES BY REGION 1968-1977



* Including National Capital Region

**LIVE BIRTHS, TOTAL DEATHS, DEATHS UNDER 1 YEAR,
MATERNAL DEATHS AND FOETAL DEATHS: 1948, 1953, 1958, 1963, 1968 to 1977**

Year	Births		Total deaths		Deaths under 1 yr.		Maternal deaths		Foetal deaths	
	Number	Crude rate ¹	Number	Crude rate ¹	Number	Rate ²	Number	Rate ²	Number	Rate ²
1948	602,415	31.5	234,467	12.2	68,897	114.4	2,468	4.1	n.a.	n.a.
1953	661,939	29.8	239,988	10.8	69,729	105.3	2,397	3.6	n.a.	n.a.
1958	766,562	29.7	218,186	8.5	61,335	80.0	2,235	2.9	9,012	11.8
1963	786,698	26.3	214,412	7.2	57,308	72.8	1,783	2.3	12,045	15.3
1968	898,570	25.9	261,893	7.5	63,786	71.0	1,979	2.2	12,835	14.3
1969	946,753	26.5	241,678	6.8	63,719	67.3	2,047	2.2	11,496	12.1
1970	966,762	26.2	234,038	6.4	57,970	60.0	1,950	2.0	12,561	13.0
1971	963,749	25.5	250,139	6.6	59,730	62.0	1,261	1.3	12,969	13.5
1972	968,385	24.9	285,761	7.3	65,719	67.9	1,379	1.4	13,577	14.0
1973	1,049,290	26.3	283,475	7.1	67,881	64.7	1,488	1.4	10,808	10.3
1974	1,081,073	26.3	283,975	6.9	63,491	58.7	1,690	1.7	13,451	12.4
1975	1,223,837	29.1	271,136	6.4	65,263	53.3	1,753	1.4	13,764	11.2
1976	1,314,860	30.3	299,861	6.9	74,792	56.9	1,862	1.4	14,865	11.3
1977	1,344,836	30.1	308,904	6.9	76,330	56.8	1,909	1.4	14,589	10.8

¹Per 1,000 population.

²Per 1,000 live births.

Sources: Disease Intelligence Center, Ministry of Health, CY 1948-59.
National Census and Statistics Office, CY 1960-77.

NUMBER OF REGISTERED LIVE
1953, 1958, 1963,

Year	Philippines		National Capital Region		Region 1		Region 2		Region 3		Region 4		Region 5	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1953	661,938	29.8	a		78,608	34.6	34,586	42.9	70,157	32.8	157,117 ^b	36.3	59,267	30.6
1958	766,562	29.7	a		86,522	34.4	38,654	39.6	82,866	33.7	194,515 ^b	37.5	68,237	30.3
1963	786,698	26.3	a		87,637	33.6	36,999	27.4	88,292	30.4	244,136 ^b	38.7	60,689	23.8
1968	898,570	25.9	a		87,770	30.4	45,597	28.6	108,113	31.1	275,164 ^b	35.7	66,444	23.3
1969	946,753	26.5	a		93,384	31.7	48,534	29.5	116,668	32.4	281,769 ^b	35.0	73,440	25.2
1970	966,762	26.2	a		94,644	31.5	48,590	28.6	113,881	30.5	288,997 ^b	34.6	74,048	24.8
1971	963,749	25.5	a		97,234	31.8	51,093	29.4	113,008	29.3	290,958 ^b	33.6	71,918	23.8
1972	968,385	24.9	a		96,026	30.8	51,105	28.7	115,311	29.0	290,100 ^b	32.3	76,801	25.0
1973	1,049,290	26.3	a		97,723	30.8	55,679	30.5	120,072	29.3	303,370 ^b	32.6	87,206	27.9
1974	1,081,073	26.3	a		95,964	29.7	55,385	29.6	121,159	28.6	301,081 ^b	31.3	88,882	28.0
1975	1,223,337	29.1	a		100,606	30.6	64,128	33.2	138,770	31.7	318,680 ^b	31.8	103,202	32.5
1976	1,314,860	30.1	181,590	33.6	107,745	32.3	67,594	32.9	150,245	33.4	174,543	35.5	107,701	33.1
1977	1,344,836	30.3	198,018	35.2	108,433	32.0	68,068	33.9	141,714	30.5	175,847	34.8	105,418	31.9

Note: Low assumption projection in population is used.

^aIncluded in Region 4.

^bIncluding National Capital Region.

Source: National Census and Statistics Office.

**BIRTHS AND RATE BY REGION:
1968 TO 1977**

Region 6		Region 7		Region 8		Region 9		Region 10		Region 11		Region 12	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
59,585	21.6	76,086	33.2	47,890	25.4	13,444	13.9	30,797	29.2	21,927	33.1	12,474	11.6
63,216	21.1	76,551	31.0	54,702	27.3	16,600	13.3	40,017	32.6	27,615	29.2	17,067	11.3
44,583	13.7	80,454	29.9	28,329	13.2	18,639	12.4	36,310	24.5	37,957	23.8	22,673	14.6
55,003	15.6	86,139	29.3	34,931	15.1	21,151	12.0	42,052	23.2	55,188	27.3	21,018	11.5
55,031	15.4	90,670	30.3	37,885	16.1	22,475	12.3	44,219	23.4	61,177	28.9	21,501	11.4
52,321	14.4	91,062	29.9	39,103	16.3	24,208	12.9	47,619	24.3	68,277	30.9	24,012	12.3
55,337	15.0	92,216	29.7	37,028	15.3	23,984	12.4	48,229	23.6	61,861	26.7	20,883	10.4
56,257	15.1	88,584	28.0	34,542	14.2	21,355	10.6	49,500	23.3	67,946	28.0	20,858	10.0
65,977	17.5	94,244	29.2	41,208	16.7	23,861	11.5	56,499	25.5	78,440	30.9	25,011	11.6
76,441	20.0	93,359	28.4	46,150	18.6	29,779	13.9	63,372	27.5	82,546	31.0	26,955	12.1
99,771	24.1	104,699	30.9	52,397	20.2	37,388	18.3	74,506	32.2	95,523	35.2	33,667	16.3
107,022	25.0	108,395	31.2	55,036	19.8	39,818	18.8	76,845	32.1	100,946	35.7	37,380	17.6
107,773	27.4	108,053	31.3	55,885	21.9	47,668	20.3	82,388	31.8	105,781	34.8	39,790	16.2

NUMBER OF REGISTERED
1953, 1958, 1963,
(Rate per 1,000)

Year	Total Philippines		National Capital Region		Region 1		Region 2		Region 3		Region 4		Region 5	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1953	239,988	10.8	a		27,348	12.0	12,839	15.9	26,532	12.4	48,871 ^b	11.3	21,204	11.0
1958	218,186	8.5	a		23,543	9.4	11,502	11.8	22,890	9.3	44,797 ^b	8.6	18,963	8.4
1963	214,412	7.2	a		20,970	8.0	10,957	8.1	20,240	7.0	50,663 ^b	8.0	19,863	7.8
1968	261,893	7.5	a		24,270	8.4	13,104	8.2	25,526	7.3	66,590 ^b	8.6	22,451	7.9
1969	241,678	6.8	a		22,035	7.5	12,692	7.7	23,357	6.5	61,674 ^b	7.7	19,806	6.8
1970	234,038	6.4	a		22,441	7.5	11,211	6.6	23,163	6.2	61,235 ^b	7.3	19,507	6.5
1971	250,139	6.6	a		24,246	7.9	12,491	7.2	24,021	6.2	66,831 ^b	7.7	22,314	7.4
1972	285,761	7.3	a		27,260	8.8	14,606	8.2	28,260	7.1	76,256 ^b	8.5	24,108	7.8
1973	283,475	7.1	a		26,334	8.3	15,768	8.6	26,831	6.5	67,964 ^b	7.3	27,978	9.0
1974	283,975	6.9	a		26,267	8.1	15,403	8.2	26,830	6.3	71,416 ^b	7.4	24,702	7.8
1975	271,136	6.4	a		25,008	7.6	14,234	7.4	26,647	6.1	68,239 ^b	6.8	23,311	7.3
1976	299,861	6.9	42,003	7.8	24,972	7.5	14,936	7.3	27,068	6.2	38,385	7.8	25,551	7.9
1977	308,904	7.0	49,770	8.9	25,876	7.6	14,181	7.1	28,190	6.1	38,408	7.6	26,738	8.1

^aIncluded in Region 4.

^bIncluding National Capital Region.

Source: National Census and Statistics Office.