EM/RC32/7(PART I)

EVALUATION OF THE STRATEGY FOR HEALTH FOR ALL BY THE YEAR 2000

SEVENTH REPORT ON THE WORLD HEALTH SITUATION

VOLUME 6. EASTERN MEDITERRANEAN REGION

in two parts

PART I. REGIONAL EVALUATION

DRAFT FOR CONSIDERATION BY THE THIRTY-SECOND SESSION OF THE REGIONAL COMMITTEE

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE EASTERN MEDITERRANEAN
1985

WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean

منظمة الصحة العالمية
المكتب الإقليمي لشرق البحر المتوسط

ORGANISATION MONDIALE DE LA SANTE
Bureau régional de la Méditerranée orientale

EM/RC32/7 (Part I) Addendum 1
30 September 1985

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IMPORTANT CHANGES TO DATA IN THE LIGHT OF ADDITIONAL INFORMATION RECEIVED

Page I-7, line 1: *referring to total Regional population*

For 296 million by 1983-84, read 297 million by 1984,

Page I-7, para.2, line 4: *referring to rate of natural increase*

For 2.8%, read 2.99%,

Page I-11, para.2, line 1: *referring to unemployment rates*

For from zero to over 7% read from zero to 17%

Page I-11, para.5, lines 4 & 5: *referring to adult literacy rate*

For four countries read two countries
For 2.4% read 1.1%

continued overleaf

Page I-21, para.6, line 6: *referring to deliveries in institutions*

For 35%. read 15%.

Page I-32, para.2, lines 4 & 5: *referring to proportion of GNP spent on health*

For five countries read four countries
Delete Islamic Republic of Iran,

Page I-34, para.3, lines 2 & 3: *referring to percentage of population covered by local health care*

For 68% read 59%
For 97% read 93%

Page I-55, para.4, line 1: *referring to PHC coverage*

For ten countries read eleven countries

Final updating and the appropriate changes in the tables and figures will be made in the copy of the report to be submitted to the Executive Board and the World Health Assembly.

ERRATA

Page I-21, para.6, line 5:

For institutions read institutional

Page I-27, para.4, line 3:

For Palestinian read Palestine

Page I-46, para.5, line 3:

For per 1000 of the population read per 1000 live births

0532A/pf

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REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN

Thirty-second Session

Agenda item 9

EM/RC32/7(PART I)
12 August 1985

ORIGINAL: ENGLISH

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CONTENTS TO PART I

P R E F A C E

I take great pleasure in submitting to the Thirty-second Session of the Regional Committee the report on the Evaluation of the Strategies for Health for All by the Year 2000 for the Eastern Mediterranean Region.

The last five years have been unique in the history of public health, not only for this Region but for the world as a whole. The nations have made a serious commitment to provide a reasonable level of health for all their citizens by the year 2000, and they have begun to transform their health delivery systems and services to accomplish this noble goal.

Constant vigilance is required to maintain our progress towards that goal. Hence the nations have agreed to monitor progress and to evaluate the implementation of their strategies, individually and collectively, at regular periods.

Evaluation is but an organized way of learning from experience. When applied to public health, the purpose must be to improve the delivery of national health and health-related services through adjustments in strategy, adaptation of health infrastructures and allocation of resources. Like the managerial process for national health development in general, it has to be supported by a sufficiency of valid, relevant and sensitive information. However, evaluation must never become an end in itself - it must lead to action that raises the quality, efficiency and effectiveness of the services that are being evaluated.

Considerable preparatory work was undertaken in the Region by Member States and by the Regional Office before the final evaluation was undertaken using the Common Framework and Format. I am glad to put on record the unremitting cooperation extended by Member States in carrying out this challenging task. Above all, however, these efforts have kindled in Member States an understanding of how and why this process of evaluation, now on a more systematic basis, forms an essential part of the national managerial process for national health development. Indeed, a number of countries have followed up by establishing formal national mechanisms for this process, so that it can be used continuously to their own advantage.

I am aware of the fluctuating fortunes of Member States in the Region in the recent past and at present. Civil strife and armed conflicts have led to widespread socio-economic stagnation, if not decline, with serious consequences to health development. Natural disasters or political tragedies have resulted in migration of populations, and this has thrown excessive burdens on the health services and resources of host countries.

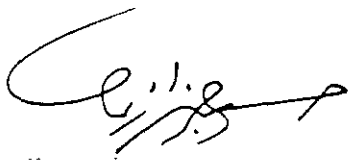
Nevertheless, seen overall, significant progress in health development has been and is being made in the Region. A number of countries have

already attained full coverage of their populations with basic health facilities. In others, the health services are being continuously extended to serve more rural and remote areas, and the gap between the served and underserved is steadily narrowing.

The response of Member States to the call for evaluation has been gratifying. They have been clear and candid in the appraisal of their shortcomings as well as of their achievements. In particular, the resulting report highlights the areas in which the collaborative efforts of the Organization and the Member States will have to be modified or intensified in order to reach our common goal. The resolute spirit in which such cooperation is already being undertaken augurs well for the future.

Just as each nation requires the evaluation process to be able to assess its own health situation, so the regional offices require the national data to prepare regional assessments - the bases for the Organization's global report, Evaluation of the Strategies for Health for All by the Year 2000: Seventh Report on the World Health Situation. Let us remember that these various assessments will serve to mould national, regional and global policies and programmes so that they address real needs, the basis for a coordinated advance towards HFA/2000.

Let me close by expressing my warm appreciation to the Member States of the Region for the excellent way in which they have participated, thus making possible the preparation of this report.



Hussein A. Gezairy, M.D., F.R.C.S.

Regional Director for
the Eastern Mediterranean

PART I

REGIONAL EVALUATION

INTRODUCTION

The Global Strategy to achieve the goal of Health for All by the Year 2000 (HFA/2000) was adopted by the World Health Assembly (WHA) in 1981 [resolution WHA34.36]. It invites Member States to "formulate or strengthen, and implement, their strategies for health for all ....., and to monitor their progress and to evaluate their effectiveness, using appropriate indicators to this end". The Plan of Action for Implementing the Global Strategy was adopted one year later [resolution WHA35.23]. The Plan of Action[1] requires the governing organs of WHO to monitor progress in implementing the regional/global strategies every two years and to evaluate the effectiveness of these strategies every six years. Evidently, the governing organs cannot execute this responsibility without reports on monitoring and evaluation undertaken at the country level.

In accordance with the Plan of Action, Member States informed WHO about the first results of their monitoring early in 1983. The first review of progress in the Eastern Mediterranean Region was carried out by Sub-Committee A of the Thirtieth Session of the Regional Committee in Amman, Jordan, in 1983, and this was passed on for consideration by the Executive Board and WHA in 1984. Similarly, this first evaluation of the strategies, after being reviewed by the Thirty-second Session of the Regional Committee in 1985, will be considered by the Executive Board and WHA in 1986. The results of the global evaluation will be available before the Executive Board embarks on the preparation of the Organization's Eighth General Programme of Work (1990-1995), to be submitted for approval by the WHA in 1987.

To assist the countries in carrying out monitoring and evaluation, and the periodic reporting on the outcomes to the Organization, Common Frameworks and Formats were prepared by WHO, one for monitoring [WHO document DGO/82.1] and the other for evaluation [WHO document DGO/84.1].

Following experience in Member States of the Eastern Mediterranean Region of the monitoring process, and appreciating the value of "learning by doing", it was decided to field-test the evaluation process and the appropriate framework and format, and to disseminate the outcome to Member States. Kuwait and Yemen were selected for the purpose, being widely different in their demographic and socio-economic characteristics, and in their health statuses and health systems. Officials designated by governments of the Region as the national focal points were invited to participate in an inter-country group meeting that was held in Nicosia, Cyprus, in 1984. Its main objectives were to consider the field-testing experience of the Evaluation Framework in Kuwait and Yemen (the reports were distributed to all participants), to clarify issues relating to the national evaluation process and to brief participants regarding the subsequent reporting to WHO.

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[1] Plan of Action for Implementing the Global Strategy for Health for All, Health for All Series No.7, WHO, Geneva (1982) p.19.

Senior nationals from two countries (Djibouti and Sudan) who had not been able to attend the Nicosia meeting visited the Regional Office for briefing. A similar briefing was offered to all WHO Representatives and Programme Coordinators and Regional Office staff so that they would be able to offer effective support to countries if called upon. Many Member States did, in fact, seek help in carrying out their evaluations and preparing their reports and, in certain cases, staff from the Regional Office were dispatched to assist national focal points.

Most countries of the Region had set up one or other mechanism to monitor and evaluate their strategies. In some, it takes the form of a permanent structural unit, either independent and charged with "follow-up and evaluation" or, more frequently, forming an integral part of "planning". In others, the functions are the responsibility of a permanent or even an ad-hoc committee. This function is, of course, undertaken without prejudice to the internal programme evaluations carried out by individual programme managers as part of their normal management procedures. It was these units or committees, supported by nationals briefed by WHO, that prepared the data and reports transmitted to WHO.

The present report is based primarily on the results of the national evaluations. However, other official national reports, as well as published data and data derived from reports of UN agencies, served as sources of additional information.

The present report considers broadly the progress made by the Member States of the Eastern Mediterranean Region in the implementation of their HFA strategies, the successes achieved and the obstacles encountered, as well as the implications of the experience gained so far. It will serve to chart the future course of health development in the Region.

It should be noted that a certain amount of overlap and partial repetition could not be avoided in the presentation of the data, since some topics have to be examined from different angles.

CHAPTER 1

MAJOR DEVELOPMENTS IN SOCIO-ECONOMIC SECTORS AFFECTING THE HEALTH STATUS OF THE POPULATION

SECTION 1.1. THE REGIONAL DEVELOPMENT SCENARIO

Member States of the WHO Eastern Mediterranean Region share many common features relating to ethnic origin, language, religion, political temperament, social values and customs. Hence many aspects of social behaviour and mores affecting the health of individuals and communities follow similar patterns in the different countries. The most commonly spoken language is Arabic, and the most widespread religion is Islam.

The politico-institutional background of the Region has undergone a series of changes, in particular during the last three decades, and widely different political systems and political institutions are to be found. Furthermore, the countries differ considerably in their socio-economic development.

At one end of the spectrum there are the politically very stable and rich countries. One feature of these States is that the stability of the system of government has made possible steady and well coordinated socio-economic development. Another feature is their dependence on expatriate manpower in all fields of development. However, serious steps are now being taken to promote national self-reliance through providing intensive training for nationals, locally and abroad.

In the middle of the spectrum there are stable but less rich countries that have been able to sustain reasonable socio-economic advancement, while at the other end are the poorly endowed and the less stable countries, which have fared the least well.

The main sources of income in the Region are agriculture, oil production, industry and tourism, although the distribution of each varies widely. Despite the wealth of resources, the unsettled political situation, the ideological differences, and the chronic levels of armed conflict and civil strife prevailing in the Region severely hamper national development. In particular, rising military expenditure in a number of countries, against a background of economic recess deriving from falling oil prices, does not provide the atmosphere necessary for smooth and unfettered progress.

SECTION 1.2. DEMOGRAPHIC TRENDS

1.2.1. Population size

The Region has witnessed significant demographic changes during the past decade. The total population, about 194 million in 1970, had soared

TABLE I. WHO EASTERN MEDITERRANEAN REGION: DEMOGRAPHIC AND SOCIO-ECONOMIC INFORMATION

Item	Measure (rate, proportion, etc.)			Estimated
	Regional average	Range	C	Regional total (millions)
Surface area (sq.km)		685-2 505 000	22:	13.010
Total population		280 000-94 720 000	22:	296.199
Population density (per sq.km)	22.8	2.1-612	22:	
Urban population	38.6%	11-91%	22:	114.333
Rural and nomadic population	61.4%	9-89%	22:	181.866
Population by age and sex:				
Below 5 years	16%	10-20%	22:	47.392
Below 15 years	44%	25-52%	22:	130.328
15 years and over	56%	48-75%	22:	165.871
65 years and over	4%	1-10%	22:	11.848
Males :Total	51%	50-69%	22:	151.061
15 years and over	52%	48-76%	15:	86.253
Females:Total	49%	31-50%	22:	145.138
15 years and over	48%	24-52%	15:	79.618
Net increase	2.9%	0.0-6.4%	22:	8.590
Natural increase	2.9%	1.3-3.9%	22:	8.590
Live-births	41.8‰	20.7-50.0‰	22:	12.381
Total deaths	13.4‰	2.5-29.0‰	22:	3.969
Child (1-4 years) mortality	17.5‰	0.3-38.0‰	17:	0.635
Deaths below 5 years	33.4%	5.0-50.0%	17:	1.326
Life expectancy at births: M	54.6 yr	36-72 yr	18:	
F	55.4 yr	39-76 yr	18:	
Illiterate adults: Total	63.7%	7-88%	20:	188.679
Males	53.0%	2-84%	19:	80.062
Females	76.1%	12-99%	20:	110.450
% GDP from: Agriculture	11.0	0.5-78	18:	
Mining and industry	31.5	0.1-50.5	13:	
Per caput (US$) : GNP	1216	175-12773	19:	
GDP	1396	202-22900	22:	
Unemployment	4.4%	0.0-7.7	10:	

C: No. of countries for which data were available.

to 296 million by 1983-84, with an average annual rate of increase of about 3%. It is difficult to analyse in detail the trends in the various components of population dynamics. For example, in some countries, population censuses are a recent undertaking. Vital registration data are quite incomplete, particularly for earlier years; as a result, present estimates of mortality levels in many countries are higher than those of 30 years ago without this apparent increase being meaningful.

However, natural increase is an important aspect. The present Regional averages for the vital rates are: crude birth rate (CBR) 42 per 1000, crude death rate (CDR) 13 per 1000, giving a rate of natural increase of 2.8%, while the infant mortality rate (IMR) is 103 per 1000. The improving health situation, with the consequent reduction in mortality, is probably the major factor behind this high natural increase. For example: CDR figures have reached five or less per 1000 in a few countries; over the past decade, the IMR has fallen by about 20 per 1000 in sixteen; fertility, however, is still high, with a CBR above 40 per 1000 in many. Some data are given in Table I.

Net migration, including that of refugees, is another factor that plays an important role at the country level, though less at the Regional level, since population movement is mainly between countries of the Region.

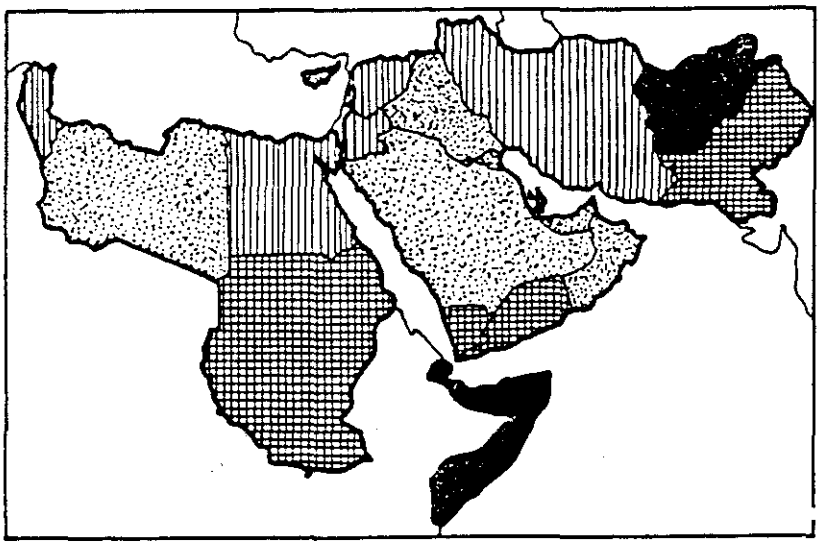
The overall population increase was 50% for the whole Region between 1970 and 1983. At one end of the range, it was 7-8% for Cyprus and Lebanon, and at the other, it was 450% in United Arab Emirates, and 100-160% in Djibouti, Kuwait and Qatar. UN data on "migrant workers" in 1980 gave a figure of 2.8 million for those coming to the Arab countries of Asia and to the Libyan Arab Jamahiriya; however, only 24% of these workers were from outside the Region. There are also great numbers of refugees and the situation is worsening. At the time of the Second International Conference on Assistance for Refugees in Africa (July 1984), Somalia and Sudan registered having some 700 000 refugees each. By mid-1984, Pakistan had three million. In Sudan, the figure is now well over one million.

1.2.2. Population characteristics

Population composition by age and sex has also undergone marked changes. With the reduction in mortality, life expectancy has increased by five years or more in nine countries during the past decade. Children under 15 years constitute 44% of the Regional population, and the number of women of childbearing age is increasing. The main factor affecting the age/sex composition in a number of countries is the expatriate population, often consisting almost exclusively of adult males of working age. In Bahrain, for example, adults (15 years or more) constitute 59% of the Bahraini population against 85% of the expatriates; the percentages of males are 50% and 80%, respectively.

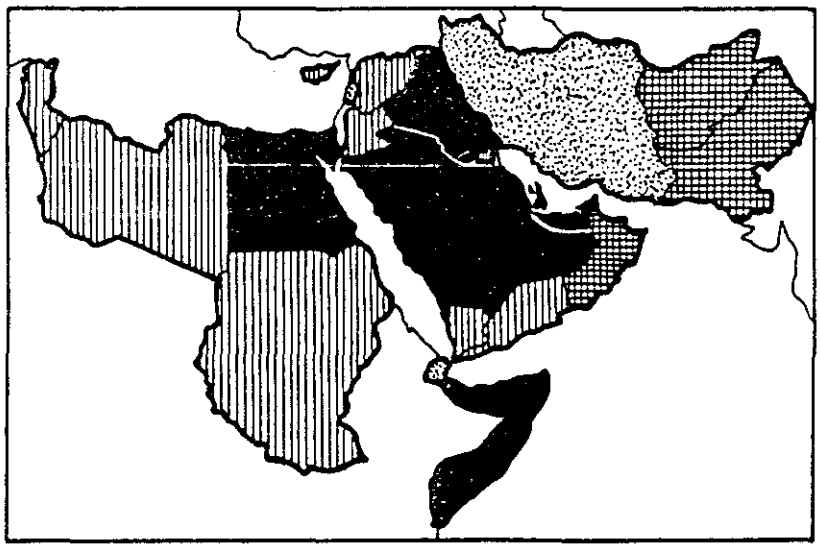
In terms of spatial distribution of the population, the average population density is 23 per sq.km (range 2.1 - 612 per sq.km). This figure, however, is not truly significant since cultivatable and inhabitable areas constitute only a fraction of the total surface area of the countries of the Region in North Africa and on the Arabian Peninsula. While the average urban population is less than 40% of the total, it

FIGURE 1



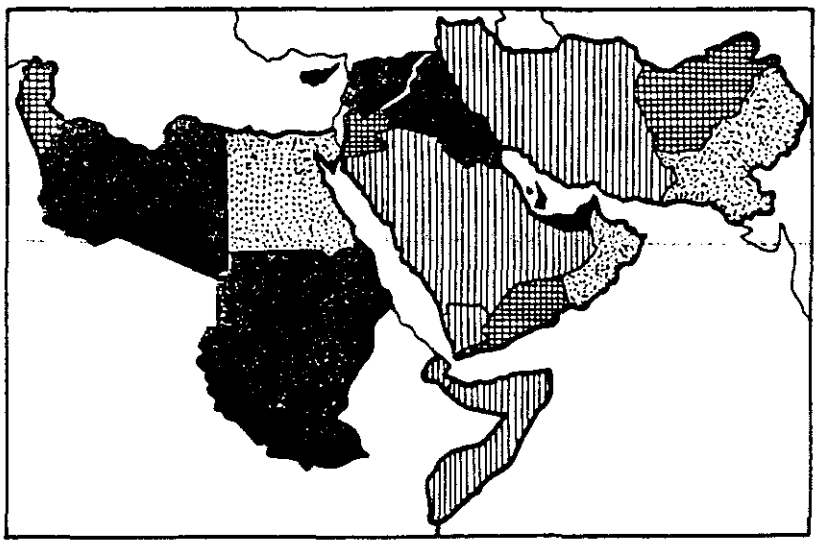
A. Per caput GNP (US dollars).

- ABOVE $2000
- $501 TO $2000
- $300 TO $500
- BELOW $300



B. Percentage of GNP (or GDP) spent on health.

- ABOVE 5%
- 3% TO 5%
- BELOW 3%
- NO DATA



C. Percentage of health expenditure allocated to primary health care.

- ABOVE 50%
- 30% TO 50%
- BELOW 30%
- NO DATA

exceeds 70% in some Arab countries of the Gulf. Twelve cities in the Region have a population exceeding one million each.

SECTION 1.3. ECONOMIC TRENDS

1.3.1. Economic situation

The economic situation in the Region includes both extremes. There are six countries which are classified as least developed, having a low gross national product (GNP), while there are four countries in which the GNP per caput exceeds US$10 000. Approximately half the population live in seven countries which have a GNP of US$500 per caput or less (see Annex and Fig.1).

All countries have socio-economic development plans that aim at a steady growth of the GNP which, in the majority, is usually set around 6-8% (or more) per annum. In countries like Kuwait, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia and United Arab Emirates, 50-70% of the gross domestic product (GDP) is expected to come from mining and quarrying and the manufacturing industries, while in Afghanistan, Egypt, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen, agriculture plays a significant role, contributing to 20-30% or more to the GDP.

Recent developments in the Region, however, cast doubts on whether the economic growth rate targets can be attained. A number of countries are directly affected by one or more unfavourable conditions (e.g. continued hostilities within the country, state of armed conflict, political upheaval, or massive refugee problems, as well as natural disasters such as drought, floods and earthquakes). Frequent disruption of transport (cf. shipping) and trade because of war-like conditions also affects neighbouring countries not directly involved in the conflict. In addition, the reductions in oil prices and the cuts in oil output have had telling effects on the economies of even the well-to-do countries of the Region. This is reflected in their respective allocations for health.

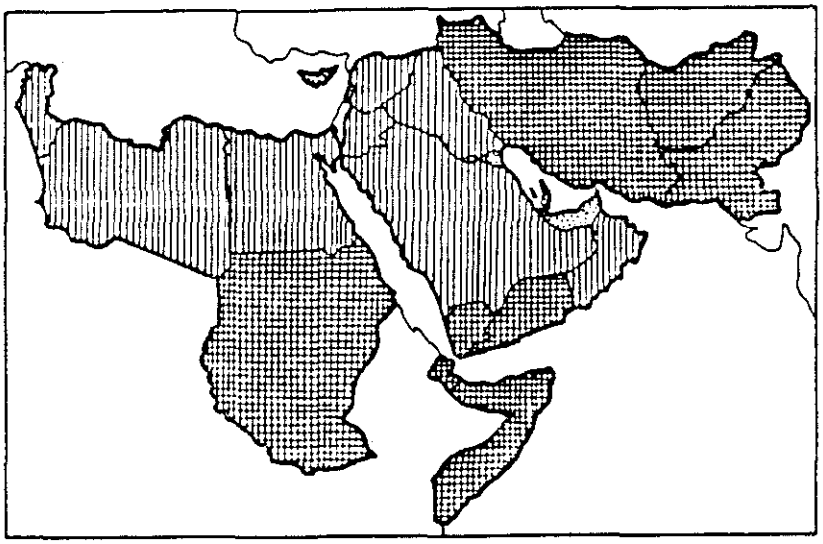
Furthermore, the above problems are being compounded by high inflation rates and unstable exchange markets, all leading to a stagnation, if not regression, in the industrial and developmental processes previously initiated. This may have repercussions on employment and on the migration of skilled and unskilled labour from developing countries; this would, in turn, affect socio-economic development in the countries of origin of the workers.

1.3.2. Size and structure of labour force

Precise information about the size and structure of the labour force is not available from many countries; where it is available, there is room for doubt regarding the completeness and reliability of such data.

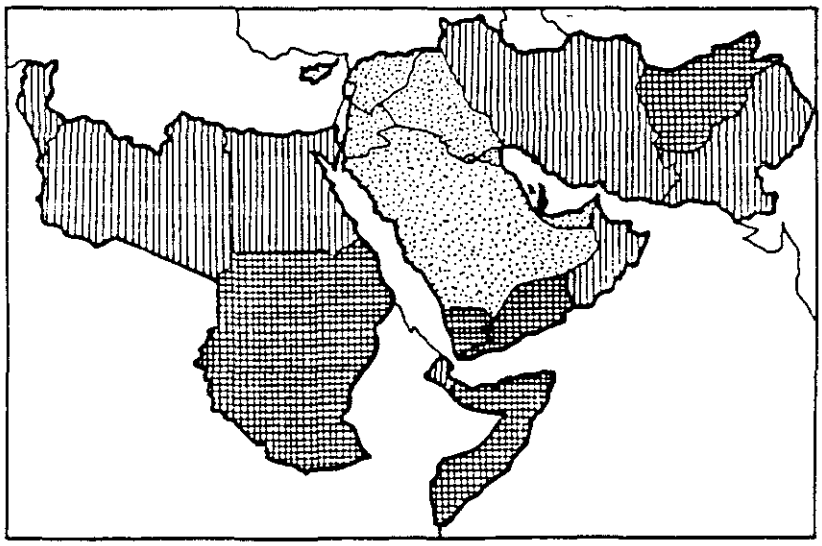
In some countries, the labour force constitutes 30-40% of those over 10-15 years of age, which is considered low by world standards. A low female labour force is another common feature; this seems to vary, from 2% in Pakistan to about 15% in Jordan. The structure of the labour force also varies. For example in the Arab countries of the Gulf and the Libyan Arab Jamahiriya, a great part of the workforce is engaged in mining and

FIGURE 2



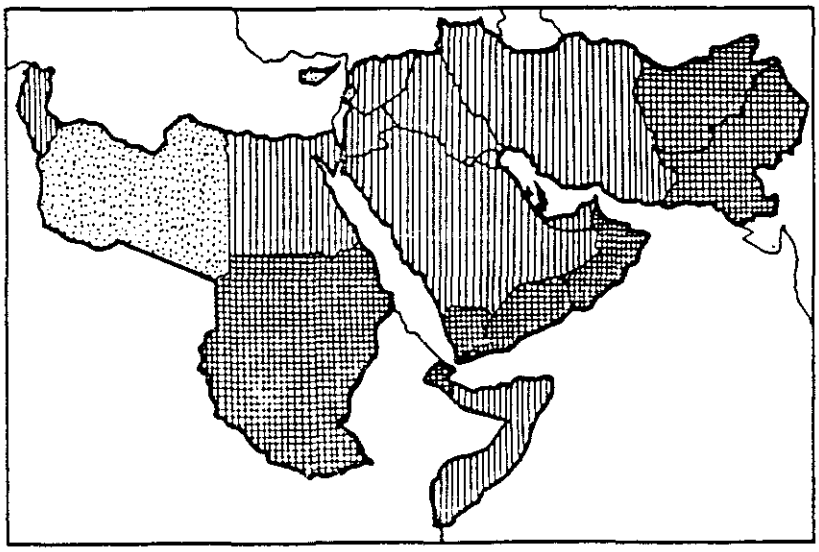
A. Infant mortality rate (per 1000 live births).

- BELOW 50
- 50 TO 99
- 100 AND OVER
- NO DATA



B. Life expectancy at birth.

- OVER 60 YEARS
- 50 TO 60 YEARS
- BELOW 50 YEARS
- NO DATA



C. Adult literacy rate.

- ABOVE 70%
- 35% TO 70%
- BELOW 35%
- NO DATA

manufacturing, while, in countries like Afghanistan, Pakistan, Somalia and Sudan, the accent is on agriculture and livestock-raising. In most of the countries, about 10-12% of the labour force work in commerce, catering and the hotel trade.

Unemployment rates are reported to range from zero to over 7% in the different countries. Underemployment is a more widespread problem in one third of the countries, a factor that drives workers (including professionals) to move to 'greener pastures'. Such movements of the labour force, however, have provided a significant if not the largest single source of foreign exchange for some countries of the Region. Ten per cent of the workforce of Pakistan, for example, are employed abroad. Other major "donor" countries, with respect to labour force, include Egypt, Jordan, Sudan, Syrian Arab Republic and Yemen. However, with the slow-down in the erstwhile construction boom in the oil-rich countries and with their measures to train their own nationals, etc., labour migration is expected to decline.

1.3.3. Food production

Most countries of the Region depend on food imports of one kind or another to meet the basic needs of their populations, although a few may have attained self-sufficiency in respect of certain foodstuffs. For example, Pakistan is self-sufficient in all basic foods except edible oils, Saudi Arabia has achieved self-sufficiency in wheat, eggs and fresh milk products, while Somalia may even be a food-surplus country in animal meats and bananas.

Even in those countries where agriculture is a major economic activity, the food balance has often been precarious. Dependence upon rainfall and old-fashioned methods of irrigation are common. Any vagaries of weather, like those leading to floods or drought, not infrequent in the Region, or the growing shortage of groundwater, etc. can throw the food supply situation in the affected countries into serious imbalance. Added to the above, some countries face serious problems resulting from a massive influx of refugees or displaced persons; for this reason, huge emergency food aid programmes are in operation in Djibouti, Lebanon, Pakistan, Somalia and Sudan and, from the prevailing circumstances, it looks as though the need for such food aid will continue in the coming years.

SECTION 1.4. SOCIAL TRENDS

1.4.1. Developments in education

The desired adult literacy rate set in the Global Strategy for HFA/2000, of over 70%, seems a rather high target with respect to the Eastern Mediterranean Region. The present rate of adult literacy in the majority of countries is well below that level. Only in four countries, representing 2.4% of the Region's population, has the adult literacy rate reached the desired level. Females are often under-privileged in this respect. The Regional overall average is 36%, (for males 47%, for females 24%). In some countries the illiteracy rates are as high as 84% for males and 99% for females (Annex and Fig. 2).

This is a very serious situation, pointing to the fact that the majority of the Region's population is educationally restricted in a way that hampers individuals from contributing creatively to their countries' health development. The problem will continue unless exceptional efforts are made, as the available resources cannot cope with the population growth. This may be seen by considering the four largest countries in the Region, namely, Egypt, Islamic Republic of Iran, Pakistan and Sudan, representing a total population close to 208 million. The first (primary) level school enrolment ratio averaged 55% in 1970, and increased to only 64% in 1981, still leaving one third without an opportunity to attend school. In absolute terms, this means many millions are added to the illiterate population every year.

1.4.2. Poverty and nutrition

Admittedly, there is a large discrepancy in the distribution of wealth among and within the countries of the Region, poverty still being the misfortune of nearly one-half of the total population. Unfortunately, with the terrible drought currently afflicting a number of African countries, and the accompanying mass movements of refugees, poverty has become even more accentuated, not to forget the thousands of lives that expired due to famine. There is also a concomitant degradation in health conditions among refugees, as was evident from the recent outbreak of cholera in Somalia and Djibouti. It should also be remembered that such conditions are the seedbed of social and political unrest.

Although acute and severe malnutrition, especially among children, seems more widespread among refugee settlements, hidden malnutrition is more pervasive, as revealed by sporadic reports in the literature. No systematic and substantial data are yet available to permit judgements as to its magnitude. In this connection, it may be worth noting that malnutrition exists in both rich and poor countries, due to improper feeding habits and undernutrition, respectively.

1.4.3. Social insurance

Social insurance schemes have been introduced in countries of the Region, although relatively only recently, with a view to securing a minimum acceptable standard of living for every citizen. Such schemes are being increasingly applied and should be encouraged, particularly because, in many countries, the difference between the incomes of the rich and of the poor is truly pronounced. As has been mentioned above, almost half the population of the Region suffer poverty. This underlines the need to introduce social insurance schemes, especially since there is a strong correlation between poverty and a poor state of health.

1.4.4. Equity in the provision of health care services

Not all population groups have access to adequate health care. The most deprived are those living in rural and remote areas where health services are not yet readily accessible. However, it is hoped that equitable distribution, as a target, will gradually become accepted; countries that are committed to the goal of HFA/2000 to be attained through the primary health care approach have been making steady progress towards that goal.

1.4.5. Socio-economic needs

Member States have formulated socio-economic plans covering varying periods of time. However, implementation of such plans is often delayed owing to lack of funds or other adverse circumstances. Nevertheless, it is hoped that, with progressive implementation of socio-economic development schemes, primary health care services will improve. Thus, a balanced development of health and other socio-economic sectors should eventually serve to satisfy the basic needs namely air, food, water, clothing, shelter and health, of all individuals. It is hoped that the majority of the populations, including those living in rural and remote areas, will be so served by the year 2000.

SECTION 1.5. INTERSECTORAL COOPERATION AND THE HEALTH COMPONENT IN ECONOMIC DEVELOPMENT SCHEMES

Most countries in the Region have mechanisms to provide for the incorporation of health considerations into their overall socio-economic development schemes. Such mechanisms may include a ministry or a secretariat of planning, as in Egypt, Kuwait, Libyan Arab Jamahiriya, Somalia and the United Arab Emirates, or a planning council or division as in Pakistan and Yemen. In others, multi-sectoral boards or councils at the national level and/or ad hoc committees carry out similar functions. Health considerations also feature in the long-term national development plans of most countries. The importance allocated to this factor is not known, though, in general, the health sector is not regarded as a "strong" one.

To mention a few examples, a developmental project which has a clear health input is the Blue Nile Health Project in Sudan. A number of sectors, including agriculture, environment and health, collaborate (under the aegis of an intersectoral board) in one region which is centrally important to agriculture and food production. Large components of this project are funded by the United Nations and by bilateral bodies - an illustration of international cooperation helping to bring sector activities together at national level.

The Lake Nasser Development Project, in Upper Egypt, is another example of intersectoral collaboration. The Government of Yemen reports on its Southern Highlands Development Project, based in Taiz, where the control of schistosomiasis is an integral health component of the project. In Yemen, too, community heath centres are supported in part by local development councils and contribute to the overall improvement of health in villages as part of their general socio-economic development.

Some countries have multisectoral health committees to advise on health development at local level. There may be committees or councils charged with specific tasks, such as environmental protection (Kuwait and Oman), water supply (Egypt), or nutrition.

It is important that effective legislation be incorporated into the implementation of national economic development plans. This may be achieved in part by licensing through the health authorities, by inspection, and by specifically designating to the health sector the responsiblity in health matters which affect another sector. Some

interesting examples may be seen in Jordan, where new factories can only be established after licensing by a higher "Joint Committee on Prevention of Environmental Pollution". In Bahrain, all migrant labour must be screened by the health services before being accepted, and individuals found to be suffering from certain diseases are immediately deported. This type of legislation operates in other countries, too, but not sufficiently.

The effectiveness of ad-hoc communication and ad-hoc committees is open to doubt. There is a need to rely less on these for collaboration between the health services, planning authorities and other sectors, when issues of national economic planning arise. Relevant planning documents should be sent as a regular procedure to health experts, who should examine and agree them prior to their approval and adoption as national initiatives. This is apparently the case in Cyprus, where intersectoral collaboration generally is clearly regulated in economic development plans.

CHAPTER 2

DEVELOPMENT OF THE HEALTH SYSTEMS INCLUDING HEALTH POLICIES AND STRATEGIES

SECTION 2.1. HEALTH POLICIES AND STRATEGIES

The World Health Assembly decided (resolution WHA30.43) that "the main social target of governments and WHO in the coming decades should be the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life". Almost all Member States have endorsed the Alma-Ata Declaration of 1978 whereby primary health care (PHC) was identified as the key to attaining this target. Their health for all (HFA) policies and strategies emanate as well from the provision in the WHO Constitution, that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."

To translate the principle embodied in the WHO's resolution, the Alma-Ata Declaration and the constitutional provisions for health into practice, most Member States of the Region commenced preparing statements on policy and strategy, followed by plans of action, for attaining the target or "goal" of HFA/2000. In these statements, each Member State indicated its full endorsement of the principle of HFA/2000, either in its constitution, in declarations by the Head of State, in pronouncements of its legislative body or council of ministers, in a ministerial decree, or in a party manifesto (see Table II). The main directions and orientations of the policy were spelled out, indicating priority health and health-related problems and the objectives, targets and approaches necessary to alleviate these problems. The national strategies varied, depending on the level of the country's socio-economic development, and on the political orientation. However, all countries stated expressly that the eight essential elements of PHC will figure eminently as major concerns of their strategies and plans of action.

The most important feature of these strategies is that they all document the intention to aim at equitable distribution of health care between groups of the population, whether rural or urban, rich or poor, thus reducing the present inequity in the availability of both resources and services. Another important feature is the intention to foster as much community involvement as possible, even in the planning, implementation, monitoring and evaluation of the strategies. In addition, many Member States have considered contributions by the population, financially and materially, towards providing health care to be an important element. Some have even stated that their citizens share the responsibility for maintaining their own health. Intersectoral coordination and collaboration in the provision of health care, both at national and international levels,

TABLE II. ENDORSEMENT OF HFA AS POLICY (Global Indicator 1); EXISTENCE OF MECHANISMS FOR INVOLVING PEOPLE IN THE IMPLEMENTATION OF THE STRATEGY (Global Indicator 2); EXPLICIT RESOURCE ALLOCATION (Global Indicator 6)

Global Indicator 1		
Endorsement of HFA as policy*	C	P
In the constitution	14	49.7
Declaration of commitment	12	69.5
Significant changes in policy	10	87.0
Adoption of systematic managerial process for national health development	1	0.6
Not defined or not yet endorsed	2	5.0
Global Indicator 2		
People's involvement in implementation*	C	P
National, district or local health development councils or committees	16	93.4
Interministerial committees	7	72.2
Health sector joint management of PHC	5	36.8
Involvement of professional groups, NGOs, etc.	12	56.6
Not defined or very limited involvement	3	5.1
Global Indicator 6		
Explicit resource allocation*	C	P
Adequate without external support	8	37.1
Sustained external support received	8	40.7
Inadequate external support	5	17.3
Support provided to others	4	17.3
Not defined	1	4.9

C = No. of countries; P = % Regional population therein.
* A country's response may fall under more than one category.

was emphasized as a prerequisite for successful implementation of the strategies, since health is a multisectoral social activity involving many different national and local governmental institutions and organizations, as well as voluntary ones.

Deriving from the national strategies of Member States, a Regional Strategy for HFA/2000 was defined. The Regional Strategy follows the main philosophies of the components identified in the individual national strategies, determined in a review of these strategies undertaken at three WHO sub-regional meetings on HFA/2000, held in Mogadishu, Damascus and Kuwait during 1980.

The Regional Strategy identifies the long-term objectives and the medium-term targets and approaches needed to solve the problems, as well as

the main supporting measures, political, economic, social and technical, required for successful implementation of the plans of action. The managerial support and the health information systems essential to make possible the implementation of the Regional Strategy and the national plans of action, both at institutional and community levels, were also identified.

Thus the individual national strategies and the Regional Strategy together provide the main directions and guidelines for national health development in the Eastern Mediterranean Region, serving to streamline all collaborative efforts in health programme development of WHO and the Member States.

SECTION 2.2. ORGANIZATION OF HEALTH SYSTEMS BASED ON PRIMARY HEALTH CARE

A number of countries of the Region had long had fairly well-developed basic health services. However, these services comprised several "vertically managed", watertight components and lacked adequately broad orientation, intra-sectoral and intersectoral collaboration, and community involvement. Since the philosophy of PHC has become a firm political orientation and commitment of all Member States, positive trends have been noted, namely, improvement in the distribution, quality and type of health services offered, and a broadening of the concept of health services to include an input from health-related ones.

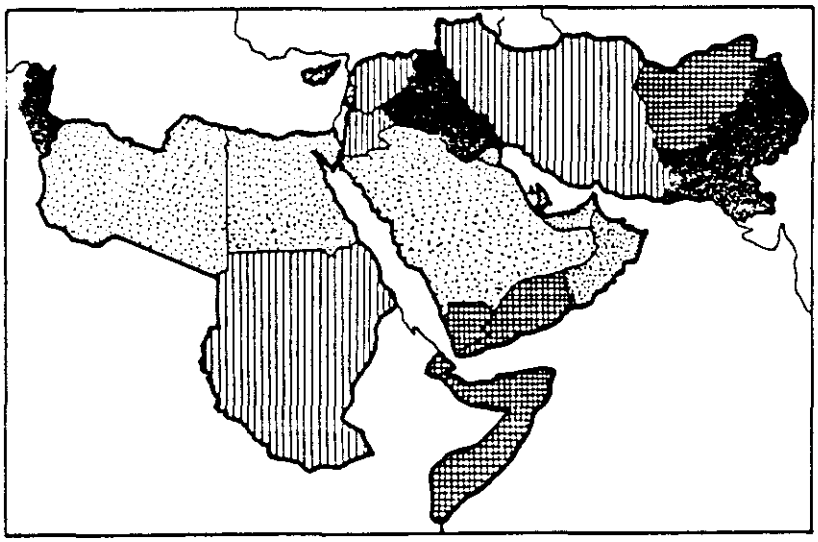
It is difficult to speak about comprehensive coverage as a common characteristic. Services may be provided for specific population groups only, e.g. mothers and children. The quality of health care delivery and the accessibility of services differ from country to country, and even within the same country. The overall PHC coverage in the Region is about 74%, while it has reached 90% or more in ten countries (Annex and Fig.3).

The adequacy and quality of PHC coverage should be looked at, not only in general terms, but according to the specific situation in the countries' rural and remote areas. For example, urban population groups are usually better covered by and have better accessibility to comprehensive health services at secondary and tertiary referral levels than do rural populations. The latter have mostly to rely upon elementary health care delivery, particularly in the large countries (area-wise) with poor communications. Very often logistics and supplies are not well organized and hence, even if there is fairly adequate coverage by the local health units, the quality of services might need much improvement.

Among the main obstacles to rapid progress in PHC development, the lack of understanding of PHC among health professionals and decision-makers must be emphasized. One evaluation report has hinted that, while it has been relatively easy to obtain political commitment, professional commitment has still to be made. This leads to misconceptions in planning, management, research etc. and, above all, to excessive costs.

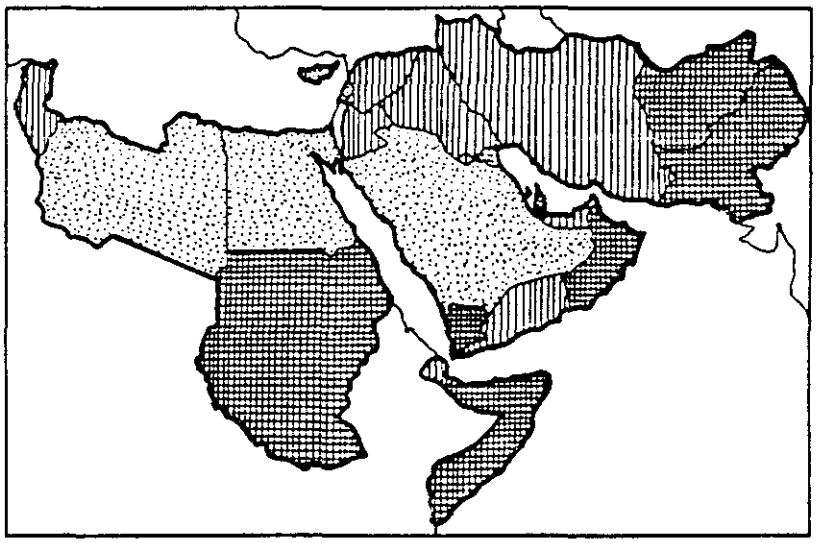
The financing of different parts of health care services by different sectors (e.g. by ministries of health, education, defence, etc.) does not contribute to a systematic approach in the establishment of an adequate and well-distributed health system infrastructure based on PHC principles. Collection of data and utilization of information in planning and

FIGURE 3



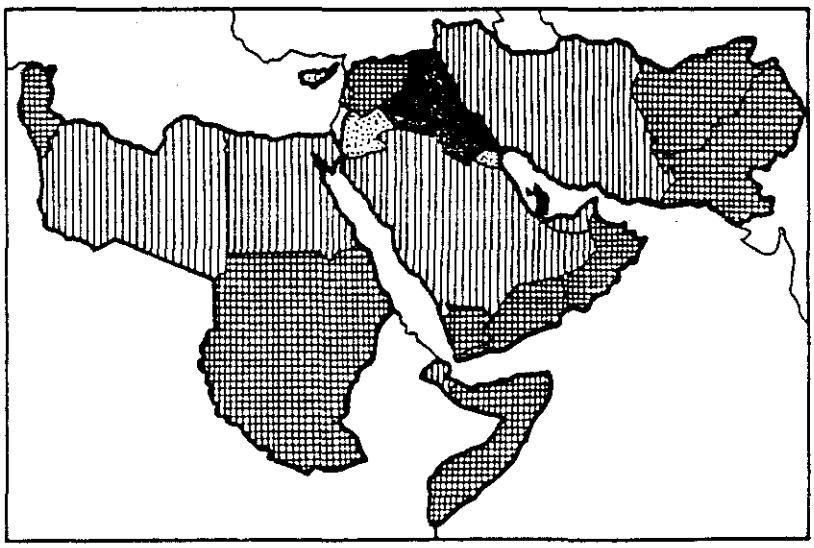
A. Percentage of population covered by local health care.

90% AND OVER
50% TO 89%
BELOW 50%
NO DATA



B. Percentage of population having access to safe drinking water.

90% AND OVER
50% TO 89%
BELOW 50%
NO DATA



C. Percentage of population provided with adequate sanitary facilities.

90% AND OVER
50% TO 89%
BELOW 50%
NO DATA

management of the health systems depends on intersectoral collaboration, and this is all too often not satisfactory. Countries reporting the existence or creation of inter-ministerial coordinating bodies admitted that ways, means and procedures that will make such bodies functional have still to be evolved. The percentage of national expenditure allocated to PHC is not known in many countries. In some countries it has been considerably increased, e.g. in Egypt and Oman, while it is less than 30% in seven countries, representing 12% of the population in the Region (see Fig. 1).

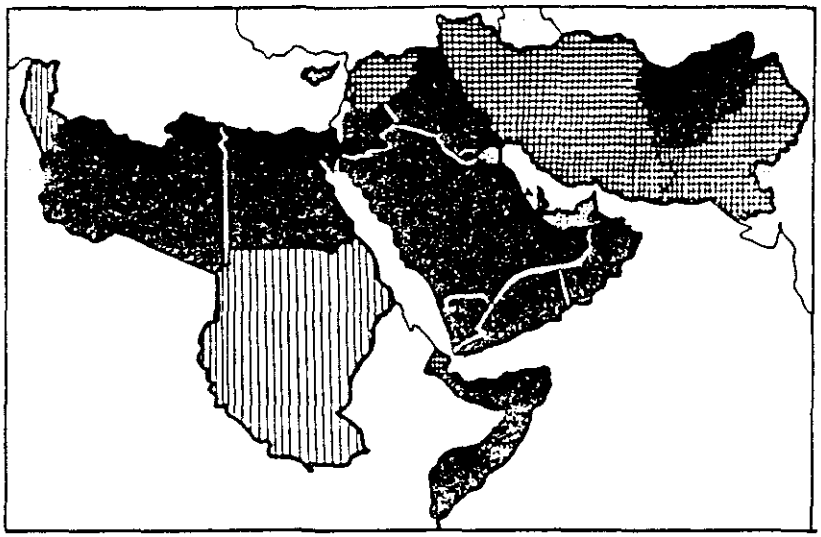
"Vertical programmes" still feature significantly in most health systems in the Region. In some countries, PHC is itself treated as a vertical programme! It must be remembered, however, that often vertical programmes were originally organized as intervention or emergency measures in order to satisfy priority health needs. Indeed, special attention and support may still have to be given to some of these programmes to respond to urgent calls for problem-solving, at least until such time as the programmes can be fully absorbed into a well-organized PHC system. Nevertheless, there is an overall tendency to merge and consolidate basic components of PHC, particularly at district and local levels. Maternal and child health, immunization, disease control activities such as those for malaria and tuberculosis, nutrition and, to a certain extent, epidemiological surveillance and health education are typical components that are being integrated, to varying degrees, into comprehensive basic health services.

2.2.1. Public information and education for health

Public information and education for health (IEH), when it is concerned with prevailing health problems and methods for their prevention and control, is an important component of PHC, being linked to all other components. Health education units exist in almost all ministries of health; however, their resources (funding and personnel), as well as the level of competence of the staff involved, vary. Having been considered for years as a vertical programme, IEH faces difficulties in assuming its new role in PHC. An Inter-country Meeting on IEH Policies and Approaches in Primary Health Care was held in Riyadh in 1984; it was charged with formulating guidelines for future development of IEH. National workshops dealing with integration of communication and mass media into IEH were held in Cairo and Djibouti in 1985. Requests for more WHO support in this area testify that this is one of the major country needs. Special school health education programmes will be launched in some countries (Bahrain, Egypt, Djibouti, Pakistan and Somalia) with the aim of revising school health-education curricula; the aim is to focus them on priority health problems, e.g. water supply and sanitation, control of diarrhoeal diseases, immunization against childhood diseases and nutrition.

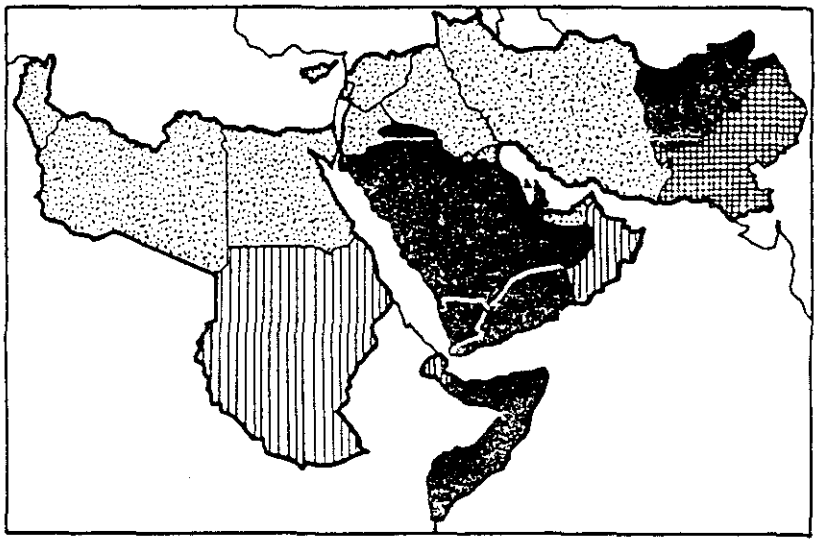
The exact number of health-education specialists in the Region is not known but, in some countries (Egypt, Islamic Republic of Iran and Pakistan) the numbers appear to be satisfactory. Postgraduate training facilities in health education for Arabic-speaking candidates exist in Egypt (High Institute of Public Health, Alexandria), and others will be opened at Gezira University (Sudan), Yarmouk University (Jordan), and at the College of Health Sciences (Bahrain). National workshops and seminars for training of trainers and supervisors of community health workers in IEH

FIGURE 4



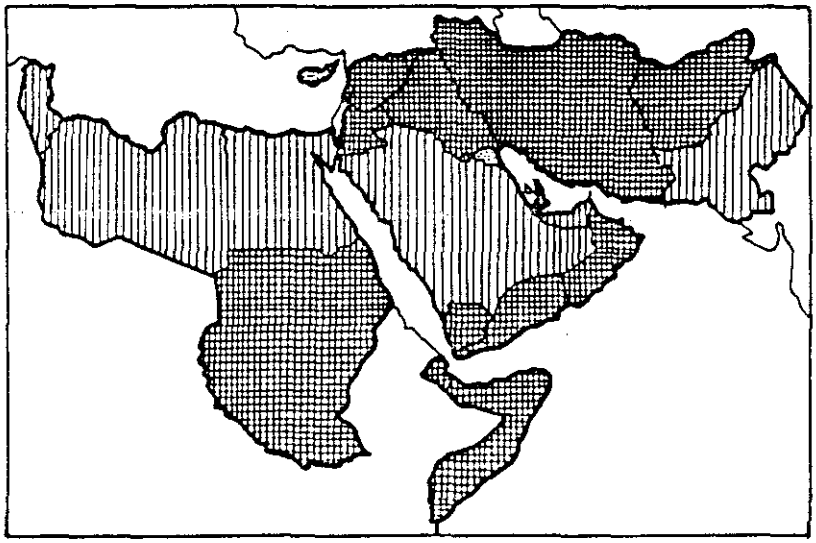
A. Percentage of infants cared for by trained personnel.

90% AND OVER
50% TO 89%
BELOW 50%
NO DATA



B. Percentage of newborns with birthweight of 2500 g and over.

90% AND OVER
75% TO 89%
BELOW 75%
NO DATA



C. Percentage of infants fully vaccinated for diphtheria, pertussis and tetanus.

90% AND OVER
50% TO 89%
BELOW 50%
NO DATA

methods have been held in Democratic Yemen, Pakistan, Somalia and Sudan, and are planned for Islamic Republic of Iran, Iraq, Oman and Syrian Arab Republic.

2.2.2. Promotion of food supply and proper nutrition

Promotion of food supply and proper nutrition are being boosted through the Joint Nutrition Support Programme in Pakistan, Somalia and Sudan. Egypt, Islamic Republic of Iran, Iraq and Tunisia have specialized training institutions, but these are not always properly geared to the nutritional aspects of public health. There is an overall shortage of qualified high and intermediate-level workers in this area. However, educational activities for the promotion of nutritional awareness, sound food habits, breastfeeding, etc. are already quite well integrated into maternal and child health care and the general primary health care programmes, where they enjoy the eager participation of mothers and the community in general.

Information relating to the nutritional status of newborns is incomplete. Available information reveals that over 90% of the newborns weigh 2500 g or more in half the countries of the Region. The percentage of children within the weight-for-age standard, admittedly based on meagre and sporadic data, averages about 76%, with a range of 23-97% (Annex and Fig.4).

2.2.3. Adequate supply of safe water and basic sanitation

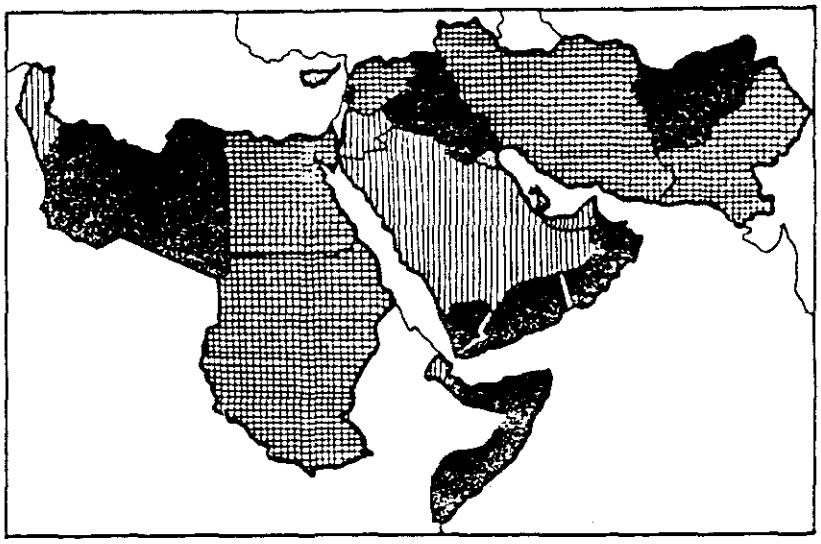
This is being fairly well developed through the International Drinking Water Supply and Sanitation Decade Programme. The provision of safe water covers about 59% of the Regional population, mostly in urban and peri-urban areas (average 84% in urban areas against 39% in rural areas). The situation is generally less good when hygienic disposal of wastes and adequate sanitary facilities in the home or in its immediate vicinity are considered. The Regional average for availability of such services is only about 41%. The situation seems to be unsatisfactory even in some countries with a high GNP. Guidance and support must be given to both suburban and rural areas in order to improve the existing situation (Annex and Fig.3).

2.2.4. Maternal and child health

The maternal and child health programme including family planning (MCH), even when treated as a comprehensive vertical programme, comes the closest to following PHC principles. Services are oriented to disease prevention and health promotion, and include home visits and involving mothers in self-care and healthy family practices. "Adequate coverage" by MCH services should be understood as meaning that more than two-thirds of the population are provided with this form of health care.

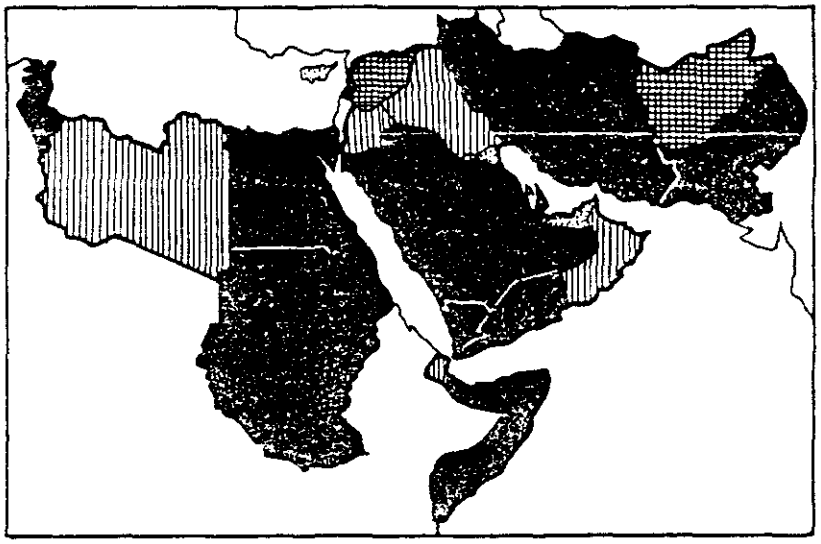
It would be difficult to define accurately the percentage of women attended by trained personnel during pregnancy and at childbirth. In some countries of the Region, more than 90% of women are delivered by trained personnel or in institutions; however, according to available statistics (Fig.5), the Regional average for institutions deliveries is only about 35%. The majority of women in rural areas are attended by traditional birth attendants or lady birth attendants (who are either not trained or

FIGURE 5



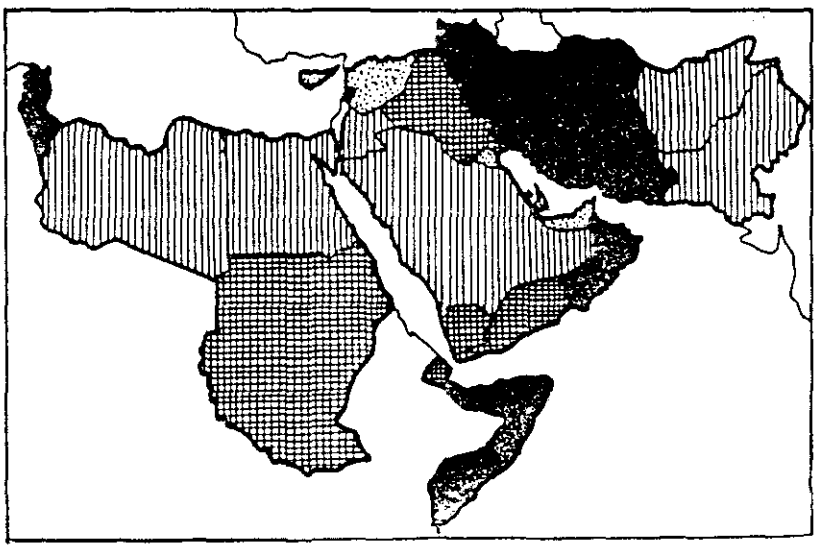
A. Percentage of pregnant women cared for during pregnancy by trained personnel.

90% AND OVER
50% TO 89%
BELOW 50%
NO DATA



B. Percentage of pregnant women delivered in institutions.

90% AND OVER
50% TO 89%
BELOW 50%
NO DATA



C. Maternal mortality rate (per 10 000 live births).

BELOW 2.0
2.0 TO 9.9
10.0 AND OVER
NO DATA

only semi-trained). Some countries have major programmes that aim to improve care by training traditional birth attendants. Despite the abundance of trained midwives in some countries, e.g. Egypt, Jordan, Iraq, Syrian Arab Republic and Tunisia, the services of traditional birth attendants are still used and appreciated.

Family planning and population policy, matters of great importance to some countries of the Region, do not depend on the health sector only and, in addition, are greatly influenced by socio-cultural behavioural patterns. Many different agencies are involved in this field, and mostly their activities are uncoordinated. "Outreach health workers" as well as community leaders need to be properly oriented so as to contribute effectively. Family planning programmes exist in Afghanistan, Egypt, Islamic Republic of Iran, Jordan, Pakistan and Tunisia.

Data on the percentage of children whose health needs and development are cared for by trained personnel are rather scarce (Fig.4). Effective introduction of the use of "growth charts" is slow, despite the efforts made by WHO and UNICEF to promote their use in MCH units. The practice is only implemented in countries where health services are well organized, or in selected urban MCH centres in other countries; even then, the data obtained are rarely put to full use.

The quality of MCH services, which depends on many factors, varies from country to country. The infant and maternal mortality rates reflect the situation regarding general conditions as well as provision of adequate health care, including preventive and promotive measures. In countries with a better socio-economic status, and accessible and well-organized MCH services, infant and maternal mortality rates are quite low; the opposite also holds true. The infant mortality rate is reported to be lower than 50 per 1000 in six countries, while in eight countries (representing about two-thirds of the Regional population) it is 100 per 1000 or higher. However, the Regional average of 103 per 1000 reflects the sad situation in the Region as a whole (Fig.2).

2.2.5. Immunization against the major infectious diseases

The immunization programme (EPI) has been fairly well-developed in the Region. In most countries, special programmes exist, supported by WHO and UNICEF and/or other UN and bilateral agencies. Provision of equipment, transportation and training has been given high priority. Differences still exist regarding vaccination schedules, coverage, organization and management of these immunization programmes. There are trends to integrate them into comprehensive community health services, to ensure continuity and to make this activity a routine part of PHC. Community involvement is badly needed, particularly in remote rural areas and among nomadic populations, for whom immunization is undertaken in the course of periodic visits by mobile teams.

The Regional average for immunization coverage of infants under one year (Annex and Fig.4), is around 50% for diphtheria, pertussis, tetanus, measles and polio; few countries have passed the 80% mark. Where tuberculosis is of low incidence or prevalence, BCG vaccination is instituted for children only on entry into school. Immunization of pregnant women against tetanus is low, the Regional average being

only 14%. The rare incidence of tetanus neonatorum in some countries (see Section 3.1) may be one reason. Repeated pregnancies at short intervals, and the fact that toxoid administration need not be repeated once the mother has been fully immunized before, may also contribute to this apparently low coverage. In most countries, however, accurate data are lacking.

2.2.6. Prevention and control of local endemic diseases

The main predisposing factors for local endemic diseases are the environmental conditions and the lifestyles of the population. Infectious and parasitic diseases are very common (see Section 3.1). Therefore, many countries have specialized programmes, such as control of communicable diseases, or control of specific diseases (e.g. schistosomiasis, malaria, tuberculosis, leprosy, and communicable eye diseases). Most countries collaborate with WHO in the operation of these programmes.

2.2.7. Provision of essential drugs

Twenty-one countries in the Region now have lists of essential drugs for use in their health services. Where delivery of local health care is provided by community health workers, separate lists of drugs have been drawn up for their use. A publication entitled "Drug Information Sheets for Use by the Community Health Worker", covering thirty-seven drugs, was drawn up by participants at the Inter-country Meeting on Essential Drugs for Primary Health Care, held in Amman, Jordan, in 1983, and was widely distributed in the Region. A further list of eighty-five drugs for use by the physician at the PHC level was drawn up at a subsequent inter-country meeting in Cyprus in 1984.

National workshops on the rational use of essential drugs have been held in Democratic Yemen and Djibouti. Training has been provided for all categories of workers involved in the use of drugs, with emphasis on the logistics of procurement, storage and distribution. A model drug legislation has been drawn up for Djibouti. A network of drug quality control laboratories is being established in sixteen countries. Remaining constraints are principally the unnecessarily large number of proprietary drugs available on the market and the poor distribution of essential drugs to the PHC level.

Herbal medicines are very much in use in most countries. The trend is to expand their utilization in support of PHC, based on research. A basic list of 54 medicinal herbs for use at the PHC level was drawn up at the Inter-country Scientific Working Group Meeting held in Kuwait in 1985.

SECTION 2.3. MANAGERIAL PROCESS

During the period covered by WHO's Sixth General Programme of Work (1978-1983), many Member States undertook country health programming exercises as a means of improving the planning and management of their health services. Country health programming proved its worth, though the main stress was on planning, with little emphasis on management, monitoring, evaluation and information support for health services development.

The managerial process for national health development was later introduced in the Seventh General Programme of Work (1984-1989). It has been used to varying degrees and in different ways for the purposes of:

(a) developing national HFA strategies and plans of action;

(b) implementing these strategies and plans of action;

(c) monitoring progress achieved in implementing the strategies;

(d) evaluating progress achieved by comparison with the set objectives and targets;

(e) updating the strategies as and when necessary in accordance with the outcome of monitoring and evaluation.

The managerial process is being promoted in the Region in various ways:

(i) A series of three inter-country workshops were held (Geneva, Riyadh and Damascus, 1983-84) in which senior national officials, together with WHO staff members, discussed the various steps of the managerial process and applied them to national planning and managerial situations. This has created a core of well-trained national and WHO staff capable of introducing the process to the lower echelons of the health services.

(ii) National workshops for different categories of health personnel responsible for the management of health services were conducted by nationals already trained in the process, assisted by WHO staff members as necessary. Four workshops were held in the period 1984-1985, in Egypt, Jordan, Somalia and Sudan; others will follow.

(iii) Literature and publications in Arabic, English and French were disseminated, particularly the "Health For All" series and the "Guiding Principles" for the different components of the managerial process.

(iv) The process has been introduced, though still on a limited scale, into postgraduate and undergraduate training programmes of some categories of health personnel. This approach, however, needs further strengthening. The incorporation into the curricula has to be done with care and depends on the level of responsibility and academic background of the students.

(v) The use of "common frameworks and formats" was developed by WHO, for monitoring progress in the implementation of the HFA strategies (WHO document DGO/82.1) and for evaluating these strategies (WHO document DGO/84.1). The reports on monitoring and evaluation are intended for use by the nationals as working documents for the management of their health services.

(vi) A regular item on the agendas of Regional Committees relates either to monitoring or to evaluation of the strategies of HFA/2000.

Many Member States have started to use the approaches of the managerial process for drawing up medium- and long-term national health

plans as part of their socio-economic development plans. Other countries have used them in preparing long-term health manpower development plans (e.g. the Kuwait Health Plan 1982-2000). WHO staff have provided the necessary support to Member States using the process for national health planning and management.

SECTION 2.4. SUPPORTING LEGISLATION

Member States' commitment to the goal of HFA/2000 using health systems based on PHC was discussed in Section 2.1. To back up their commitment, governments have taken a variety of legislative measures, not only to restructure the health systems, but also to stimulate health action in a number of areas including those supportive of primary health care.

In Iraq, a Presidential Order provided supplementary legislative support to the existing public health law. It recognizes health as part of socio-economic development, endorses HFA/2000 through PHC, and directs administrative restructuring in support of this goal. Directives were issued that the infant mortality rate be reduced to 50 per 1000 within five years, starting from 1985. A recent parliamentary decision in the Islamic Republic of Iran has redesignated the Ministry of Health as Ministry of Health and Welfare, merging with it the State Welfare Organization; this is expected to broaden the base for PHC and related activities in the country. Lebanon restructured its health services along PHC patterns, establishing Community Health Councils. Yemen restructured the Health Ministry. Cyprus had already established its modified health system. In Afghanistan, more equitable distribution of physicians is being aimed at, by exempting male doctors from conscription if they work in rural areas; a law on local organs has, as one of its objectives, greater community participation in all health matters, including planning and implementation.

In addition to the above, several other legislative and regulatory activities have taken place. Some of those that are of particular relevance to HFA strategies are briefly reviewed below.

Legislative support for immunization has been provided in several countries (e.g. Bahrain, Egypt, Islamic Republic of Iran, Kuwait, Syrian Arab Republic and United Arab Emirates). A unique example is a Royal Decree in Saudi Arabia that has linked the issue of birth certificates to completion of the vaccination schedule; it has been well followed up and has ensured high coverage. As a result of a Presidential Order in Iraq, the Women's Federation Union has associated itself with all activities bearing on the health of women and children, and this has also led to increased immunization coverage. Efforts are under way in Pakistan to modify the Vaccination Ordinance to include vaccination against all six target diseases of the expanded programme on immunization.

Promotion of breastfeeding has been an important activity in some countries; laws or decrees regulating quality control, import, advertisement and marketing of breast-milk substitutes have been enacted or promulgated. Afghanistan, Democratic Yemen, Qatar and Yemen, as well as the Arab countries of the Gulf, are developing draft national codes to regulate their marketing and use. A law enacted by Tunisia (1983) covered quality control, marketing and information concerning the use of such substitutes; Lebanon issued a decree to regulate marketing.

The action taken by the Council of Ministers of Health for the Arab Countries of the Gulf Area against the health hazards of smoking is noteworthy, especially since it is regularly being followed up. Among the various efforts to discourage smoking are certain regulatory and legislative measures which ban smoking in public places, schools, hospitals, health centres, government offices, public transport, at meetings, etc. Advertisements promoting smoking are prohibited in the streets, on television and in cinemas. Import of cigarette-like candies, as well as cigarettes with tar and nicotine content above certain limits, cigarette-vending machines and sale of cigarettes to children and on board aircraft are also banned by several countries. Customs duties on cigarettes have been raised through legislative action by 30-40% by many governments.

The substantial increase in new legislation dealing with occupational health witnessed around 1980 and thereafter broadly reflects the growing concern with this subject. The principal aims were provision of safety regulations, protection of workers' health at workplaces, definition of the responsibilities of employers, and specifying diseases for which compensation may be claimed and the levels thereof. Countries having enacted legislation include Democratic Yemen (1980), Iraq (1981), Oman (1982), Tunisia (1983) and United Arab Emirates (1980 and 1982). Apart from laws, some regulations were issued by ministries of labour and social affairs and some by ministries of health.

The legislative thrust to provide protection of the environment was in the main concerned with establishing statutory bodies to be responsible for all matters dealing with environmental pollution and its control. A decree in Saudi Arabia (1980) designated the Meteorology and Environmental Protection Administration (MEPA) as responsible for pollution control and environmental protection. Bahrain (1980) established an Environmental Protection Committee (EPC). Kuwait created the Council for Environmental Protection as the body to integrate and coordinate such activities (1980); the Minister of Public Health is Chairman. Pakistan's Environmental Protection Ordinance (1983) established the Pakistan Environmental Protection Agency (PEPA) for that purpose.

A Regional Convention for the Conservation of the Red Sea and Gulf of Aden came into existence in 1982, signed by Democratic Yemen, Jordan, Saudi Arabia, Somalia, Sudan, Yemen and the Palestinian Liberation Organization. The Regional Organization for the Protection of the Marine Environment (ROPME) was set up for Arab countries of the Gulf. Tunisia promulgated a law in 1981 on protection against the hazards of ionizing radiation.

In addition, to boost the activities of the International Drinking Water Supply and Sanitation Decade, laws have been enacted to establish new national water authorities, for example in Egypt and Jordan. Other countries established national action committees for the Decade and effected appropriate reorganization of sectors dealing with water and sewage.

There is growing concern about mental health legislation, as expressed in a Regional meeting in Amman, Jordan in 1983. It is hoped that Member States will take suitable legislative measures to ensure that patients' rights are safeguarded and to protect health workers.

Saudi Arabia and Somalia have totally banned the importation and growing of khat. Import, sale and consumption of alcoholic beverages are already prohibited in several countries.

The above overview cannot be considered as being complete. There have been other legislative measures to ensure effective registration of births and deaths, to monitor the drugs used in the private sector by enforcing registration, to subject immigration of expatriate workers to health clearance, to regulate private practice, and so on. Governments are eager to utilize legislation for the promotion of health and well-being – but the real problem comes after legislation. A good deal of existing legislation is not properly enforced. This is due to ill-defined responsibilities for implementation when several offices of government are involved, inadequate coordination and follow-up, and lack of trained manpower, especially for the "policing" force, when one is required (e.g. food or factory inspectors).

SECTION 2.5. COMMUNITY INVOLVEMENT

Public information and education for health, an essential component of PHC activities, aims to ensure better understanding of health activities by the users, and to promote collaboration between them and the health care providers.

"Community involvement" is hardly taken into account in most national health planning or it is quoted merely as an empty phrase. The importance of a "bottom-to-top" transfer of ideas and proposals to form the basis for planning is not well recognized by planners and decision-makers. Mechanisms for involving people in implementing strategies are not clearly defined; there is little community involvement in planning and management of the health system infrastructure in general (Table II). Health services do not rely much on local resources, and traditional planning and management are based mainly on national or provincial budgets. However, health planners and professionals do seek community involvement when they need financial support, e.g. for construction of health facilities or sharing costs for equipment and supplies or the salaries of community health workers (Pakistan, Somalia, Sudan and Yemen). The delegation of responsibilities and resources to communities to enable them to establish their own PHC services can seldom be found; this is an important concept in the implementation of HFA strategies. Equally, the involvement of individuals, families and groups in self-care and self-reliance needs to be more systematic, guided and supervised as a part of the regular comprehensive PHC approach, in order to be effective and efficient.

Establishment of community health committees, one of the mechanisms for promoting community involvement, was initiated in the 1970s in many countries. When elected by the communities they are to serve, they have proved to be more active than when they were appointed by higher authority, and have made real contributions through mobilization of local human, material and financial resources. Community involvement has been proven successful in many countries, although more in selected project areas than on a nation-wide scale.

Another type of community involvement represents collaboration with practitioners of traditional health care. For example, suitably trained

birth attendants are now making substantial contributions through providing perinatal and post-natal care as well as conducting deliveries. Traditional healers, herbalists and spiritual counsellors are usually not recognized by health authorities. Yet they are present in most countries, and the percentage of the population that makes use of their services is particularly high in areas where health professionals are scarce. The number of such traditional practitioners is estimated at more than 35 000 in Pakistan alone. There is some apprehension that some of their services may be harmful to the health of the users; however, this problem cannot be solved by legislative suppression. It may be more rational to help them to improve the quality of their services by involving them in carefully planned training programmes with follow-up supervision, as is being done with the traditional birth attendants.

Group work with mothers has been quite well developed for use in maternal and child health centres. It may not always be properly organized and well performed, but it is accepted by health workers as an integral part of their daily routine. While the number of mothers using some of the services is reported in returns, the indicators need to be elaborated if they are to be useful for evaluation and management.

Involvement of national associations (professional or others) is still limited. Teachers in some countries have been making useful contributions to programmes such as trachoma control, early detection of visual or hearing defects, etc., in addition to helping to strengthen health education. An innovative approach is to involve school-age children and youth in health programmes, based on the health education programmes in schools; the Youth Health Brigades established in Afghanistan are an example. The Women's Federation Union in Iraq is said to be actively involved in supporting various aspects of mother and child care; several members have been trained in primary health care, and are expected to assist in programmes of oral rehydration therapy, nutrition and immunization.

Involvement of religious leaders has been approached in collaboration with the high Islamic schools and authorities (e.g. in Egypt). Health subjects are now being included in their training programmes, and involvement will be fostered.

SECTION 2.6. HEALTH MANPOWER

There is a growing awareness in Member States of the importance and place of health manpower policies and plans. However, few countries in the Region have clearly defined health manpower plans; among them are Bahrain, Democratic Yemen, Islamic Republic of Iran, Jordan, Kuwait, Somalia and Sudan. Scrutiny shows that many of these plans deal more with numbers than with the quality of manpower required. There is scarcely any mention of the technical role, supportive skills and attitudes of the different categories of personnel, nor any specific delineation of PHC teams.

Some Member States have requested support to formulate their health manpower plans, and this has been provided by the Regional Office. It was noted that health manpower planning must be viewed within the context of the unique circumstances in the Region: certain affluent countries will

continue to depend for some time to come on manpower trained in other countries to satisfy their health manpower needs. Some of these "other" countries are continuing to produce health manpower in excess of their own needs, and "export" of this manpower provides a far from negligible source of national income, both directly and indirectly.

In response to the needs of HFA strategies and PHC, some countries have redefined the roles of health personnel. In Jordan, physicians are being reoriented through short courses to prepare them to man the newly established PHC centres. Bahrain is continuing with the Family Medicine Post-Graduate Programme to produce specialized family physicians for their PHC centres and for other Arab countries. However, greater efforts are needed to reorient the medical profession to PHC, as most physicians still lack even a basic understanding of what PHC and HFA/2000 mean. It is gratifying to note that many newly established medical schools are adopting community-oriented programmes in line with PHC approaches. Notable examples are the Gezira Faculty of Medicine (Sudan), the Suez Canal Faculty of Medicine (Egypt) and the College of Medicine and Medical Sciences of the Arab University of the Gulf (Bahrain). However, these new institutions and their graduates are not likely to outnumber the already existing institutions and graduates in the foreseeable future.

A positive development is the increasing number of education development centres which have taken upon themselves the responsibility for teacher training. In addition, some of these centres give special training to physicians and other categories of health workers, including management training to mid-level PHC personnel (e.g. Bahrain, Jordan and Sudan). There are now seven of these centres in the Region.

Some countries have set out job descriptions for the various categories of health worker (e.g. Iraq, Somalia and Sudan), but many others have requested guidelines for preparing these; accordingly, guidelines were prepared by WHO and sent to all Member States. Others have defined new categories of health personnel for PHC, for example health guides and their mobile supervisory teams in Democratic Yemen, and community health workers in Pakistan and Sudan. Job descriptions to serve PHC-oriented services were specified for ten categories of health personnel in Sudan: community health workers, medical assistants, health visitors, sanitary overseers, provincial medical assistants, medical inspectors, public health officers, public health inspectors, village midwives and nurses. In Somalia, a study of health manpower utilization was undertaken. It revealed that nurses' roles in PHC activities were minimal. This is also known to be true for many countries other than Somalia. However, in some countries nurses are acting as supervisors and trainers of PHC personnel at the peripheral level. In others the nursing profession constitutes a source from which personnel directly involved in PHC are drawn, e.g. medical assistants, health visitors and nurse midwives in Sudan.

The main obstacles to involving nurses in the Region in PHC activities are listed below.

(i) Nurses do not participate in planning and decision-making. This may, to a great extent, be due to the prevailing culture, namely the relatively poor image of women as a whole in society.

(ii) There is a general lack of nurses, and priority is given to nursing care in hospitals. One factor that aggravates the shortage is low salary.

(iii) On the whole, the nursing profession does not comprehend the PHC approach. There is also a reluctance to accept it, mainly for job security reasons, for, in some countries, the new categories of health personnel produced for PHC were seen to assume some of the basic functions of nurses.

(iv) It has been shown that, to secure real involvement of nurses in PHC, it is essential to educate them through approaches other than traditional, hospital-based programmes. Trainers to provide this kind of training are not yet available; furthermore, training at community level is challenging, requiring patience, conviction and know-how on the part of the trainers - qualities which are, admittedly, rather hard to come by.

(v) Poor utilization of nursing manpower is yet another obstacle. Many are deployed in jobs other than the ones for which they have originally been trained, e.g. administrative or supervisory jobs outside of nursing. As stated above, nurses' salaries are not competitive, while the career structure and programmes for continuing education leave much to be desired.

2.6.1. Reorientation and retraining

Concerted efforts are being made by some countries to reorient and retrain health manpower to serve their HFA strategies and PHC.

Special training for traditional birth attendants has been progressing for some time. More countries are training and utilizing them, not only in their midwifery roles, but also in an extended role involving perinatal and post-natal care, health education, oral rehydration therapy and some other aspects of child health. WHO has collaborated with some countries in developing or improving their curricula for the birth attendants and in training the trainers.

Pakistan is planning to train a total of 45 000 traditional birth attendants in the coming years. There is also a programme for training the trainers (programme training officers and tutors) of schools for medical technicians at national workshops. The medical technicians, after training, are deployed in the PHC health centres and basic health units. In Somalia, the community health workers and traditional birth attendants responsible for the village-level health posts are given specialized training; on-the-job supervision is then provided by a district health team composed of a nurse, a midwife and a sanitarian. In Sudan, some major changes have been instituted in line with the health manpower plan. These include establishing a cadre of community health workers, and 30 schools for their training, as well as schools for training other PHC personnel, developing curricula for training all front-line health workers, and holding periodic management courses for senior and mid-level health personnel. The Islamic Republic of Iran is planning to train two new categories of health personnel, a family health worker (female) and a disease-control worker (male), in addition to the already practising female and male health auxiliaries.

2.6.2. Equitable distribution of health manpower

Although many countries claim that they have an equitable distribution of health personnel, the realities indicate that most suffer from the reluctance of health personnel to serve in rural areas. This is particularly true for physicians, who tend to concentrate in towns. The picture for other health personnel may be a little brighter, and efforts are being made in some countries to improve the situation. However, the economic problems that abound in the Region aggravate the difficulties by making cash incentives difficult to provide.

SECTION 2.7. MOBILIZATION OF RESOURCES

All countries have been taking measures to reallocate human, material and financial resources for implementing their strategies, but with varying results. Increasing allocations are being made to the health sector. However, based on the evaluation reports received, in only five countries (Djibouti, Islamic Republic of Iran, Kuwait, Lebanon and Yemen) does the proportion of the GNP spent on health through the Ministry of Health and/or related sectors reach or exceed 5%. Of this, the percentage of health ministries' budgets devoted to PHC ranges from 4% to over 80% (over 50% in Egypt, Oman and Pakistan); the Regional average is around 50% (Annex and Fig.1). Local community contributions are also being sought, in terms of labour, material and money, as in the Islamic Republic of Iran, Jordan and Sudan; in Pakistan and some Arab countries of the Gulf, a new policy of charging the users for services is being introduced.

Some Member States have been steadily adding new health facilities in rural and remote areas, and referral facilities at secondary and tertiary levels. Some countries have decided to establish teams headed by a physician at the first contact level of PHC (Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Qatar, Saudi Arabia, Tunisia and United Arab Emirates). Others have been training new PHC cadres, such as community health workers, traditional birth attendants and lady birth attendants (Islamic Republic of Iran, Somalia, Sudan and Yemen), health guides (Democratic Yemen), and medical technicians (Oman and Pakistan) to staff their first-contact posts. Redistribution of support personnel at higher levels is also being undertaken in several countries.

An equitable distribution, by way of reallocation of resources, seems to have achieved a satisfactory nation-wide coverage in some countries, e.g. Bahrain, Cyprus, Egypt, Kuwait, Libyan Arab Jamahiriya, Qatar, Saudi Arabia, Tunisia and United Arab Emirates. In others, underserved areas (e.g. rural and urban fringe) are receiving priority attention, with varying degrees of coverage. Data on within-country distribution (by geographical area, major civil division, or even simply urban/rural) of physical and manpower resources, not to mention the financial resources, are usually patchy.

In the less affluent countries, there is a constant struggle to mobilize internal material and financial resources for health. The lack of visibility to the public eye of the positive results produced by the health services in general and the fact that health services are not considered an income-generating sector like agriculture or industry handicap the health

sector in the competition for funds. However, some countries have been taking measures to enhance their internal resources through encouraging community participation and collaboration.

Governments normally assess the resources needed for health as part of their general socio-economic development planning. The health plans and resources available are reviewed periodically with WHO, other UN agencies and bilateral and other donor organizations. The recently adopted practice of having regular Joint Government/WHO Programme Review Missions is proving very useful in this respect. Where national resources fall far short of the expressed needs (e.g. Democratic Yemen, Somalia, Sudan and Yemen), Country Resource Utilization Reviews (CRUs) are undertaken with technical support from WHO to rationalize the use of such resources and to identify and to develop priority programmes for funding by external donors. In the reporting biennium, the response of donor to proposals arising out of such reviews was not considered satisfactory by some of the recipient countries. The reasons were assumed to be the generally unfavourable economic climate, political factors, differences in policies and priorities of donors and recipients, a need for presentation of more realistic proposals, and the lack of follow-up by the recipients.

A number of countries were, however, satisfied with the current mechanisms for collaborating and with the support obtained for health sector development from different bodies. Mention must be made here, even at the risk of repetition, of the inter-country cooperation existing in the Region. The more affluent Arab nations have been supporting health programmes in the less privileged countries in a number of ways - by direct bilateral arrangements, by channelling additional contributions through international agencies, and by surrendering their allocation of the WHO regular budget in favour of programmes in less fortunate Member States, funding their own collaborative programmes by way of funds-in-trust arrangements.

The less fortunate countries of the Region with clearly defined strategies have received reasonable support from external sources, either from international agencies, through bilateral arrangements or through grants or loans from development banks (Table II). For example, in Somalia, external funds constitute 67% of the national health budget. Examples of funding provisions of major significance in the Region are: the joint UNICEF/WHO projects for the development of PHC in Democratic Yemen, Somalia and Sudan; the UNICEF/WHO Joint Nutrition Support programmes in Pakistan, Somalia and Sudan; the joint essential drugs programme in Somalia; the USAID-supported health services development project, PHC support and training programmes for PHC personnel in Jordan, Pakistan and Somalia; construction of PHC facilities in Sudan by the African Development Bank; and the World Bank loan for extension of PHC coverage in three governorates of Democratic Yemen and in Yemen.

Regional needs that did not receive adequate external support were in the areas of transportation, management, training, disease control, strengthening of health infrastructures, and information systems.

SECTION 2.8. HEALTH CARE DELIVERY

Health care delivery is still based on hospital services in most countries, being the more developed component of the national health

system. Hospitals are sometimes overdeveloped when judged on the basis of the country's needs and resources; often, only hospitals receive regular supplies. However, it has been noted that building of new and sophisticated hospitals even in countries with a high GNP is at a standstill at present, because of difficulties in financing the maintenance of existing facilities.

District hospitals, community health centres and peripheral health units are less well equipped and supplied, and they are often unable to provide proper health care services or to satisfy the needs of the population. There is often no properly organized referral system between the different levels, or it is often just one-way, i.e. for emergency cases and seriously sick patients. Much must be done to strengthen this aspect. The establishment of a basic list of drugs, as well as of drug policy and control, has been improving the situation. However, availability of basic drugs at the district and peripheral health facilities is not always assured.

The proportion of the population for whom local health care services are available within one hour's walk or travel (Fig. 3) averages about 68% for rural and 97% for urban areas (Annex). Data are lacking for nomadic populations, for those living in remote areas of large countries, such as Islamic Republic of Iran, Pakistan and Sudan, and for the urban poor who only have minimum health care.

In terms of quality of care, university hospitals and urban general hospitals are always the best staffed and equipped; in some countries they are of a high standard. As one goes towards the periphery, namely towards provincial, district and rural hospitals, respectively, the quality and range of services decrease. The out-patient health care services, attached to hospitals, are of a better standard than those without such a link.

The availability of health manpower is also an area where average figures do not reflect the true situation regarding coverage and distribution. Nevertheless, if at the national level there is only an average of one physician per five to ten thousand people, the situation is indeed unfavourable; with the usual maldistribution of physicians and other qualified health personnel between towns and the countryside, the situation in rural areas can be serious in the extreme. However, with the commitment to PHC concepts and approaches, some reorganization of health care delivery systems in terms of facilities, resources and personnel is taking place in most Member States.

In some countries, it is the physician who is considered the key figure in provision of health care. In others, for example Democratic Yemen, Pakistan, Somalia, Sudan and Yemen, the greater part of the population is covered by community health workers and local birth attendants, or at best by mid-level assistants.

As regards provision of health services, the private sector in health operates in parallel with the public sector in most countries, but its magnitude is usually unknown. However, it is either rather limited or not permitted in Arab countries of the Gulf, in Democratic Yemen and in the Libyan Arab Jamahiriya. It is sizeable in Cyprus and Lebanon. Private practitioners and specialists are usually concentrated in capital cities

and urban centres. Although the quality of care is not always better in private clinics and hospitals, health personnel are more attracted to the private sector because of the better remuneration. Besides, with the advantage of free choice, the satisfaction of patients is higher than in the public health-care delivery system. Collaboration of the public sector with the private is generally weak, and supervision by the former is limited. Certain ministries of health try to encourage the growth of the private sector and provide guidelines for its development in keeping with the national policies and strategies.

The financing and budgeting of national health care systems deserve careful consideration. Available national budgetary resources are usually allocated to the "top of the health services pyramid", namely the specialist clinics and services. In Bahrain and Djibouti, for example, the main hospital in each consumes about two-thirds of the health budget. Thus a small part of the population is given better and very expensive care; curative services are well-endowed at the expense of basic, preventive and health-promoting activities. Changes in such established traditions come rather slowly. Certain countries have now reported that 10-30% of their health budgets are used to support PHC; many were unable to assess this figure with any accuracy.

Despite the efforts of the national health planners and managers to press forward the implementation of strategies for HFA/2000 in keeping with a country's needs and resources, advances can be hampered by political decisions which run counter to the national commitments to PHC, e.g. investments in sophisticated and modern health care facilities and over-production of physicians. It is to be hoped that such wastage of resources will diminish as all sectors and the public become more enlightened.

SECTION 2.9. HEALTH RESEARCH

The establishment of the Regional Advisory Committee for Medical Research and its regular annual meetings have provided a major impetus to the development and strengthening of research capabilities in Member States. The Committee has assigned high priorities to research in a number of programme areas, including maternal and child health, environmental health, malaria, mental health, diarrhoeal diseases, cancer and cardiovascular diseases. In the more important programme areas like maternal and child health, priorities have been reviewed twice in the light of research work carried out in the intervening period. The Committee also regularly reviews research activities supported by the two WHO Special Programmes for Research. In recent years, the emphasis in the Regional research programme has shifted from being mostly disease-oriented to the broader-based systematic research required for the implementation of national HFA strategies.

WHO has been actively collaborating with Member States in strengthening national research capabilities through research grants, training awards, and sponsoring inter-country and national training activities. WHO recently supported an inter-country study to assess health coverage at the PHC level in Bahrain, Egypt and Yemen, and a similar study is being implemented in Jordan. Technical and financial support has been

provided for research studies related to health manpower development. For example, a study on the "Effectiveness and Acceptability of PHC Workers" was carried out in Yemen, and the results obtained are being utilized to improve the training of this category of health personnel and to ensure their greater acceptability by the community. WHO actively promotes such research by preparing the protocols and then commissioning selected national scientists to undertake the research. Most research supported by WHO has a component built in that serves to train the younger scientists in appropriate research methods. While, in the past, research was mostly an individual effort, research workers, policy-planners and health service personnel are now increasingly working together to formulate and implement research projects.

A major constraint in the development of national research capabilities has been the lack of suitably trained and motivated manpower to undertake the research. To help overcome this, WHO has sponsored several inter-country and national training courses in health services research, with emphasis on the multi-disciplinary and intersectoral approach. In these training activities, preference is being given to personnel working in health services in order to promote applied research at the community level. These training activities will, it is hoped, play a major role in advancing national self-reliance in research.

Even though national mechanisms of one type or another exist for managing research in most countries, national expertise in planning and evaluating research is still lacking. To counter this, WHO has held one inter-country (Islamabad, Pakistan, 1981) and one national (Alexandria, Egypt, 1983) workshop on research management; more such national workshops are planned for the coming years. Learning material to facilitate these training activities has been prepared. In order to promote closer collaboration between countries in the field of research, and to engender a greater appreciation of national, Regional and global concerns in research, WHO convened two inter-country meetings of national officers responsible for medical research (Limassol, Cyprus, 1983; Islamabad, Pakistan, 1984), and it is proposed that these meetings should continue to be held once every two years.

SECTION 2.10. COORDINATION WITHIN THE HEALTH SECTOR AND WITH OTHER SECTORS

Member States are taking action to improve coordination within the health sector (intra-sectoral cooperation) with the aim of improving implementation of HFA strategies. The most common measure is to reorganize health ministries, bringing closely related service units under one department or directorate. Some Member States have set up special directorates for PHC, some have combined PHC, preventive and curative care under one "umbrella", and others have established special coordination units, or "international health units" with coordination as one of their functions. Other measures include establishment of departmental committees or councils (as in Kuwait, Sudan and Yemen) to monitor and coordinate various activities. In the Islamic Republic of Iran and in Iraq, separate "High Councils" for coordination, supervision and development of PHC have been established. Similar measures at provincial and district levels have also been reported. Periodic meetings or workshops involving regional and district health directors and managers are becoming on-going activities in

the larger countries, and some of them have reported that coordination is now better at the regional and district levels. More needs to be done in this respect in some other countries.

The eight essential elements of PHC reflect the major problems in improvement of the health status of populations. They may be regarded as major components in socio-economic development, and they cannot be tasks for the health sector alone. The need for more effective intersectoral collaboration is becoming increasingly recognized. Inter-ministerial committees at the national level (in a few countries chaired by the Prime Minister) and multi-sectoral councils or boards at "sub-national" levels are being established in most countries. Admittedly, much has to be done to make these coordinating bodies truly operational, namely to ensure that they meet regularly and follow up the decisions taken.

Other partners for cooperation in fostering health that are steadily gaining in importance are the numerous voluntary and private organizations with health-related aims and tasks. These organizations have often carried out health programmes on their own while health officials and managers made no effort to promote or facilitate coordination and collaboration. Duplication and overlap were inevitable, and there was the risk that certain "minimum standards" were being ignored. Regular exchange of information with such organizations about their existing or proposed activities and the furthering of cooperation and coordination at the national level is highly desirable, as has been seen in the Sudan, where such partnerships have been achieved with WHO in the catalysing role. It must be emphasized that such collaboration at national level can extend the range of health and health-promoting services at a relatively low cost to the national budget.

The growing interest in Member States in "cooperation" was reflected in their choosing, as the subject of Technical Discussions for the Thirty-first Session of the Regional Committee (1984), "Intersectoral collaboration in health development". Subsequently, Sub-committee A adopted resolution EM/RC31A/R.9, which urged Member States "to strengthen or establish appropriate national and local health collaborating and coordinating bodies with clearly defined duties, functions and powers which may include advising, planning, monitoring and evaluating intersectoral health matters." The same resolution requested the Regional Director to "give preferential support to country-level initiatives that have a strong intersectoral component and to continue to support non-health-sector programmes which are consistent with Health for All by the Year 2000 through the primary health care approach."

In summary, it is to be hoped that the difficulties that have been encountered in making functional the national bodies that are supposed to further intersectoral coodination will be resolved in the near future.

SECTION 2.11. INTER-COUNTRY COOPERATION

The Region offers some of the best examples of inter-country cooperation. Motivated by common cultures and problems, and recognizing the economic advantages of cooperation, the Arab States have long ago institutionalized their cooperation in the health field. They established

the Council of Arab Ministers of Health (of the Arab League). More recently a Council of Ministers of Health for the Arab Countries of the Gulf Area was set up. These bodies meet regularly to exchange views on problems of common interest and to determine the lines of cooperation. The Regional Office has cordial ties with both of them.

Through these channels, a variety of health programmes and developmental activities being undertaken in some of the less-privileged countries are being supported by their richer Arab neighbours. These activities include exchange of epidemiological information, control of communicable diseases, training, construction of health centres and hospitals, and even staffing and running services where a country is in dire need of help. Similarly, problems of common concern in the Gulf region are addressed in a collaborative fashion, in areas such as environmental protection, maternal and child health, food safety and collective purchasing of drugs and vaccines.

Apart from the above, and broadly Regional in character, inter-country cooperation in health has been a continuing tradition with countries from outside the Region. Several countries (including China, the EEC countries, Japan and USA) have been collaborating with Member States in the Region in a wide range of activities that develop "health". With the guidance of WHO, these activities are becoming more closely linked to the national strategies for achieving HFA through PHC.

Although technical cooperation among developing countries (TCDC) is essentially a governmental responsibility, the Regional Office has played an important catalytic role in its promotion, taking its mandate from resolutions of the World Health Assembly and of the Regional Committee. WHO has strengthened and supported a number of training centres or institutes within the Region where candidates from other countries can be trained, e.g. the Regional Training Centre for Maintenance and Repair of Medical Equipment in Cyprus, training centres in Sudan to meet the needs of mid-level health workers, the High Institute of Public Health in Alexandria, Egypt, for advanced degree courses or short intensive courses in specialized areas, and the family physicians' residency programme in Bahrain.

It is the Organization's policy to emphasize and encourage placement of fellows and trainees in institutions within the Region. Directories of education and training programmes for health personnel and of collaborative centres and research institutes within the Region have been prepared and widely distributed. Exchange of expertise, including utilization of UN volunteers from one developing country in another, is also being promoted where appropriate.

Some of the obstacles to inter-country cooperation are political differences, lack of adequate funds, differences in policies and priorities of donor and recipient countries, ill-prepared proposals and inadequate managerial systems. Lack of confidence on the part of some governments in the technical and technological capacities of sister developing countries seems also to hamper TCDC approaches.

SECTION 2.12. WHO COOPERATION WITH MEMBER STATES

Of the factors that have contributed to productive cooperation between the Regional Office and the Member States, the many country visits of the Regional Director, often accompanied by the Director-General, must be emphasized. In addition, the Joint Government/WHO Programme Review Missions, in-depth programme reviews and visits by senior national health officials to the Regional Office were very important facilitating activities.

The Regional Director and his staff have worked very closely with Member States in the preparation and implementation of their strategies and plans of action for HFA. The strategies were prepared by national authorities in close collaboration with WHO Representatives and Programme Coordinators or, where there were none, with other WHO staff members. They identified together the priority problems in the national strategies, particularly those relating to the essential elements of PHC. They then reprogrammed activities and reallocated funds to ensure best possible support for national priorities.

Following a Regional Committee resolution to this effect, the Joint Programme Review Missions are now launched to all Member States during the second year of each biennium. They review the programme activities in the current biennium, impart detail to the programme budget of the next biennium, and identify the priority programme areas for collaboration in the biennium to follow. The magnitude of external resources required and coordination of inflow of such resources are examined to ensure that they are used optimally and to identify possible means of obtaining additional ones. The first round of Joint Programme Review Missions was launched in 1983, the second in 1985; such Missions were completed for all Member States of the Region.

WHO has also carried out in-depth reviews, in the Regional Office, with participation of the appropriate WHO Representatives and Programme Coordinator, of its collaborative programmes with some Member States. The aim was to assess progress in implementing the planned activities, to identify constraints and to resolve the problems. In addition, Country Resource Utilization Reviews (CRUs) were either updated or undertaken for Democratic Yemen, Somalia, Sudan and Yemen to identify the magnitude of resources required for implementation of national strategies. Similar studies are planned for Afghanistan and Djibouti in 1986.

WHO staff members assisted nationals during the monitoring of progress in implementing national strategies, and in the preparation of the national reports on the outcome. Following receipt of the reports, a Regional analysis of progress achieved was prepared for consideration by the Regional Committee. Certain resolutions were passed directing future activities and collaboration. The collaborative efforts to produce this first evaluation of HFA strategies are detailed in the "Introduction" to this Report.

Of the difficulties faced in collaboration with Member States, the different interpretations of the concepts "Health for All" and "primary health care" brought home to the Regional Office the need to discuss and explain these concepts in depth in a way that took account of the different

demographic, geographical, economic and political structures in different countries. This was done in the course of the personal visits of the Regional Director paid to the Member States, at meetings of the Regional Committee, during Joint Programme Review Missions, on the occasion of visits to the Regional Office by senior health officials, and as part of the national workshops on the managerial process for national health development. With time, the concepts of PHC have become better understood and more unified. Another area of difficulty lay in the exchange of health and health-related information between Member States and the Organization. In some instances, certain types of information did not exist, sometimes it was incomplete, and in some cases it went to the wrong people. The Joint Programme Review Missions played a vital part in identifying the problem in each case and in discussing means for its solution. Other problems related to difficulties in communications and logistics; these are gradually being overcome.

CHAPTER 3

PATTERNS AND TRENDS IN HEALTH STATUS

SECTION 3.1. PATTERNS AND TRENDS IN MORBIDITY AND MORTALITY

3.1.1. Mortality

The estimated total population of the Region in 1983-84 was about 296 million. In one year, an estimated 12 million were born, of whom about 1.4 million died in infancy, together with 2.6 million older children and adults, making a total of nearly four million deaths. About one third of these deaths were children under five years of age.

Estimates of the leading causes of death in the Region can be made in two ways. One way is to assume that the mortality pattern in developing countries today is similar to that found in developed countries around the turn of the century. From data available for the latter, a model can be developed which, when applied to the countries of the Region, indicates that 45% of the deaths would be due to infectious disease, 14% to cardiovascular diseases, 10% to perinatal conditions, and 4% each to cancer and injuries. The remaining 23% would be due to all other as well as "unknown" causes (Fig.6).

A second way is to extrapolate from the causes reported to WHO. Only six countries reported deaths by cause in the period 1979-83: Bahrain, Egypt, Islamic Republic of Iran (for selected cities), Jordan, Kuwait and Syrian Arab Republic. These countries represent only 36% of the Region's population; the coverage of their data by cause of death ranged from more than 90% down to only 15%. They listed a cause for nearly 600 000 deaths, but more than one-fifth of these were classified under "signs, symptoms and ill-defined conditions". Excluding these, it may be said that a cause was given for only about 40% of the deaths in these countries, or about 10% of deaths in the whole Region. When the causes in each country are ranked, a picture emerges that is different from the estimates based on the model used above. Except for Egypt, the leading cause of death is cardiovascular disease, followed either by infectious and parasitic diseases, or by accidents. Next in ranking are cancer and perinatal conditions, although the last ranks among the five leading causes in only three of the six countries. These five causes account for two-thirds of the deaths reported in these six countries.

The different pattern to that indicated by the model could be due either to serious under-reporting of infectious diseases and perinatal conditions, or to the fact that these six countries are not truly representative of the Region as a whole, the more populous countries probably having a mortality structure approaching that of Egypt rather than that of the other five countries. Mistakes in coding, resulting from

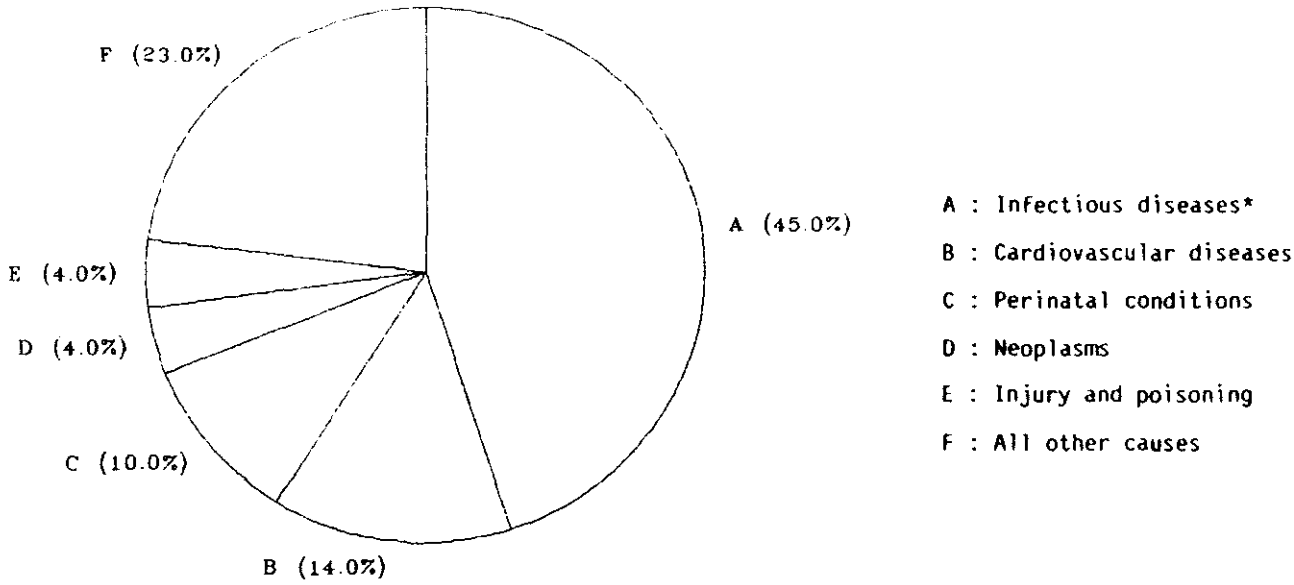


Fig.6. Leading Causes of Death in the Eastern Mediterranean Region

* Composed of ICD-9 Chapter 1 (Infectious and parasitic diseases) plus Chapter 8 (Diseases of the respiratory system). Examination of the age distribution of deaths coded as due to category 349 of the ICD-9 Basic Tabulation List reveals that in 1980 in Egypt 85% of these were in the under-five age group, and therefore probably diarrhoea-associated, so for that country they have been included here also.

incorrect or ambiguous medical certification of cause of death, is an important factor. It is likely that the large number of deaths whose cause is given as "cardiac arrest" are coded under "cardiovascular diseases" although, in the way the term is used, the cause should be listed as "ill-defined cause". During a visit to the Syrian Arab Republic, it was observed that "diarrhoea" cases were incorrectly coded under "diseases of gastrointestinal system" rather than under "infectious diseases". Under-reporting of those deaths occurring shortly after birth may account for the relatively lower percentage of deaths due to "perinatal conditions".

Trends in mortality are difficult to determine, since only two countries have been reporting causes of death for 10 years or more. There has been no change in the ranking of the five leading causes of death in Egypt since 1970, which are of the same order as the model estimates (see above) for the Region as a whole. In Jordan, cardiovascular diseases have replaced infectious diseases as the leading cause of death, and perinatal conditions have disappeared from among the first five. Over the same period, the absolute numbers of deaths recorded as being due to infectious diseases, perinatal conditions and injuries declined in Egypt and Jordan, while those for cancer and cardiovascular diseases rose.

3.1.2. Morbidity

Nineteen countries report regularly on new cases of certain infectious and parasitic disease. Unfortunately for attempts to compare and summarize, they do not all designate the same diseases as notifiable; some

countries combine categories, particularly where intestinal infections are concerned. However, when the reports are used to rank the leading causes of morbidity from infectious disease for each country, together with estimates of the leading causes for the three non-reporting countries, these may be combined to produce a list of the ten leading causes of illness from "infectious and parasitic diseases" for the Region.

Diarrhoeal diseases head the list, being ranked among the first six causes in more than three-quarters of all reporting countries. Measles and malaria are also among the first six in half or more of the countries. The remaining diseases ranked in the list in at least a quarter of the countries are: chickenpox, hepatitis, mumps, respiratory infections, schistosomiasis, tuberculosis and typhoid/paratyphoid. Diseases which do not appear in the list of ten leading causes, but which ranked among the leading causes of morbidity in three to five countries of the Region are: amoebiasis, eye infections, streptococcal sore throat and whooping cough.

A similar tabulation can be made for 1970, when reports were received from thirteen of the countries analysed above. These countries are not fully representative of the Region, since they do not include some countries that report a high incidence of malaria and tuberculosis. Comparison of data for 1970 and 1981-1983 for these 13 countries shows that measles remains at the top of the list, that intestinal infections, mumps and malaria have advanced in importance, and that influenza, tuberculosis and typhoid/paratyphoid have decreased. However, this change in itself is not evidence of a trend.

3.1.3. Diseases subject to the International Health Regulations and to International Surveillance

Cholera

Cholera has been reported from two-thirds of the countries of the Region over the past decade, but only in few countries has it been reported to persist at high levels for more than two years in succession. Since 1980, about one-third of the countries have reported cases, mostly in very small numbers (except in Islamic Republic of Iran). In spite of incomplete reporting, it does appear that the pandemic has waned from its peak in 1977 in the Region.

A cholera epidemic started late in March 1985 in one of the refugee camps in the northern part of Somalia. It resulted in several thousand cases, with a relatively high case fatality rate at the beginning of the epidemic. It was brought under control and, at the end of June 1985, only sporadic cases were being reported from most of the regions of Somalia. Djibouti reported some cases of cholera, also starting among refugees. It is believed that these two introductions of cholera into the Region are related to the cholera situation in a neighbouring country. Emergency preparedness to handle outbreaks of cholera, supported by WHO, is being undertaken in other Member States, in particular those with refugee problems.

Cholera is a disease which some countries are reluctant to report for fear that their neighbours will place restrictions on trade. Those that promptly report suspected cholera cases are to be commended for their

conscientious adherence to their international obligations. Countries should realize that their own interests are best served by prompt reporting and investigation of suspected cases, as well as by refraining from taking discriminatory measures against others who fulfil their obligations.

Plague

Plague may recur in a natural focus of infection after very long intervals. At least seven countries have had suspected or confirmed cases in the past 40 years or so, but these have rarely numbered more than 20 in a year, and have been of no significance for international travel. During the ten years 1975-1984, only Libyan Arab Jamahiriya has officially reported cases, the latest being four cases in 1980. Outbreaks in two other countries were not officially confirmed. This is another disease which countries are reluctant to report, but the same considerations as for cholera should apply.

Yellow fever

Yellow fever has not been reported from any country in the Region since the outbreak in Sudan in 1940.

Louse-borne typhus and relapsing fever

Louse-borne typhus and relapsing fever have not been of any significant public health importance in the Region during the past decade (1975-1984). Sporadic cases are being reported from a few countries.

Malaria

Malaria is a major public health problem in 14 countries of the Region. In six of these, there is no nation-wide control programme, but plans for an extension of control activities are being made in most of them. In countries without nation-wide control programmes, the number of laboratory-confirmed positive cases has been rising, partly due to the extension of case-detection activities. In fact, between 1979 and 1983, the malaria situation has deteriorated in 9 out of 17 countries in which an assessment could be made.

3.1.4. Target diseases of the expanded programme on immunization

Final figures for 1982 and 1983 were still not available from some countries; references to years later than 1981 involve provisional figures.

Tuberculosis

In tuberculosis reporting, it is difficult to separate new from old cases. Taking the figures at face value, it appears that, since 1977, the trend in cases has been upwards, with more than 500 000 cases per year reported in 1980 and 1981. In eight countries peak levels were reached in 1981-1983.

Measles

Reports of cases of measles during 1978-1983 came from 17-21 countries in the Region and totalled 200-350 thousand per year. During this period,

around 10 11 million infants per year survived to the age of one year, of which 25% were immunized, leaving eight million susceptible. In the light of such a large susceptible population, the number of cases reported must have been only a fraction of possible number occurring. Despite this under-reporting, the numbers of cases reported placed measles among the leading causes of morbidity in at least 14 countries, and doubled from 1976 to 1979, followed by a fluctuation around the 1979 level in subsequent years.

Poliomyelitis

Using lameness surveys in three countries (Democratic Yemen, Egypt and Yemen) to estimate the incidence of poliomyelitis, and comparing these estimates with reported cases, it has been found that only about one-quarter of the cases are reported. Though some 12 000 cases were reported in the Region in 1980, the true figure might have been closer to 50 000 cases. Since that peak year, apparent incidence has fallen back to the 1978-79 levels. No cases have been reported from a few countries in recent years (e.g. Cyprus, and some Arab countries in the Gulf area).

Diphtheria

Diphtheria case reports more than tripled after 1976, to reach a peak at nearly 20 000 in 1980; since then the Regional numbers annually have held steady, although a few countries have shown a recent increase in cases. No cases of diphtheria have been reported from a few countries in recent years (e.g. Cyprus and some Arab countries in the Gulf area).

Pertussis

Pertussis case reports peaked at 205 000 in 1978, and declined overall by one-quarter by 1981. Four countries of the Region still showed an upward trend at that time; all of these had low levels of immunization coverage.

Tetanus, including neonatal tetanus

The number of tetanus cases reported has been rising continually since 1975, partly owing to reporting by an increasing number of countries, as well as owing to improved reporting completeness. Between 1979 and 1981, the countries that reported for both years showed a one-third increase in the number of cases. Nearly 18 000 cases were reported in 1981. The figures include neonatal tetanus, for which reporting has greatly increased since 1976, when only one country reported it separately. By 1981, twelve countries were reporting on neonatal tetanus separately, six more in 1982-83. More than 7000 cases were reported in 1982. Estimated reporting completeness of neonatal tetanus for seven countries in the Region was 2% in 1980-1981.

3.1.5. Other diseases of Regional importance

Acute diarrhoeal diseases

Acute diarrhoeal diseases of children under five years of age are a significant cause of morbidity and mortality. Estimated death rates from

diarrhoeal diseases range up to 50 per 1000. The number of episodes of diarrhoea, as calculated for six countries, ranged from 2 to 5 episodes per child per year. The 16 countries with infant mortality rates of 50 per 1000 or more are considered to have a major infant and childhood diarrhoeal disease problem. With the continued increase in the number of births in the Region the crude birth rate averages 42 per 1000 - this problem is a growing one.

Viral hepatitis

Viral hepatitis has shown an overall rising trend over the last decade (1975-1984) in eleven countries, and a falling one in the others. As mentioned above, it ranks among the six leading causes of morbidity in more than one quarter of the reporting countries.

Schistosomiasis

Schistosomiasis is reported from 14 countries, but it constitutes a major public health problem in only seven countries. In those, 15-75% of the population are at risk, and 4-40% of the total population are infected. As irrigation and hydro-electric projects are extended, more people become exposed to infection. With the recent introduction of potent, single-dose oral drugs, it has become possible to attack the problem effectively, but so far this has been done only in limited areas of some countries.

Meningococcal meningitis

Meningococcal meningitis is being reported from some countries. The number of cases reached a peak in 1978, when there was a large epidemic in Sudan. However, the magnitude of recent outbreaks is not as great as in the past, following extensive use of meningococcal meningitis vaccines.

3.1.6. Health indicators

Infant mortality, life expectancy

Infant mortality rates (IMRs) have fallen in the Region over the past decade, with a corresponding rise in the life expectancy at birth. The IMR has fallen by 20 or more per 1000 of the population in 16 countries, including 11 countries in which it has fallen by 25 or more. Life expectancy has risen by three years or more in 16 countries, including nine in which it has risen by five years or more.

Nutritional status

Nutritional status of women during pregnancy is indicated by the incidence of low birth-weight children (less than 2500 g). Recent data (1979-1982) show an incidence that ranges from 1% to 27% (Fig.4). In those countries for which data are available for both 1979 and 1982, there was no change in incidence except for Egypt, which showed a remarkable fall, from 14% to 1%.

Levels of protein-energy malnutrition in children have been measured in only a few countries, with differences in reference levels and

coverage. For example, a 1978 survey of two villages in Democratic Yemen revealed malnutrition, judged by weight-for-age, ranging from 32% in infants less than six months old to 74% in two-year olds; these figures were supported by those for wasting and stunting. In contrast, weight-for-age figures of a national sample in Tunisia (1973-75) appear to indicate acute malnutrition, ranging from 19% in infants to 27% in 2-year olds (and 18% in 4-year olds), yet figures for wasting (weight-for-height) show only a very low level of malnutrition. In Yemen, weight-for-age figures from a 1979 national sample appear to show malnutrition at all ages, ranging from 37% in infants to 69% in 4-year olds, yet wasting figures show that only infants are significantly affected.

Somalia and Sudan have been severely affected by the drought in Africa and have suffered from famine conditions for years, with a concomitant effect on all ages of their populations.

SECTION 3.2. PATTERNS AND TRENDS IN HEALTH-RELATED BEHAVIOUR

Human behaviour greatly influences all aspects of health and disease. There is a close relationship between a number of serious diseases and certain lifestyles, such as the effects of excessive smoking, drinking or overeating on various body systems. The role of behaviour is equally well-documented, and it is reflected in the rising rates of traffic accidents, suicides and many psychosomatic illnesses. In addition, many of our so-called health-related practices, like rearing of children, breastfeeding and weaning, contraception, etc., are all intimately related to behavioural practices of the community or individual.

3.2.1. Trends in alcohol, smoking and drug dependence

The abuse of alcohol has not yet emerged as a major health problem in the Region, largely due to the influence of Islamic religious views, which forbid ingestion of alcohol. Smoking, however, is widespread, gradually spreading among women and youth, particularly among skilled labour and the more highly educated, in several countries of the Region. The use of cannabis (hashish) and opium has been traditional in many of the countries, and they continue to be the major drugs of abuse. In the last decade, disturbing trends have been recorded. There have been significant increases in drug dependence reported from Afghanistan, Egypt, the Gulf countries and Pakistan. There have also been changes in the drugs of preference; heroin (a refined and more dangerous product of opium) is being increasingly used. The habit is said to be spreading among school and college students and among skilled workers, particularly in urban areas and industrial slums.

Khat-leaf chewing has been traditional in Democratic Yemen, Djibouti, Somalia and Yemen. It is, however, becoming more widespread and is causing serious concern. In Yemen, owing to its high market price, farmers are switching to khat-growing from food crops. Saudi Arabia and Somalia have recently banned its cultivation and sale; Democratic Yemen has restricted its use to certain days of the week, but Djibouti and Yemen have not yet adopted any legal measures for its control. To share information about khat, its consumption, its social role and its effects on the population, WHO organized an inter-country meeting in Mogadishu, Somalia, in 1983 and supported a national workshop in Djibouti in 1984.

3.2.2. Behaviour and utilization of health services

It is ultimately human behaviour that determines how health services are utilized. Studies in the Region have shown that 20-30% of the patients who go to general practitioner clinics or other medical facilities do not have demonstrable physical illness; their symptoms are usually a result of psychosocial stress. Current medical services offer costly laboratory investigations and costlier medication, without really helping these patients. In chronic diseases like tuberculosis, leprosy, epilepsy, diabetes and psychosis, the need for prolonged care using long-term drug regimens is well recognized, but compliance on the part of patients is often very poor, largely due to aspects of human behaviour. Some, it should be noted, are linked to the difficulties of travel in rural areas, making the effort needed to obtain further prescriptions seem not worthwhile.

3.2.3. Traditional healers

Traditional medical practitioners, herbalists and spiritual counsellors are extensively utilized in the Region; they are usually unrecognized by and outside the national health systems. In Pakistan, there is a well-established ancient system of "Unani-Tib" medicine. Herbal medicines are also frequently used in Egypt and the Islamic Republic of Iran. Traditional religious healers still play a prominent role in Sudan, particularly in the treatment of mental illness. In view of the deep faith of large sections of population in traditional healers, many health planners feel a need to incorporate them in some way into national health systems, but no clear patterns have yet emerged.

3.2.4. Traditional birth attendants

Some countries, like Egypt, Lebanon, Saudi Arabia and Syrian Arab Republic, have certain legal restrictions on the work of traditional birth attendants (TBAs). However, as a recent WHO survey has pointed out, many of the countries of the Region are utilizing their services and providing them with various types of training. It has been shown that, even where trained health personnel are available, many families prefer to use TBAs, for economic, social and cultural reasons. This is an indication of how community habits and behaviour can affect the type of services offered by national health systems. In any case, it may, in the long run, be more economical and efficient to train existing TBAs rather than to provide a new class of health personnel.

3.2.5. Breastfeeding

Prolonged breastfeeding has been the traditional practice in the Region; Islamic teaching recommends a minimum of two years before weaning an infant. This has a beneficial effect on the child's physical and psychological growth, and, acting as a means of contraception, helps to space births. Unfortunately, under the impact of "modernization" and high pressure selling techniques by manufacturers of baby foods, this behavioural pattern is changing. This is more evident in the Gulf countries and in areas of rapid social change, e.g. cities. The movement away from breastfeeding requires special attention, including institution of corrective measures, even legislation.

3.2.6. Family planning practices

A technological breakthrough alone will not solve the problem of the rapid population growth in most countries of the Region. The simplest or the technically best contraceptive still requires human motivation to use it; furthermore many social and religious constraints hinder wider acceptance. Egypt, Islamic Republic of Iran, Pakistan and Tunisia have accepted family planning as an official health policy; many other countries have not. Vasectomy, which hardly gives rise to complications, is reported to provoke fears of physical and sexual weakness in Pakistani men, particularly among the uneducated and the poorer classes. Similarly, contraceptive pills have not been widely accepted. There is as much need for research into the psychosocial aspects of family planning as there is for studies of its biological aspects.

3.2.7. Other traditional health practices

The influence of patterns of social and individual behaviour can be seen in many other health-affecting practices. Female circumcision has been a subject of intensive study, and has resulted in two publications being issued by the Regional Office. The harmful impact, both physical and psychological, on the growing female is well documented. Like all traditional behaviour, it is not easy to change: the practice is still widely prevalent in Djibouti, Egypt, Somalia and Sudan, as well as in some neighbouring countries.

3.2.8. Health promoting behaviour

There are many examples of health promoting behaviour which can be officially furthered by the national health systems, such as cleanliness, taking exercise, and sport in schools and colleges, to mention but a few. Other patterns of family life that are worthy of support are care for the aged, the mentally ill and the handicapped within the family.

Religious institutions and their leaders can play an important role in promoting healthy lifestyles and in combating drug dependence, to mention but a few areas of collaboration. The Organization is playing an active role in seeking their assistance in promoting community health.

SECTION 3.3. ENVIRONMENTAL FACTORS

3.3.1. Water supply and sanitation

The water supply and sanitation sectors in the countries of the Region are at various stages of development. Since the launching of the International Drinking Water Supply and Sanitation Decade (1981-90), the Member States have taken steps to accelerate the provision of potable water supplies and proper sanitation, especially to to the underserved rural and fringe urban areas. Many have prepared national plans reflecting the Decade targets. Nine countries (Afghanistan, Egypt, Jordan, Oman, Pakistan, Somalia, Sudan, Syrian Arab Republic and Tunisia) have organized national Decade conferences with WHO support, while Democratic Yemen, Djibouti, Islamic Republic of Iran, Iraq and Yemen have plans for holding such meetings. Progress already achieved in meeting Decade targets by the

countries of the Region was the subject of an inter-country mid-Decade meeting in Cyprus in July 1985.

WHO has collaborated with Member States to strengthen human resources development, fundamental to progress and success. A national workshop on management development was held in Jordan, and others are proposed for Somalia, Pakistan and Yemen. Low-cost technologies in wastewater treatment have been promoted through national courses held in Egypt, Oman, Pakistan, Saudi Arabia and Sudan. There is a need for information on appropriate methods of water distribution and treatment for rural areas, and WHO is preparing guidelines suitable for the Region.

Senior managers of water and sanitation systems have been made acquainted with financial and socio-economic aspects through an inter-country workshop held in Somalia in 1984. Training, research and technology transfer through information exchange will receive a major boost through establishment of the Centre for Environmental Health Activities (CEHA) in Amman in 1985. Some problem areas, such as whether regular drinking of desalinated water affects health (Gulf countries), the remarkably high cost of construction of water and sanitation systems in several countries of the Region, taste problems due to corrosion of water pipes in Qatar, maintenance and operation problems of wastewater treatment plants in Saudi Arabia and the suitability of different pipe materials for water systems in Pakistan were the subjects of studies and seminars.

3.3.2. Environmental health

Environmental pollution problems are on the increase in the Region. Their magnitude and the potential hazards to health vary, depending, for example, on the degree of industrialization of the Member State.

One group of countries, including most of the Gulf countries, have taken steps to control the more obvious manifestations of environmental pollution in urban areas. There has been some advance in the development of sewerage systems and the treatment of sewage and industrial wastewater. In view of the general shortage of water in the Region, treated effluents must be re-used. However, re-use must be controlled. At present re-use for irrigation is occurring without a true understanding of the epidemiological consequences of alternative forms of re-use and the part played by optimization of treatment processes.

Marine pollution is a common concern of many of the Gulf countries and a number of collaborative programmes are being arranged through the Regional Organization for the Protection of the Marine Environment (ROPME) in Kuwait.

With the rise in petrochemical and other heavy industries, disposal of hazardous wastes is becoming a serious problem. None of the countries concerned have decided on a disposal policy, though several alternatives are under consideration. Technical collaboration in hazardous waste treatment and disposal is needed and research on landfill disposal and its impact on groundwater pollution would be urgently needed. Participation in WHO's International Programme on Chemical Safety (IPCS) has been shown to be advantageous for the environmental agencies in countries with large-scale industry.

Air pollution in Gulf countries presents problems because industries are located near urban residential areas. Monitoring and control of air pollution is improving. Better control will depend on training qualified personnel and the implementation of site-specific control policies. Incineration of solid wastes also contributes to air pollution; stricter monitoring of such disposal sites and practices is required. In general, training of personnel in solid waste disposal is essential to upgrade the technical competence of staff. It has been pointed out that the potential for reclamation of compost from municipal solid waste should not be overlooked.

A second group of countries, such as Egypt, Iraq, Jordan, Libyan Arab Jamahiriya, Pakistan, Syrian Arab Republic and Tunisia, have been pressing forward with urbanization and industrialization without having paid much attention to environmental pollution control, and they now face similar pollution problems. Unfortunately, they are not properly equipped to monitor pollution nor to enforce regulations. As a first step, it would be necessary to assess the environmental pollution situation, as an approach towards developing legislation. They could benefit from the experience of Gulf countries that have more advanced environmental legislation and established control agencies. The States listed above have coastlines and release pollutants into coastal areas, but little effort is made to control marine pollution or to collaborate with neighbouring countries in this task. Pollution of inland waters is generally a major problem too, because sewerage systems are not widespread and existing ones are often in a state of poor repair. However, the sewerage systems in the larger urban centres are being improved and extended.

It has been noted that it is important in water-short areas to re-use treated effluents. However, problems have already occurred through use of untreated sewage to irrigate vegetables eaten raw (e.g. in Egypt), and strict control of wastewater treatment and re-use is essential.

Air pollution goes largely unchecked, but it is clearly of lower priority than water pollution. Gradual improvement in technical competence of air pollution control agencies and the introduction of appropriate legislation form a reasonable medium-term approach.

Solid waste collection and disposal in these countries are, on the whole, poorly organized, and there is a great need for staff training at all levels in the sectors concerned. Air, land and groundwater pollution often result from poor waste disposal practices and strict regulations should be introduced and enforced as a matter of urgency.

Ministries of health are generally not influential in controlling solid waste disposal, but they should be encouraged to take on more responsibility in this area for, with increasing industrialization, poor disposal practices for hazardous wastes give rise to growing health problems. Training is of importance, and the solid waste disposal sector as well as ministries of health need staff with an up-to-date knowledge of treatment and disposal practices for hazardous wastes. Indeed, governments as a whole need to be more aware of all aspects of the use of hazardous materials in their own countries, from the stages of import or manufacture to that of disposal.

A third group of countries, including Sudan, Djibouti, Somalia and Yemen, have done little in the field of environmental pollution control. The basic problems of water and sanitation have a greater urgency because water is in short supply. Environmental impact assessment would be essential to evaluate the present situation with respect to pollution and to predict the effects of urban, industrial and agricultural development. This would form a basis for formulating policies and programmes. Formulation of appropriate legislation will also depend on a thorough assessment and will need action to prevent the continuing adoption of unsatisfactory waste disposal practices. In assigning priorities, land pollution deriving from poor disposal practices for solid wastes and groundwater pollution are the common problems which require immediate attention: air pollution control is of low priority. There is a need to upgrade national expertise, and awareness of the importance of proper hazardous waste disposal practices at governmental, and municipal and regional levels is essential if public health is to be protected as industry expands.

3.3.3. Food safety

Food safety programmes are at different stages of development in the countries of the Region. Lack of coordination amongst different governmental agencies has hampered the implementation of existing laws and regulations. A seminar on the Organization and Management of Food Control Services was held in 1982, attended by senior officials from ten countries of the Region. Inadequacy of manpower for field inspection and laboratory work continues to be a constraint, so specially tailored Regional or national courses have been organized and more are being planned. WHO has collaborated with Democratic Yemen, Iraq, Islamic Republic of Iran, Oman, Pakistan, Syrian Arab Republic, Sudan, Tunisia and Yemen in preparing well-defined strategies to implement their policies in this area. There is growing need for more intensive and continuous collaboration to strengthen national food safety control activities.

3.3.4. Natural disasters

Apart from the drought that has been and is affecting Sudan, Somalia and Djibouti, natural disasters of such a magnitude as to influence national socio-economic development do occur in the Region. For example, floods of some magnitude have occurred in Egypt, Democratic Yemen and Pakistan, while an earthquake of considerable severity struck in Yemen. This has created in Member States an awareness of the need to undertake national as well Regional planning to cope with such emergencies. WHO is involved in providing emergency health relief and supporting national health services as appropriate. Emergency preparedness for natural disasters has been promoted through supporting a national seminar in Egypt in 1983 and organizing a Regional workshop in Iraq in 1985. A booklet containing a list of standard drugs and clinic equipment for an emergency health kit sufficient for 10 000 persons for three months was published by WHO in both English and Arabic and was distributed to all countries of the Region. In addition, WHO, through its Emergency Relief Office at Headquarters, has provided assistance to national health services, both to ameliorate the effects of disasters and to help with rehabilitation of populations.

The organization of national emergency medical services is related to disaster preparedness. Such services are a high-cost component of any health system and can place a considerable burden on national health service budgets. The Organization has been assisting six countries of the Region with reviews of available facilities, preparing plans of action and seeking external funds.

SECTION 3.4. IMPLICATIONS FOR SOCIAL AND ECONOMIC POLICIES

The previous sections have described major patterns and trends in health status. What are the implications when countries are setting their social and economic policies? Efforts to combat major infectious diseases need to be sustained or increased. Yet diseases which have their aetiology in the physical environment, diseases of affluence and old age, and diseases of psychosocial origin are emerging as major areas of concern. Countries, following accurate health surveillance, monitoring and evaluation, should set down an order of priority for debilitating diseases and health conditions, and then select the most effective and efficient strategies to overcome them. Special attention should be paid to the socio-economic development of rural areas and urban slums. Ways are needed to increase the coverage of the population with basic PHC services. Reallocation of manpower, continuing education of the already qualified, improvement in the supervision, and hence quality, of work, better management of personnel, and making conditions of work more attractive are some of the aspects of human resource development that need to be considered further. The construction and equipping of basic health units is progressing, but these efforts must be increased. Construction of large, expensive hospitals needs to be rationalized, and high coverage with PHC health units must receive first priority.

The history of successful public health has shown that disease control requires a singificant element of law and order. Introducing appropriate legislation and enforcing it is a prime requirement. Social and economic plans must be examined to ensure that a particular course of action to achieve national economic gain does not compromise the health of the people, for example, through pollution.

Care is needed where international funds, gifts or loans, are used to construct health facilities, to staff services and/or to overcome an immediate health problem. Too often the technology "left behind" cannot be sustained on the country's limited resources, and initial gains in disease control and infrastructure building are soon lost. It is necessary to seek technology which is culturally acceptable or can be adapted to be so, and can be sustained, maintained and operated using the country's own financial and manpower resources - appropriate technology.

Of particular concern is a population too large to exist in a poor and depleted environment. Health problems of overpopulation point to the special attention that must be devoted to population-size control at national level and to family planning at all levels. Because of intertwining of social/psychological/religious/cultural considerations at the level of the general public and community, it is difficult to arrive at a single policy by consensus or at acceptable and practical strategies to implement a policy.

Health is strongly correlated with level of education, especially of the mother, the health authority in the family; special efforts are needed to reach and educate women in matters of family health, enabling them to understand the relation between lifestyle and health.

In a number of countries, the involvement of communities in protecting and developing their own health is increasing. Some provide land for their local health facilities, accommodation for the health worker, or help to build the health facilities. Others give general support to their local health service. Community participation has been shown to be possible and valuable within the context of many different political systems. Policy makers would do well to consider the ways their communities could become involved in health promotion and disease prevention, helping to determine effective mechanisms. This can extend the effectiveness of national health services, especially in reaching out to rural and underserved populations at an acceptable cost to national budgets.

In short, policy makers must be imbued with the importance to their countries of striving to attain the goal of HFA/2000. They can assist: by taking into account the potential impact of any socio-economic policy on health; by making proper use of health information; by understanding the concept of PHC; by being realistic in their expectations; by making wise use of international funds; by considering the ideas and findings of health experts; by realizing that health is the responsibility of many sectors, thus recognizing that intersectoral collaboration is essential; by advocating appropriate legislation; by putting more reliance on the community; and by generally providing greater support for health promotion and disease prevention activities.

CHAPTER 4

ASSESSMENT OF ACHIEVEMENTS

SECTION 4.1. EFFECTIVENESS AND IMPACT OF THE STRATEGY

All Member States of the Eastern Mediterranean Region have explicitly or implicitly endorsed the HFA/2000 strategy. Nearly all have formulated their national strategies up to the year 2000, a few translating them later into plans of action. Where difficulties were encountered, WHO collaborated to help the countries accomplish the tasks they had set themselves.

In the national health plans, due importance has been given to the promotion and strengthening of PHC systems, aiming at equitable distribution of resources and facilities. Several governments have reorganized their ministries of health appropriately and have decentralized services to the extent possible. Manpower development plans have been worked out, though some seem to need refinement. Existing health training institutes have been strengthened and new ones are being set up to train a variety of front-line health workers. New primary health posts or units are steadily being added, with varying degrees of community support, in the form of labour, donations or sharing of costs. Referral tiers are being strengthened, both physically and by redistribution of staff and other resources; the principles behind referrals are being specified to improve effectiveness of the health services. Job descriptions and levels of responsibility of health service staff and facilities have been defined.

Health services are now actively transforming themselves from taking the traditionally passive role to assuming a more effective functional state with community involvement and interaction. The countries have reported positive accomplishments, although such statements were not always backed by objective and quantitative data. Furthermore, the "most recent data" were often from 1982 or earlier. Thus, it is not easy to make quantitative assessments of progress, except from a few aspects, due to lack of suitable baseline data. However, some information is given below.

Coverage by PHC ranges from 20% to 100%; in ten countries it has reached 90% or more (Fig.3). The extent to which the different elements of PHC are covered seems variable, as is, perhaps, the quality of services provided. Integration of vertical programmes into PHC systems has generally been patchy. Supplies of safe water and provision of sanitation, especially in rural areas, are still far from satisfactory. Many countries have mentioned reductions in deaths from diarrhoeal diseases as a result of the wide use of oral rehydration therapy. A reduction in the incidence of communicable diseases preventable by immunization has also been generally mentioned, though not always substantiated by figures.

The relative effectiveness of the PHC approach in providing essential care, as against provision of traditional, high-cost, hospital-oriented, curative care, has been commented upon by several countries. Having communities express their own views on their health needs in itself justifies the approach and illustrates its appropriateness. Community involvement is increasingly being elicited through local health councils and by direct contact. In fact, some countries have commented that, because of community involvement, better coordination is observed at the regional and village levels than at the national level. With active councils, PHC delivery has tended to be more efficient and comprehensive.

Most countries have now been examining progress made in relation to the goals and targets set in their current national health plans, as a prelude to the preparation of their next medium-term (five-year) plans. The achievements seem to be variable and generally on the low side. A number of constraints which appear to be common to several countries have been noted.

(1) The first of these constraints relates to the development of information support to the managerial process. Although efforts are being made to rationalize the collection, structure and flow of essential health information, much has yet to be done to establish these efforts as an integral part of the health system, and to permit proper utilization of the information in planning, evaluation and decision-making at different levels.

(2) Nationals with appropriate managerial skills at different levels of the health system continue to be in very short supply. Several countries have trained their senior officials in health management techniques and have started national courses for the benefit of others, but progress has been rather slow. More intensive efforts to improve managerial skills within the national health systems are urgently needed at this stage.

(3) Health manpower development is another major area requiring greater attention. The problem of insufficient manpower is compounded by maldistribution of available staff, to the detriment of rural areas and urban slums. Task-oriented training, though initiated in several countries, needs to be further expanded. Policies regarding employment, levels of remuneration and career development are yet to be placed on a sound footing.

(4) Integration of various vertical programmes into PHC delivery, although slowly being achieved by some countries, is still uneven in quality and completeness, even within the same country. While it may be convenient to maintain some of the vertical programmes for administrative reasons for a period of time, the aim must be to have them fully absorbed into the PHC system, through appropriate training, well-defined procedures, close supervision and continuous guidance.

(5) Wrong public notions about health and health needs, as well as the sometimes irrational professional attitudes to PHC, reflect the magnitude of unawareness of the real aims and approaches of PHC. Together, they constitute a serious impediment, fettering the development of appropriate health delivery systems. Public information and education for health, therefore, should be intensified by all available means.

(6) Insufficient financial resources are yet another problem in all countries, more so in developing countries, and critical in the least-developed. Mobilization of adequate resources for health, internal and external, is therefore, of the utmost importance.

A major problem that has faced proper evaluation has been dearth of reliable, quantitative information, particularly information that could serve as a baseline for comparison. Some countries felt that it had been too soon to attempt an evaluation with respect to aspects such as health impact or quality of life. A few reported improvement of the status of the nation's health; this, coupled with other socio-economic development activities, has led to an improvement in quality of life. Whatever has been the pace of progress so far, Member States have been unanimous in their conviction that the health care systems based on PHC are relevant and effective, and that, with perseverance, they would eventually lead to achievement of the targets and goal of Health for All.

4.2. SATISFACTION WITH RESULTS

The health services coverage study carried out in Bahrain, Egypt and Yemen during 1981 showed that utilization of basic health services was somewhat low. The study also included an analysis of how health providers and consumers perceive this "low utilization". In the providers' view, lack of health awareness, overcrowding of health facilities, long waiting times and unnecessary referrals were the major factors. Consumers cited over-referral, arrogance, irregular attendance of health staff and demand for gratuities as the chief factors. This, however, was the situation in 1981. From observations made in the national evaluation reports of 1985, a different picture seems to be emerging. This is summarized below.

In the majority of countries, no systematic assessment of the degree of community satisfaction with results has been carried out. If done at all, this was usually undertaken by health service staff, and the methods used were subjective (interviews or meetings with different sectors of the community). Of interest are the evaluation studies carried out in Pakistan and Sudan. In Pakistan, the study was conducted by the Pakistan Medical Research Council. In Sudan (1982), it was WHO/UNICEF/USAID teams that interviewed community leaders, government officials other than health personnel, and the recipients of the services. A national health survey was recently completed in Kuwait; this and a research study currently being carried out by the Faculty of Medicine in Somalia are expected to throw further light on the subject.

The comments offered by the countries are interesting and very positive. Active community participation in the planning and implementation of health services, which is encouraged and which is increasingly being elicited, is a reflection of community interest and concern about the health services being provided (e.g. Jordan, Sudan and Yemen). In some countries, communities are quite deeply involved, contributing to the development of the new health systems. In Sudan, it is said, 90% of the PHC units were built by communities, and there has been a demand for more PHC facilities.

Utilization of the services has also increased. Jordan reports a doubling in the number of children covered by immunization through the PHC

services between 1982 and 1984, which is far above the normal rate of increase. Pakistan obtained a similar dramatic increase in immunization coverage after initiating its accelerated programme of health in the period 1982-83, the main "ingredient" being the PHC approach. Iraq has reported that immunization of infants increased two and three-fold between 1982 and 1984 due to active support of the Women's Federation Union. Increasing attendance at PHC posts, units or centres seems to be a common experience in several countries. Surely, such accomplishments would not have been possible had it not been a result of the conviction in the communities of the usefulness of the services provided. Another positive feature is the growing interest of communities in health education campaigns.

Providers of services seem also to be more satisfied. The gap between the served and the underserved is narrowing. A decrease in the incidence of communicable diseases covered by the expanded programme on immunization and of water-borne diseases owing to the improvement of water supplies and sanitation is a source of great relief to all. The fact that the services are being sought on a wide range of issues boosts the morale of the health provider.

Thus, in countries where PHC is taking roots, the experience seems very acceptable, both to the providers and the consumers.

CHAPTER 5

OUTLOOK FOR THE FUTURE

Demographic trends show that the natural increase in the population of the Region is close to 2.9%, which is quite high when compared with the global figure (estimated as 1.7% for 1975-80), and there are no signs that the fertility rate will be significantly reduced in the near future. The age and sex composition reveals that about 44% of the population is under fifteen years of age, and the number of women of child-bearing age will continue to increase. Thus protection of maternal and child health will remain a major concern for health planners in the Region. Furthermore, life expectancy has been increasing, bringing in its wake the pressing need for health care of the elderly. Some countries are already experiencing this problem. Growing urbanization, which in some Gulf countries may exceed 90%, has a number of health implications - physical, environmental and psycho-social. Urbanization is also associated with a move towards nuclear families, leading to a breakdown of the traditional "extended family" system. This in turn is disrupting the established cultural pattern of providing home care for the aged or otherwise disabled within the family. Yet another trend is the steady migration of the labour force, away from agriculture into industry, highlighting the need for readjustments in the types of health services to be strengthened.

The social and economic trends recognizable in the Region deserve the full attention of health planners. About half of the Regional population lives in countries with a per caput gross national product of less than US$500 per annum, while for about 15% it is less than US$300. Cost containment on health expenditure while aiming at equity of services, though important for all, is of particular significance for the lowest-GNP countries. At the other end of the scale are the rich countries, where changes in social structure and lifestyle are taking place at a relatively faster pace, accompanied by an upward surge of diseases attributable to affluence.

Industrialization, to which both developed and developing countries have resorted in order to diversify their economies, has brought in its wake a variety of environmental problems and health risks. Some countries have initiated measures to face these new challenges - and they need continuous support. Others should be encouraged to take similar steps to avoid the undesirable effects of developmental progress, such as pollution of air, water and land. Water conservation and wastewater treatment and its re-use are of special importance to countries of the Region, many of which suffer chronic shortages of water.

The present general economic stagnation, and the diversion of huge portions of national incomes to buy armaments, only serve to underline the

economic constraints under which the health sector may have to operate in the coming years.

Health status trends cannot be precisely depicted, since morbidity and mortality data are neither complete, nor available for all countries, nor comparable - apart from the fact that they are mostly institution-based. However, some generalizations can be made from information that is available.

It is evident that countries of the Region are in a state of transition - in the sense that they have disease patterns characteristic of both developing and developed countries. They have not yet rid themselves of the diseases of squalor that predominate in the developing world, yet deaths due to cardiovascular diseases, neoplasms and traffic or other accidents are rising in several countries. Infant mortality rates are still over 100 per 1000 live-births in eight countries, and are between 50 and 100 in another eight. Malaria is still a major public health problem in fourteen countries, schistosomiasis in seven. Measles and other infectious diseases, including childhood diarrhoeas, still constitute significant causes of morbidity and mortality in several countries, although some reduction in these problems is said to have occurred in the wake of changing over to PHC approaches. Thus the pattern seen in many of the countries is of cardiovascular diseases and accidents on the one side and infectious and parasitic diseases on the other, vying with each other to share the top place among the causes of death. Governments in the Region will have to be able to find resources adequate to deal with the health problems and diseases of both the developing-world and modern societies.

Implications for the Regional Strategy

It will have become clear from the preceding pages that Member States of the Eastern Mediterranean Region have not only fully committed themselves to HFA/2000 but that they have also made an impressive start in the race for that goal. Some have reorganized their health service facilities in such a way that services are within easy access of their entire populations. In the rest, the coverage by PHC systems can be judged to be moderate to advanced. However, much needs to be done in both groups of countries before one can consider that their health systems based on PHC are fully operational in the true sense, i.e. that they cover all the essential elements of PHC and are suitably supported by appropriate referral, back-up and linkages. In those countries that have attained full coverage, it is the quality and the spectrum of services that are being provided that now need attention. The referral services, too, need further strengthening. The other group of countries has a long way to go before the PHC network is spread equitably. This will involve the training and retraining of appropriate personnel and consolidation of the services already established. Community involvement and participation on a much wider scale has to be secured if tangible results in PHC are to be achieved, although good progress has been made and interesting experiences have been recorded. Similarly, efforts must be pursued to counteract public apathy and professional ignorance of, if not antagonism to, PHC. Finally, intersectoral coordination mechanisms on the national scene must be made more active and supportive of HFA strategies.

In short, while governments have found the PHC approaches to be both effective and relevant to their strategies, the issues they have to address in the development of their health delivery systems still remain the same. The disease patterns to be dealt with will also broadly remain the same for some time to come. This being the case, the Strategy for the WHO Eastern Mediterranean Region, as defined in the Regional Committee document EM/RC30(81)/7 and its Annex I, still remains valid. It principally comprises promotional and supportive activities to be undertaken by the Organization to help Member States realize their national health plans.

Promotional activities include the furthering of PHC concepts and HFA strategies among top government policy-makers, professional groups in health and health-related fields, and among the public in general. They also include promotion of resource mobilization, and collection and exchange of general and technical information - to facilitate the formulation and implementation of policies, strategies, plans of action, etc. Supportive activities are those undertaken directly in support of national strategies and programmes in a number of fields related to primary health care.

A variety of supportive approaches are being and will continue to be adopted, some examples of which are listed below:

(a) Advising on and supporting the national managerial process, including assistance in monitoring and evaluation;

(b) Improving health education methodology;

(c) Training, including that of teachers;

(d) Defining with the countries the nature of services to be provided at different levels of PHC;

(e) Strengthening national information services and systems;

(f) Analysing, with the countries, problems encountered in structuring PHC services, including supervision and organization of referral systems, and related administrative and logistic support;

(g) Achieving proper intersectoral cooperation, cooperating with national administrations in seeking support from sectors outside the health sector;

(h) Developing research methodology and supporting research for operational improvement;

(i) Promoting integration of vertical programmes together with support to disease control programmes;

(j) Assisting Member States to rationalize the use of their national resources and to obtain external funding for their health programmes based on PHC;

(k) Strengthening technical cooperation among developing countries in support of these various efforts.

To conclude, while the content of Regional strategies still remains the same, greater emphasis needs to be given in the coming years to certain areas identified as important at this stage of development by the various Member States.

ANNEX

COUNTRY DATA ON INDICATORS

12-Aug-85

TABLE A-1. Selected demographic and social indicators showing, for each, the reference year (Y)*

Country	Population							Birth rate		Death rate		Natural increase		Net increase		Adult literacy rate (o/o)			
	Total		By age (o/o)			Rural													
	Y	'000	Y	<15	65+	Y	o/o	Y	o/oo	Y	o/oo	Y	o/o	Y	o/o	Y	Total	M	F
Afghanistan	4	17670	5	45	3	5	83	9	48	9	29	9	1.9	a	1.8	9	20	33	6
Bahrain	5	419	5	32	2	1	20	a	32	a	5	a	2.7	a	4.3	1	74	79	65
Cyprus	4	660	1	25	10	2	36	3	21	3	8	3	1.3	3	1.0	2	93	98	88
Dem. Yemen	4	2230	5	45	3	0	64	a	42	a	17	a	2.5	a	2.6	0	31	48	16
Djibouti	4	350	3	56		5	25	4	48	4	20	4	2.8	b	6.6	2	17	25	9
Egypt	5	48000	5	39	4	5	52	3	37	3	10	3	2.7	a	2.5	6	47	58	29
Iran, Isl. R.	4	43410	5	46	3	2	51	3	40	3	10	3	3.0	3	3.0	6	36	48	24
Iraq	3	14650	3	46	4	3	31	3	42	3	11	3	3.1	a	3.4	0	43	63	23
Jordan	4	2595	1	52	3	4	40	4	45	4	11	4	3.4	a	4.0	1	70	83	60
Kuwait	5	1695	0	40	1	0	9	4	32	4	3	4	2.9	b	6.4	0	67	73	59
Lebanon	4	3000	5	44	4	0	35	a	29	a	9	a	2.0	a	0.0	0	77	85	68
Libyan A.J.	3	3672	2	50	4	3	31	2	44	2	11	2	3.3	b	4.2	0	77	86	78
Oman	4	1500	4	45	3	2	85	4	48	4	17	4	3.1	a	4.5	2	30	47	12
Pakistan	5	94720	1	45	4	1	72	3	42	3	12	3	3.0	b	3.0	1	26	35	16
Qatar	3	280	1	32	1	0	26	a	30	a	5	a	2.5	a	4.0				
Saudi Arabia	4	10200	2	48	3	2	45	2	48	2	10	2	3.8	b	4.8	2	50	70	30
Somalia	3	5258	6	47	3	6	75	a	47	a	21	a	2.6	a	3.7	6	55	61	48
Sudan	3	21593	a	45	3	3	80	3	50	3	25	3	2.5	3	2.8	4	31	44	18
Syrian A.R.	4	9934	4	49	4	4	52	4	43	4	8	4	3.5	4	3.4	1	66	78	53
Tunisia	3	6886	9	42	4	0	49	2	33	2	11	2	2.2	a	2.4	0	43	61	34
UAE	4	1265	0	29	1	0	19	3	37	3	3	3	3.4	3	3.2	4	68	71	61
Yemen	3	6232	1	44	4	0	89	a	49	a	22	a	2.7	a	2.4	0	12	16	1

*0=1980; 3=1983; 6=1976 or earlier; 9=1979;
1=1981; 4=1984; 7=1977; a=1980-85;
2=1982; 5=1985; 8=1978; b=1975-1980.

12-Aug-85

TABLE A-2. Health expenditure

Country	GNP per caput (US$)		Percentage of GNP spent on health*		Percentage of health expenditure devoted to PHC	
	Year	Value	Year	Value	Year	Value
Afghanistan	1984	202	1984	0.6	1984	26.0
Bahrain	1983	8400			1983	26.0
Cyprus	1982	3339	1982	3.2		
Dem. Yemen	1979	460	1982	3.2	1982	5.8
Djibouti	1983	269	1983	11.9	1982	33.0
Egypt	1982	690			1984	84.0
Iran, Isl. R.	1982	735	1983	5.5	1982	34.0
Iraq	1982	2961				
Jordan	1983	1528	1983	3.9	1985	12.6
Kuwait	1983	14930	1983	5.0	1983	25.0
Lebanon	1980	1200	1982	10.0	1982	4.0
Libyan A.J.	1982	7488	1983	3.2		
Oman	1982	4313	1983	1.7	1981-85	60.0
Pakistan	1983	336	1984	1.0	1984	54.0
Qatar	1983	22900				
Saudi Arabia	1984	13000			1982	40.0
Somalia	1982	290			1984	43.0
Sudan	1982	488	1984	4.0		
Syrian A.R.	1981	1446	1983	3.5		
Tunisia	1981	1420	1981	3.6	1982	13.7
UAE	1984	16500				
Yemen	1981	462	1983	5.0	1983	31.0

*Through the MOH. Should data be available, expenditures through related public and/or private sectors are included.

12-Aug-85

TABLE A-3. Percentage of population with safe water in the home or within 15 minutes' walking distance, and adequate sanitary facilities in the home or immediate vicinity

Country	Year	Safe water supply- o/o population covered			Sanitary facilities- o/o population covered		
		Total	Urban	Rural	Total	Urban	Rural
Afghanistan	1983	21	33	18	5		
Bahrain	1983	100	100	100	100	100	100
Cyprus	1983	100	100	100	100	100	100
Dem. Yemen	1983	50	73	39	45	69	33
Djibouti	1983	61	58	71	74	82	32
Egypt	1981	90	93	61	70	95	49
Iran, Isl. R.	1983	67	82	50	71	96	43
Iraq	1980	74	99	22		30	
Jordan	1983	97	100	90	98	100	95
Kuwait	1983	100	100	100	100	100	100
Lebanon	1982	98	95	85	75		
Libyan A.J.	1982	91	100	77	70		
Oman	1983	37	100	16	35	100	13
Pakistan	1983	39	78	24	19	53	6
Qatar	1982	95	98	50	35		
Saudi Arabia	1983	93	100	68	86	100	33
Somalia	1983	31	65	21	14	48	5
Sudan	1983	48	100	31	5	20	1
Syrian A.R.	1983	79	100	61	46	66	29
Tunisia	1982	68	100	31	43	64	29
UAE	1984	80			75		
Yemen	1981	31	100	21	12		

12-Aug-85

TABLE A-4. Percentage of infants fully immunized against diphtheria, pertussis and tetanus (DPT), measles, poliomyelitis and tuberculosis

Country	Year	DPT			Measles			Poliomyelitis			Tuberculosis		
		Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Afghanistan	1984	16			13			16			11		
Bahrain	1984	78			63			48			63		
Cyprus	1983	91			59			91			0.1		
Dem. Yemen	1983	5			6			5			10		
Djibouti	1984	20			16			20			43		
Egypt	1984	67			68			78			71		
Iran, Isl. R.	1984	68			69			65			10		
Iraq	1980	13			35			16			76		
Jordan	1982	80	86	74	52	56	49	41			88		
Kuwait	1984	100	100	100	100	100	100	100	100	100	100	100	100
Lebanon	1984	4			1			4					
Libyan A. J.	1983	75			95			75			98		
Oman	1983	29			31			29			74		
Pakistan	1984	64			80			65			73		
Qatar	1982	53			37			53			52		
Saudi Arabia	1985	81			79			81			88		
Somalia	1984	10			16			10			17		
Sudan	1984	4			3			4			7		
Syrian A.R.	1983	20			18			20			42		
Tunisia	1984	61			55			61			76		
UAE	1984	57			61			58			11		
Yemen	1984	10			18			8			25		

12-Aug-85

TABLE A-5. Coverage of health care

Country	o/o of population covered by health care				o/o of infants cared for by trained personnel				o/o of pregnant women attended by trained personnel							
									during pregnancy				during childbirth			
	Year	Total	Urban	Rural	Year	Total	Urban	Rural	Year	Total	Urban	Rural	Year	Total	Urban	Rural
Afghanistan	1984	49	65	45												
Bahrain	1985	100	100	100	1985	90			1982	80			1983	97		
Cyprus	1985	100	100	100	1985	100	100	100	1985	100	100	100	1985	100		
Dem. Yemen	1982	30														
Djibouti	1980	37			1985	15	14	17	1985	50	65	20				
Egypt	1982	100	100	100					1982	40	44	37	1978	21		
Iran, Isl. R.	1983	60	85	25	1983	13			1983	15						
Iraq	1984		100	80									1984	100		
Jordan	1983	80							1983	58	71	40	1983	75	86	63
Kuwait	1985	100	100	100	1981	100	100	100	1983	99			1984	99		
Lebanon	1984	95			1984	60										
Libyan A.J.	1983	100	100	100												
Oman	1984	92	100	90												
Pakistan	1984		100	50	1981	30			1981	26			1976	24		
Qatar	1982	95							1982	95						
Saudi Arabia	1984	90	100	78					1985	61	66	55	1985		87	61
Somalia	1985	20														
Sudan	1984	70			1984	70			1984	20			1984	20		
Syrian A.R.	1984	80			1981	20			1981	5						
Tunisia	1984	91	100	80	1982	50			1982	50			1982	50		
UAE	1981	96			1981	91	92	90	1980	79						
Yemen	1985	25	35	10												

12-Aug-85

TABLE A-6. Selected health status indicators

Country	o/o newborns with birth weight of at least 2500 g				o/o children below 5 years with corresponding weight for age				Infant mortality rate (per 1000 live births)				Life expectancy at birth (years)			
	Year	Total	Urban	Rural	Year	Total	Urban	Rural	Year	Total	Urban	Rural	Year	Total	Male	Female
Afghanistan	1984		85		1980		76		1979	182	130	189	1979	40.5	41	40
Bahrain	1980	93	94	92					1980-85	37	31	39	1985	66	64	68
Cyprus	1982	92							1983	12.8			1979-81	74	72	76
Dem. Yemen					1978	24			1984	149			1980-85	49		
Djibouti	1985	89			1984	67			1984	120			1984	49	56	44
Egypt	1983	99			1978	93			1983	73			1983	57	58	56
Iran, Isl. R.	1982	96							1983	104			1983	60.4	60.6	60.2
Iraq	1984	85							1984	72			1982	64	62.7	65.1
Jordan	1984	90			1984	97			1983	60	72	60	1983	67	65	69
Kuwait	1983	93							1984	18.8			1980	69	67	72
Lebanon	1979	88							1980-85	48			1981	66	63	67
Libyan A.J.	1982	95	97	92					1982	32.8			1981	57		
Oman	1982	86							1984	90			1984	50	49	51
Pakistan	1985	70-75			1984	67			1983	100			1983	54.5	55	54
Qatar									1980-85	45						
Saudi Arabia	1984	94			1984	93	98	77	1982	85			1982	62	60	65
Somalia					1975	40			1980	172	146	180	1980	49.5	49.2	49.9
Sudan	1982	83							1981	140			1980-85	48	47	49
Syrian A.R.	1984	91			1984	75			1976-79	57	43	67	1981	64	64	65
Tunisia	1982	93							1984	80			1981	58		
UAE	1981	92	92	92	1980	77			1984	15			1984		61.5	65
Yemen					1979	69			1981	159			1980	37	36	39

INDEX

EM/RC32/7(PART II)

EVALUATION OF THE STRATEGY FOR HEALTH FOR ALL BY THE YEAR 2000

SEVENTH REPORT ON THE WORLD HEALTH SITUATION

VOLUME 6. EASTERN MEDITERRANEAN REGION

in two parts

PART II. EVALUATION BY COUNTRY AND AREA

DRAFT FOR CONSIDERATION BY THE THIRTY-SECOND SESSION OF THE REGIONAL COMMITTEE

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE EASTERN MEDITERRANEAN
1985

WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean

منظمة الصحة العالمية
المكتب الإقليمي لشرق البحر المتوسط

ORGANISATION MONDIALE DE LA SANTE
Bureau régional de la Méditerranée orientale

REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN

Thirty-second Session

Agenda item 9

EM/RC32/7(PART II)
12 August 1985

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CONTENTS TO PART II

P R E F A C E

I take great pleasure in submitting to the Thirty-second Session of the Regional Committee the report on the Evaluation of the Strategies for Health for All by the Year 2000 for the Eastern Mediterranean Region.

The last five years have been unique in the history of public health, not only for this Region but for the world as a whole. The nations have made a serious commitment to provide a reasonable level of health for all their citizens by the year 2000, and they have begun to transform their health delivery systems and services to accomplish this noble goal.

Constant vigilance is required to maintain our progress towards that goal. Hence the nations have agreed to monitor progress and to evaluate the implementation of their strategies, individually and collectively, at regular periods.

Evaluation is but an organized way of learning from experience. When applied to public health, the purpose must be to improve the delivery of national health and health-related services through adjustments in strategy, adaptation of health infrastructures and allocation of resources. Like the managerial process for national health development in general, it has to be supported by a sufficiency of valid, relevant and sensitive information. However, evaluation must never become an end in itself - it must lead to action that raises the quality, efficiency and effectiveness of the services that are being evaluated.

Considerable preparatory work was undertaken in the Region by Member States and by the Regional Office before the final evaluation was undertaken using the Common Framework and Format. I am glad to put on record the unremitting cooperation extended by Member States in carrying out this challenging task. Above all, however, these efforts have kindled in Member States an understanding of how and why this process of evaluation, now on a more systematic basis, forms an essential part of the national managerial process for national health development. Indeed, a number of countries have followed up by establishing formal national mechanisms for this process, so that it can be used continuously to their own advantage.

I am aware of the fluctuating fortunes of Member States in the Region in the recent past and at present. Civil strife and armed conflicts have led to widespread socio-economic stagnation, if not decline, with serious consequences to health development. Natural disasters or political tragedies have resulted in migration of populations, and this has thrown excessive burdens on the health services and resources of host countries.

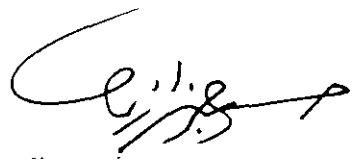
Nevertheless, seen overall, significant progress in health development has been and is being made in the Region. A number of countries have

already attained full coverage of their populations with basic health facilities. In others, the health services are being continuously extended to serve more rural and remote areas, and the gap between the served and underserved is steadily narrowing.

The response of Member States to the call for evaluation has been gratifying. They have been clear and candid in the appraisal of their shortcomings as well as of their achievements. In particular, the resulting report highlights the areas in which the collaborative efforts of the Organization and the Member States will have to be modified or intensified in order to reach our common goal. The resolute spirit in which such cooperation is already being undertaken augurs well for the future.

Just as each nation requires the evaluation process to be able to assess its own health situation, so the regional offices require the national data to prepare regional assessments - the bases for the Organization's global report, Evaluation of the Strategies for Health for All by the Year 2000: Seventh Report on the World Health Situation. Let us remember that these various assessments will serve to mould national, regional and global policies and programmes so that they address real needs, the basis for a coordinated advance towards HFA/2000.

Let me close by expressing my warm appreciation to the Member States of the Region for the excellent way in which they have participated, thus making possible the preparation of this report.



Hussein A. Gezairy, M.D., F.R.C.S.

Regional Director for
the Eastern Mediterranean

PART II

EVALUATION BY COUNTRY AND AREA

AFGHANISTAN

Afghanistan is a land-locked country whose geography is characterized by rugged central and north-eastern mountainous ranges, up to 8000 m high. These descend to lowlands of 150 m altitude and large deserts with scattered inhabited areas determined by the availability of water. This topography has hampered the development of internal transportation. The per caput GNP was US$202 in 1984.

The first nationwide population census was in 1979. The population estimate for 1983 was 15.58 million, of which 14.8% represent the urban population and 9.6% are nomads. The age structure of the population has a broad base, and life expectancy is short. The geographical diversity is matched by linguistic and ethnic diversity. Dari and Pashto are the two national official languages. Traditional tribal loyalties are important, though there is a strong national solidarity. The vast majority of the people are Muslims. Administratively, the country is divided into eight regions and 29 provinces.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

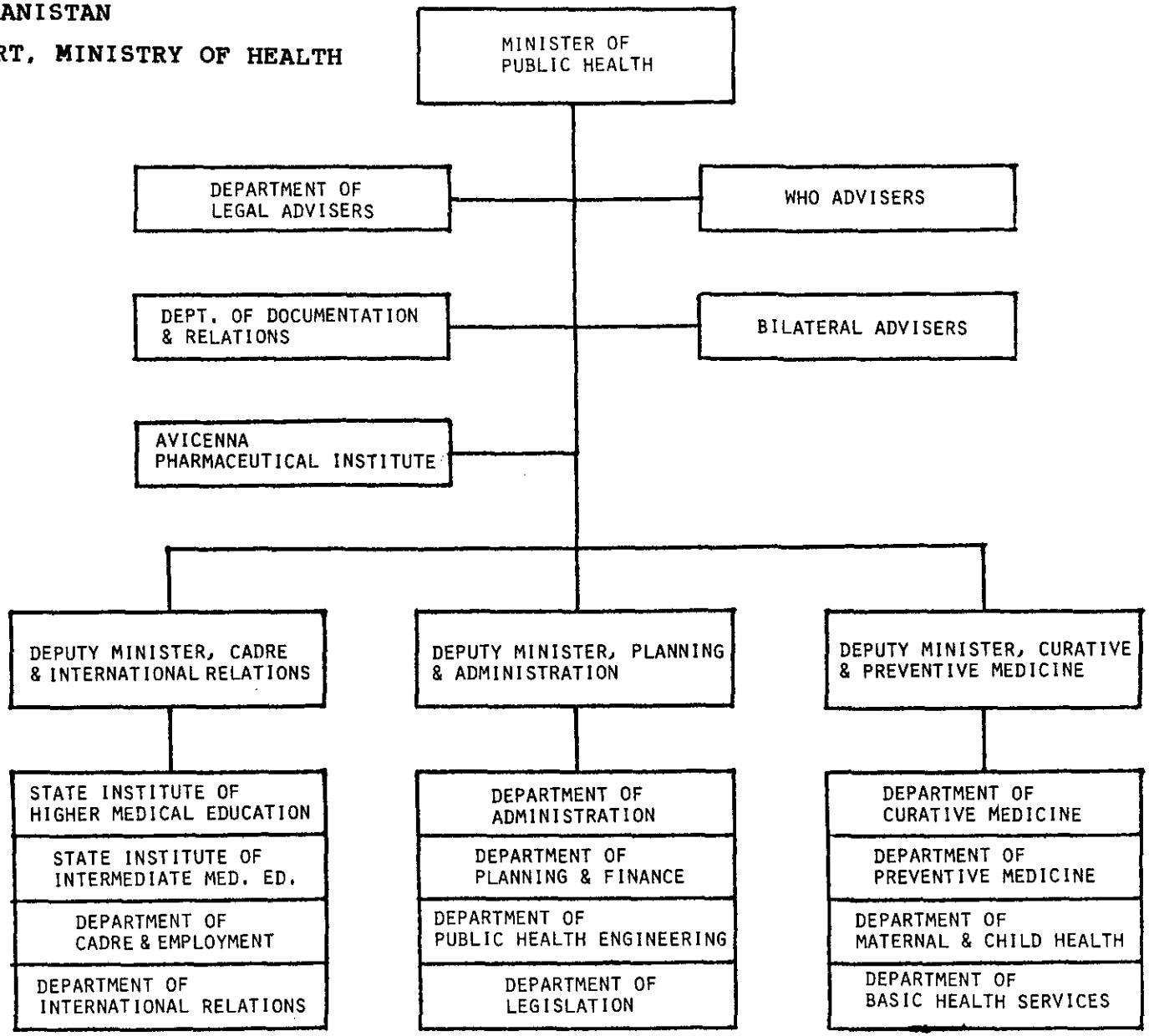
The national health policy was developed according to the HFA/2000 policy and the Alma Ata Declaration. Health for All has received endorsement at the highest official levels, as clearly specified in the Fundamental Principles (temporary constitution) of the Republic. Thus Article 26 indicates that the family, mother and child will be under the special protection of the Government. Article 29 refers to the right to health protection, social insurance and education.

The State Planning Committee, as the top coordinating body, has full authority to integrate different aspects of socio-economic plans including health. This integration is reflected in the Five-year Plan now under preparation. One of the overall objectives of that Plan is improvement of the health status of the population so that it will increase productivity and thus the rate of economic growth.

The health strategy calls for increased efficiency of the health care delivery system, strengthening of the functional integration of preventive and curative services, adoption of the team approach to solve health problems and improvement of the knowledge of the population about health and health habits. The national policy and strategy to meet the basic needs of the people was endorsed in 1979 by the Government. The areas which the strategy identified as requiring further improvement and strengthening include: more equitable distribution of qualified manpower; allocation of more funds to equip PHC centres, MCH clinics,

AFGHANISTAN

ORGANIZATIONAL CHART, MINISTRY OF HEALTH



sanitary epidemiology centres and polyclinics with appropriate technology; the managerial process at all levels; water supply in urban and rural areas; and community involvement.

The Ministry of Public Health (MOPH) is responsible for providing preventive, curative, promotive and rehabilitative care (although the Ministries of Defence and the Interior and the Red Crescent Society also maintain their own medical facilities). The Ministry is also responsible for the training of all categories of health personnel (except for pharmacists, who are under Kabul University). The top authority is vested in the Minister of Public Health, assisted by three Deputy Ministers.

The health care system has five levels, defined by their capacities in the delivery of health services, from the village through district, provincial and regional up to the central levels. At the village level we have the village health worker, traditional birth attendant, and the sub-health centre with a feldscher or male nurse. In the district we have the basic health centre headed by a physician and the district hospital. The different departments of the MOPH have specific responsibilities and line authority over operational units in the regions and provinces. The health system infrastructure is a pyramid of referral institutions, from public health workers in the village to sub centres, basic health centres, provincial, regional and central hospitals: on each level they offer referral services and, as appropriate, provide primary and specialized outpatient and inpatient services. There are limited MCH services in the sub centres and basic health centres.

In addition, there are specialized institutions. Thus there are central, regional and provincial sanitary epidemiology stations, the National Tuberculosis Institute with provincial TB control units, the Malaria and Leishmaniasis (Parasitic Diseases) Institute with units in affected areas, the Child Health Institute, the State Institute of Higher Medical Education, the Institute of Intermediate Medical Education, etc.

1.2. Managerial process for health development

The Health Ministry has the main responsibility for defining national health policies, formulating health programmes and controlling the function of the total health system. The Ministry also participates in the policy-making mechanism concerned with socio economic development at the level of the State Planning Committee and Council of Ministers.

According to the structure of the MOPH, all departments (curative medicine, preventive medicine, health manpower development and pharmaceutical department) have their responsible sections for planning and management. The Department of Planning and Finance has the overall responsibility to coordinate, monitor and evaluate achievements; under this Department is the General Directorate for Health Information.

Several obstacles impede an adequate managerial process. There is lack of managerial skills at various levels, of information support to management, of resources, of effective intersectoral coordination and of community involvement. Thus emphasis is being given to improvement of data

collection, analysis and proper utilization at all levels. The efforts to mobilize both the internal and external resources for socio-economic development, including health, are to be strengthened.

1.3. Community involvement

The Government adopted in 1984 - as an additional national policy for community involvement - a law on "local organs". These local authorities are responsible for development of an infrastructure and services for the settlements, and for improvement of environmental health in general. Thus the representatives of the public participate actively in planning and implementation of health and health-related activities.

Community involvement is also formulated in the constitutions of non-governmental organizations (NGOs). They take part in the implementation of national strategies, but the results are not yet adequate and seem to be better in the provinces where cooperation with the health personnel is more evident. Some significant examples include: establishment of Youth Health Brigades, composed of secondary school pupils trained in the basic principles of PHC, environmental health, first aid and prevention and control of diseases; participation of the people (either paid or as volunteers) in spraying operations in Malaria and Leishmaniasis Control Programmes and in vaccination campaigns, etc. The main task of the communities is also to ensure a general education programme for the people. The role of community leaders, including religious leaders, has also been taken into account.

1.4. Mobilization of resources

Out of the total developmental budget for investment in 1983, an amount of 1.57% was allocated for the implementation of public health developmental activities. The Recurrent (Regular) budget of the MOPH for the same year was Afs. 869 million (or Afs. 54.8 per caput, equivalent to US$1.0). If we add a third amount from "development external assistance", the total budget of the MOPH would reach Afs. 1125.8 million; this would give a per caput share of Afs. 71.0 (or US$1.3) in 1984. The regular government health budget was increased to Afs. 920 million in 1985. A number of other ministries have contributed additional input to the provision of health and medical care. Furthermore, it was estimated that an average of Afs. 400 per head per year represented health expenditures from personal funds, particularly for pharmaceuticals (study in 1976-77). From the MOPH budget, 15.3% were allocated in 1984 to "basic health centres and MCH centres" (i.e., US$0.19 per caput per year), other than 11% to "preventive medicine, including Malaria Institute". Public expenditures on health represent only 0.67% of the GNP.

Due to the known local political situation, there is apparent limited contribution to and interest in supporting socio-economic and health development programmes on the part of external sources, except for bilateral assistance from friendly countries. This makes it difficult to meet all PHC needs. If one adds seasonal problems, the resultant does not allow the utilization of more resources for PHC in rural areas.

A health manpower development plan has been drawn up, reflecting the categories of health personnel required for the teams in basic health

centres and sub-centres, including traditional birth attendants and village workers. Between 1978 and 1984 the numbers enrolled in the State Medical Institutes in Kabul and Jalalabad increased 3-4 times. In 1984, there were 1369 physicians (or 0.86 physicians per 10 000 population). However, concentrated in Kabul Province (with less than 12% of the population) we find 58% of physicians, 58% of beds (overall 3.0 beds per 10 000 settled population), 51% of government pharmacies, 52% of X-ray units and 59% of Afghan Family Guidance Association clinics. As a result, the greater portion of the rural population has limited accessibility to PHC. However, 90% of medical graduates have recently been required to work at least for one year in underserved rural areas.

Within the national health strategy, priorities for research are given to problems related to PHC, including communicable diseases and MCH activities. As examples may be mentioned activities of the Research Department of the National Malaria and Leishmaniasis Institute in Kabul, and the research programme of the State Medical Institute. However, research findings have not yet been reflected in the re-planning and re-programming processes, both at the level of MOPH and at that of the State Planning Committee.

1.5. Intersectoral cooperation

Incorporation of the health component into socio-economic development is sanctioned in the Fundamental Rights of the Republic. The State Planning Committee is the top coordinating body. The Government adopted in 1984 through the MOPH a resolution that all sectors during the planning and implementation period of their sectoral goals have to take appropriate measures to minimize health hazards. The Council of Ministers decided that all activities planned for socio-economic development must include the provision of health facilities.

The MOPH submitted a proposal for the establishment of a new multisectoral National Health Counsellors' Committee to coordinate all health and health-related activities before forwarding to the State Planning Committee. Intersectoral committees were established for the problems of zoonoses, water supply, sanitation and housing. The Government has delegated more authority in management of socio-economic and health affairs to zonal and provincial bodies in accordance with the law on "local organs".

1.6. International cooperation

The MOPH receives no more than 20% of the external resources requested for assistance to the public health sector. WHO's contribution during the biennium 1984-85 exceeded US$4.5 million from its Regular Budget and covered a variety of fields, mainly related to the elements of PHC. UNICEF contributed US$2.24 million in 1984 in the areas of MCH and communications, and UNDP in the areas of water supply and MCH. The International Assistance Mission (IAM) contributes yearly Afs. 6 million towards prevention of communicable eye diseases and rehabilitation services, and the German Initiative Assistance (GIA) contributes Afs. 1.5 million for leprosy control.

There is bilateral cooperation with friendly countries, particularly USSR and other socialist countries and India. This cooperation includes bilateral aid, exchange of information and expertise, training, equipment, drugs, etc.

2. HEALTH STATUS

Mortality and morbidity data are neither complete nor accurate. Birth and death registration is in an experimental phase in Kabul, and periodic household surveys in both urban and rural areas have to be resorted to, to obtain data on important demographic and health characteristics.

The birth and death rates are very high, estimated at 47.9 and 28.7 per thousand, respectively. Hence, life expectancy is short; based on the 1979 census, it is estimated at 40.5 years at birth (somewhat higher among males) and increases to 49 years at the age of five years. This is due to the high infant mortality rates, estimated at 182 per 1000 (rural 189 and urban 130 per 1000). From a study of maternity wards in four cities (1984) about 85% of newborns had a birthweight of at least 2500 g, and another in Kabul (1980) showed that 76% of children under 5 years were within normal weight-for-age.

Reporting of infectious diseases is to a large extent hospital-based. Thus in 1983, out of 28 provinces, reports were received from hospitals in 20 provinces and from basic health centres in nine provinces only. Gastroenteritis and typhoid/paratyphoid, tuberculosis, malaria, childhood infectious diseases, trachoma and venereal diseases headed the list. The leading causes of mortality in hospitals during 1982 were: injuries and poisoning, infectious and parasitic diseases, ill-defined conditions, diseases of the respiratory system and diseases of the digestive system. The main causes of hospital morbidity were infectious and parasitic diseases, diseases of the respiratory system, ill-defined conditions (|), injuries and poisoning, diseases of the nervous system and sense organs and diseases of the digestive system. (Normal deliveries were the commonest cause of hospital admissions.)

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The implementation of health policies has been systematically compared with the goals defined for HFA. As a result, the required changes have been introduced, particularly in the areas of manpower development, organization and construction of facilities and budget allocations to PHC. The national health strategy reflects the national health policies.

Except for certain specific health problems which the MOPH has to deal with alone, there are other problems connected with health of the population, e.g. water supply and sanitation, housing, nutrition, health insurance and raising living standards in general. The integration of these activities into a unified comprehensive socio-economic plan requires the efforts of other ministries. However, national financial resources are not adequate and, because of the prevailing political situation not only is

equitable distribution of these meagre resources rendered difficult, but also the MOPH receives no more than 20% of the external resources requested. Staffing and training remain a big problem at all levels of the health system; there is shortage of all categories of health personnel in rural areas, particularly female health personnel. Lack of managerial skills at various levels, coupled with inadequate information support to the managerial process, should be remedied to improve the implementation of the strategies.

Population coverage by local health care is estimated at 65% in urban areas and 45% in rural areas. The corresponding figures for the availability of safe drinking water are 30% and 10%, respectively, while facilities for adequate sanitary disposal are minimal. Generally speaking, only 45% of "children" in Kabul city and 10% in the provinces have been immunized. MCH services are very limited at the basic health centres and sub-centres. The majority of rural deliveries take place at home in poor hygienic conditions with the assistance of traditional birth attendants (although about 28% of deliveries in Kabul city are in institutions). The fatality rate among deliveries in hospitals in 1983 was 8.7 per 10 000, which implies that the maternal mortality rate must be much higher.

3.2. Efficiency and effectiveness

The results obtained from implementing the strategies are to some extent positive in relation to the efforts expended. Among the shortcomings may be mentioned that: most of the health facilities in rural areas had either qualified staff or relevant supplies and equipment or the essential drugs but not all at the same time; increased coverage was given priority over continuity and quality of care; inadequate referral system; much time being spent on routine recording of data with minimal analysis and utilization. As has been mentioned earlier (paragraph 1.5), while the total budget of MOPH was Afs. 71 per caput in 1984, an estimated average of Afs. 400 per person per year represented personal (private) health expenditures. The overall bed occupancy rate was 74% in 1982/83, but it was almost 100% in the specialized hospitals. Besides, there is an average of 2.4 paramedical personnel per physician.

Community satisfaction with the achievements is expressed at the periodic meetings of the Party representatives with community leaders, at the Local Organs and at sessions of non-governmental organizations as well as in mass media presentations. The MOPH is aware of existing problems and shortcomings in the implementation of the strategies. But no special survey has been developed so far to assess satisfaction with the results in this area or in the area of cost-effectiveness or cost-efficiency.

It is difficult to make an objectively based assessment of the impact of the strategy. However, among the positive findings are: increase of health knowledge and prevention - awareness with respect to communicable diseases, extension of immunization coverage, improvement of safe drinking water supply, gradual increase of trained manpower and development of MCH and basic health services infrastructure. Nutrition status and adult literacy rates have improved.

BAHRAIN

Bahrain is an archipelago of 33 islands, of which six are inhabited. Bahrain Island, the largest, is about 50 km long and contains the capital, Manama. The airport is in Muharraq Island, and the pipeline terminal and refinery are in Sitra Island. Causeways connect these two islands to Bahrain Island, and a long bridge under construction will connect Bahrain Island to Saudi Arabia. The surface area is barely 685 sq.km. The total population was estimated at 384 221 in 1983, and is expected to double by the year 2000. Population projection for 1985 is 419 000; this gives an overall population density of 612 per sq.km. Urban population constitutes 80% of the total. The per caput GNP was US$8 400 in 1983.

As per 1981 Census, Bahraini nationals constitute 68%. Almost all (99.8%) are Muslims. Literacy is high; 70% of adults (15 years and over) are literate (males 79%; females 60%). About 46% of adults are economically active (males 75%; females 17%). While 68% of working females are government and semi-government employees, 56% of working males are either employers, self-employed or employees of private enterprise. About 94% of the housing units were occupied by one family each, with an average household size of 6.6 persons. The profile for expatriate population (32%) is different. Males constitute 80% of the adults. Adult literacy rate is higher, reaching 84% among the females. Employees of private enterprise constitute 76% of working males, while 47% of the females are paid servants. A little more than one-half (54%) are Muslims.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

All residents, citizens and non-citizens, have the right to comprehensive health care. The country's Constitution contains a statement on the rights of all citizens in respect of health. The Government is committed to the Alma-Ata Declaration. The long-term goal of the HFA/2000 policy is to provide promotive, preventive, curative and rehabilitative health care services through primary health care (PHC). The technical and financial responsibility for providing health care rests mainly with the State, with participation of the private sector and the community.

The Health Strategy conforms with the HFA Policy. Primary health care, accessible to all, is an integral part of the comprehensive health care, within the overall socio-economic development. It includes the integration of primary health, secondary health, environmental health and occupational health care to cope with the rapid economic and industrial development. Growth and development of PHC goes hand in hand with growth and development of secondary and tertiary care.

A Plan of Action to implement the HFA Strategy has not yet been formulated.

The Ministry of Health provides comprehensive health care through its public health, primary care and secondary care facilities. The Minister of Health is assisted by one Under-Secretary and three Assistant Under-Secretaries (see Organization Chart). Owing to the country's very small area, administration of health services is centralized.

The public health care embraces six major activities: control of communicable diseases (including expanded programme on immunization (EPI) and port health), environmental health, occupational health, nutrition and food hygiene, health education and public health laboratory services. PHC is provided through 17 health centres (and three more will shortly open), each serving about 10-25 thousand persons. There is a category of family physicians, providing preventive and curative care to all family members. Secondary health care is provided through a number of hospitals.

1.2. Managerial process for health development

The Office of Plans and Programmes was established in 1982. It is instrumental in policy decisions and in providing directions for future developments. For the coordination of the health plan with the national socio-economic plan, an improved level of management is desired and the involvement of an economic planner is foreseen. The Office of Health Information System is similarly directly attached to the Minister of Health. The objective is to develop an integrated national health information system that will facilitate the availability of information as a management tool. It is supported by computer services.

A finance management reporting system was introduced in 1980. It was developed further to assist the responsible officials, at all levels of management, in taking timely and useful decisions, apart from providing an accurate and useful data base for further projections and planning. Significant efforts were made towards computerization of material costing. Local training courses are held regularly for supervisors and other staff members on the developing concept of financial analysis and its utilization for management.

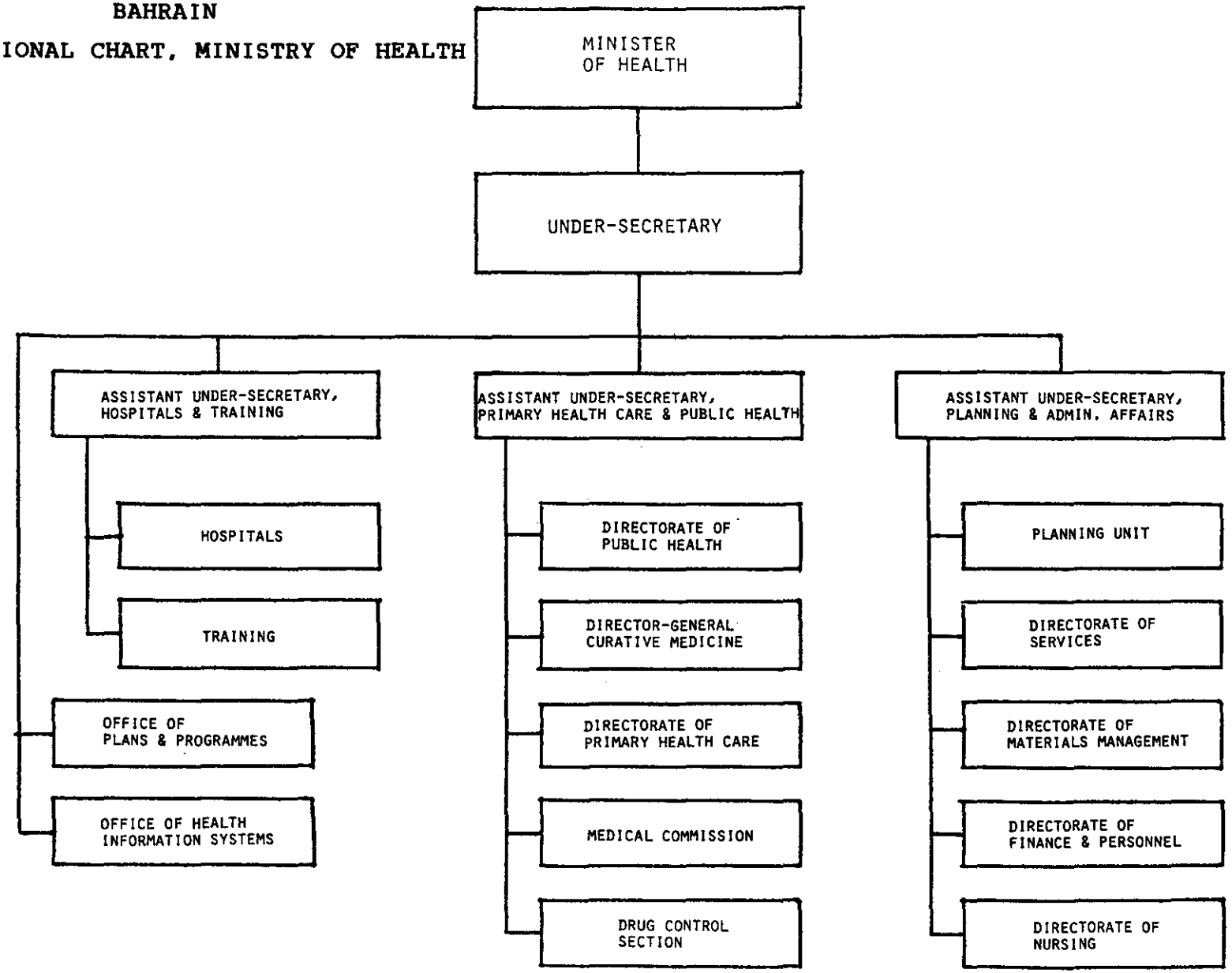
Duplication among different health services sometimes occurs. Better distribution of functions and resources is planned.

1.3. Community involvement

Bahrain made commitment to bring integrated primary, secondary and tertiary health care within everybody's reach through involvement of the community by eliciting its input for health plans and programmes. There exists coordination of activities between the Ministry of Health and non-governmental organizations, such as the Bahraini Red Crescent Society, the Women's Society, the Family Planning Society, and the Supreme Council for Youth and Sports. They receive full encouragement and financial support from the Ministry of Health and the Ministry of Social Affairs.

BAHRAIN

ORGANIZATIONAL CHART, MINISTRY OF HEALTH



1.4. Mobilization of resources

Ministry of Health expenditures in 1983 amounted to BD 39.237 million, representing 7.6% of the total public expenditures, and BD 102 (about US$272) per person per year. Recurrent expenditures were BD 32.288 million (or 11% of total recurrent public expenditures), and non-recurrent expenditures were BD 6.949 million (just 2% of total non-recurrent public expenditures). Of the above, 7% were spent by the public health care, 19% by the health centres, 8% by training and the rest (66%) by the hospitals. Thus 26% of Health Ministry's expenditures go to PHC while the Salmaniya Medical Centre, alone, engulfed 55% of all recurrent health expenditures in 1983. For 1985, BD 40.6 million are budgeted for health, representing 7.1% of total public expenditures, or BD 97 per person. Government revenues from all sources were just 26 million dinars in 1972.

Specialized services to the public and commercial sectors are offered against nominal fees. Thus health revenues during 1983 represented BD 7.2 per person, only 5.8% of the actual health expenditures, with a forecast for the same percentage in 1985. About one million dinars are paid for private medical services.

As of 1983, Government health establishments included one main general hospital (the Salmaniya Medical Centre), two specialized hospitals (for chest diseases and psychiatry), Defence Force Hospital, one geriatric home, one creche (care-baby) home, one central and four rural maternity hospitals, and 17 health centres. They had a total of 1056 beds. There are three private hospitals with additional 146 beds. With a grand total of 1202 beds, there are 31.3 beds per 10 000 population.

Health personnel of the Ministry of Health totalled 5058 in 1983. The number of physicians was 455 (or 11.8 physicians per 10 000 population). These included 325 physicians in the Ministry of Health, and 40% of these were Bahrainis.

The major development programmes of the Health Ministry are directed towards integration and consolidation of primary and secondary health care, as well as public health, for the development of a comprehensive health care system. Major efforts are directed towards training and development of health manpower, to fulfil the goal of self-sufficiency and "Bahrainization" in the near future. The opening of the Arabian GulflMedical College in 1985 (side by side with the College of Health Sciences) will be a major achievement in providing medical and other health personnel. Plans are under way to transform the Salmaniya Medical Centre into the teaching hospital for the Medical College.

1.5. Intersectoral cooperation

There is in the Health Ministry an office for Medical Commission for coordination of the activities of the private sector with the Government services along the lines of a uniform health policy and strategy. There is not yet full integration of the HFA Strategy with the national socio-economic plan. The pre-employment medical examination of all expatriate workers is carried out in cooperation with the ministries concerned. Similar cooperation exists for examination of food handlers. There is good scope to develop interministerial committees for the control

of environmental pollution and health education and for solving particular health problems (e.g. encouraging breast-feeding, maternity leaves, etc.).

It remains to secure the involvement of other sectors, such as the Ministry of Education, Ministry of Labour and Social Affairs, Ministry of Work as well as the Water and Electricity sectors, Municipality, etc.

1.6. International cooperation

A unit for 'International Health Relations' has been recently established in the Health Ministry. A systematic analysis of the needs for external support has been developed.

(a) The main area for collaboration with WHO is in health manpower development. The Joint Government/WHO Programme Review Mission acts as guidance for seeking external resources.

(b) There is full cooperation with Member States of the Gulf Cooperation Council (GCC). In the framework of the GCC, committees were established (for drug manufacture and control, bulk purchase of drugs, food control, and technical committees for PHC), to study the facilities available and to promote steps for cooperation. With the help of friendly Gulf States, a number of health centres were constructed and equipped.

(c) In cooperation with the American University in Beirut, a family practice residency programme (a postgraduate 3-year course) for doctors working in PHC has been established.

2. HEALTH STATUS

Important indicators on the health status, as well as on main causes of mortality and morbidity, are included in the Annex to Part I. Caution should be exercised in interpreting the figures, due to sizeable under-reporting of vital events, particularly deaths. A summary of salient indicators follows:

The crude death rate is estimated at 5.3, and the infant mortality rate at 37 per 1000. More than 80% of infant deaths occur during the neonatal period. Deaths under 5 years constitute 22% of all "registered" deaths. Life expectancy at birth is 66 years.

More than 90% of newborns have a birthweight of 2500 g or more. Childhood diseases are under control. No cases of acute poliomyelitis or diphtheria, and only four cases of neonatal tetanus, were reported during the two years 1982-83. Comparing the average annual incidence for the three-year period 1976-78 and 1981-83, measles dropped from 2549 to 638 cases, pertussis from 149 to 44, mumps from 2805 to 1216, chickenpox from 2746 to 1721, and streptococcal sore throat from 1122 to 260 cases annually. However, pulmonary tuberculosis increased from 171 to 181 cases annually.

For communicable diseases in general, the same comparison shows a downward trend for malaria, dysenteries, viral hepatitis, influenza, trachoma and gonococcal infections, and a rising trend for typhoid,

tuberculosis and syphilis. No cases of diseases under the International Health Regulations have been reported since 1980. Imported cases are accounting for an increasing proportion of new cases of typhoid, viral hepatitis and malaria (only three cases of indigenous malaria during 1980-83).

The main causes of mortality are, in descending order, diseases of the circulatory system, perinatal deaths, and injury and poisoning (which together account for nearly 60% of deaths), followed by neoplasms and respiratory diseases. The picture for morbidity is different: putting aside obstetric cases, the main causes for hospitalization are respiratory diseases, injury and poisoning, diseases of the circulatory system then of the digestive system.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance and adequacy

The health policy goes in line with the policy of HFA/2000 and the national health strategy reflects that policy. Though high-level secondary and tertiary health care facilities have traditionally been in the forefront, increasing attention has lately been directed towards primary health care through a network of health centres.

Adequate resources are being mobilized and activities which attract external and internal grants have been identified. The Ministry of Health expenditures increased more than four-fold between 1975 and 1983, and was only BD 2.4 million in 1968. The percentage out of total public expenditures is quite reasonable (7.6%) and the per caput health expenditure is high (US$272). Though PHC receives only 26% of the Health Ministry's expenditures, resources are distributed to reach socially and geographically disadvantaged groups.

Physical and manpower resources are also adequate, but there is a shortage of physicians in public health. Health services will have to depend, to a large extent, on expatriates for some years to come. However, the Government is paying great attention to the development of national cadres. The College of Health Sciences opened in 1976, and by the end of 1983, nearly 800 students had graduated and became part of Bahrain's much-needed middle-level health manpower. The number of students enrolled during the academic year 1983/84 exceeded one thousand. Now a medical college has just opened its doors and will in the near future contribute to the production of national professionals.

3.2. Progress

Progress in the implementation of the HFA Strategy has been quite remarkable. Health care, safe drinking water and adequate sanitary facilities cover the whole population, and MCH care nearly so; institutional deliveries account for 94% of all deliveries. Essential drugs are provided to all health centres. There is adequate coverage of public information and education for health. The first contact with health care is through the physician.

Vaccination coverage for infants, however, is incomplete. There is much to be desired regarding community involvement in implementation of the national strategy.

The various relevant indicator values are shown in the tables (see Annex to Part I).

3.3. Effectiveness and efficiency

Bahrain has developed PHC services through the health centres, with a referral system to the hospitals for secondary care. The small surface area of the country and a developed network of roads rendered it possible to achieve full coverage of the population by PHC. The accounts given earlier under "health status" and "progress" all point to the effectiveness of HFA Strategy in reducing major causes of mortality and morbidity.

The evaluation process, however, pointed out a number of areas requiring further development. There is need, for example, to increase involving the community in making decisions concerning their own health, and in the implementation and management of the national HFA Strategy. There is also great scope for developing better collaboration with health related agencies.

There is also need for coordination within the health sector itself, at the central level. There is an Office of Plans and Programmes directly under the Minister of Health, a planning unit under one Assistant Under-Secretary; a separate Office of Health Information Systems also direcly under the Minister, and there is a fourth unit for vital and health statistics in the Directorate of Public Health, under yet another Assistant Under-Secretary. There is need to bring closer together the planning, evaluation and information services.

More and more financial resources are being marshalled to improve the health services. The Directorate of Finance and Personnel provides for management accounting and information through budget control and cost control units. The cost highlights show the following:

The average annual health expenditure by the Government (Ministry of Health only) is BD 102 (or US$272) per person per year, a high figure compared to that for many countries in the Region. The average cost per outpatient visit in PHC is BD 4 (range BD 2.1-4.7), recalling an overall average of 3.63 such visits per person per year, excluding visits for injections and dressings. An average of 2.9% of the consultations to the health centres are referred to the Salmaniya Medical Centre (SMC). These referrals, however, constitute about 10% of all outpatient visits to the SMC. The average cost of an outpatient visit at SMC is BD 15, and for admissions BD 60 per patient-day. What is even more striking is that the cost per delivery at SMC shoots up to BD 363 (or US$965); one may mention here that 46% of all deliveries during 1983 took place at SMC. No wonder then that the SMC, alone, consumed 55% of all 1983 recurrent expenditures of the Ministry of Health.

Evidently, there is need to introduce different measures to rationalize and economize the cost of operation in close cooperation with the service units; tapping possible sources of health revenue may also be

considered. A great deal in this respect can be achieved through carrying out health service research, to improve the efficiency and quality of care, and to assess the degree of community satisfaction, inasmuch as the quality control of inpatient services in SMC is under continuous monitoring.

CYPRUS

An island in the north-eastern part of the Mediterranean, Cyprus has an area of 9251 sq.km, of which 1733 sq.km are forested. It may be divided into four natural regions. In the south is the Troodos range, a dome-shaped highland of infertile igneous rocks. To the north is the Kyrenia range, mainly of limestone, generally of lower elevation than the southern range. The central plain, with rivers from these two ranges, lies in between. The periphery of the island consists almost entirely of coastal valleys. In general, Cyprus has a hot, dry summer and a mild winter, with rainfall between October and April.

Agriculture forms the backbone of the economy, from the points of view of employment (21% of the economically active population in 1981), contribution to the GDP, and share in the export trade. Manufacturing industries rely on local raw material. Tourism is a major source of foreign exchange.

The estimated mid-year de jure population in 1981 was 637 000, of which 77% were of Greek origin, 18% of Turkish origin and 5% of other origins. About one-third live in rural areas. Literacy is high. With low birth and death rates, 75% of the population are 15 years and over, and 10.3% are aged 65 years and over. Administratively, the country is divided into six districts.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The right of every citizen to a decent existence and to social security is established in Article 9 of the Constitution. The Government is also committed to the HFA/2000 policy.

The health strategies reflect these health policies. The strategies are based on the mutual reinforcement of the health development policy and the socio-economic development policy. Thus the whole government machinery is involved and responsible for implementing the policies. This is reflected in the Fourth Emergency Economic Action Plan, 1982-86. The main strategies include: strengthening of the administration and management of health services at central and peripheral levels; emphasis on PHC; intersectoral collaboration in PHC activities; improvement of information support to the managerial process; introduction of health insurance schemes and improvement of health science and technology.

The health system reflects the essential characteristics of PHC. The first-level contact is through a wide network of health centres and hospital outpatient departments. Visits to rural hospitals and rural health centres accounted for 21.3% of all outpatient visits in 1982, in

addition to 42.4% as visits to general practitioners and casualty departments in the district hospitals. There is easy referral of patients for treatment from first level of contact to more specialized care.

The public sector provides free medical care to all citizens with low income, to all members of the civil service, the police and armed forces, and to practically all refugees; these categories together constitute 65-80% of the total population. The remaining 20-35% may get service from the private sector or pay full cost for services provided through government facilities. Certain preventive measures are implemented free for all the population.

1.2. Managerial process for health development

The Ministry of Health is responsible for the health care of the people. It has been reorganized so as to strengthen performance, planning and supervision.

The organization of the Ministry is shaped with a tendency toward vertical centralization, although the integration of all preventive and curative services exists at the delivery point. The Director-General is responsible to the Minister of Health for the implementation of the health policy and management of the Ministry's affairs. He is assisted by departmental directors of different services. The health service is divided into separate specialized departments, with vertical orientation in administrative and functional matters, but with a rather loose coordination at district level.

The planning process is carried out through the existing managerial arrangements and through a feedback system. Every department/section submits its proposals for development programmes for the coming year, and this must be in line with the approved Five-year Plan. At the Ministry of Health, the planning is finalized in collaboration with the Ministry of Finance. Monitoring and evaluation of the strategies is done through the managerial process, and there is no special structural unit for the purpose. Overall evaluation of the Government strategies, including those of health, is carried out by the Planning Bureau. The weak staffing at the Ministry level impedes the planning process and inadequacies in health information services constitute an additional obstacle.

1.3. Community involvement

Community involvement in health or health-related activities in rural areas is directed by a public health law. A community health commission is established having as chairman the community leader. The main duties are those related to preventive aspects, such as sanitation and cleanliness, refuse collection, water supply, cleaning, lighting and proper repair of roads, in addition to contribution towards maintenance cost of rural hospitals or health centres. Similar duties are undertaken by the municipal councils in the towns. Voluntary organizations (e.g. the Red Cross, the St. John's Ambulance Brigade, the Civil Defence, women's associations) are actively involved and encouraged to participate in health-promoting services.

1.4. Mobilization of resources

The Health Ministry's budget represented over 7% of the total budget for the last three years. This is considered adequate since major developments are covered by other funds. The total health expenditures (including private expenditures) represent 3.2% of the GNP. Notably, government health expenditures (excluding capital investment) represent 52% of total health expenditures, indicating the sizeable private expenditures on health (nearly half of which are on medical and pharmaceutical products). Almost 50% of MCH and immunization services are provided by the private sector. Hence, it is difficult to assess the proportion of national health expenditure devoted to PHC. The per caput final consumption expenditure on health (excluding capital expenditure) was US$107 in 1982.

In 1982, there were 258 physicians in government service, compared to 415 physicians in the private sector, with an overall ratio of 12.8 physicians per 10 000 population. Dentists were rather few (3.9 per 10 000 population of which 83% were in private practice). Nursing/midwifery personnel were available at the ratio of 40 per 10 000 population. In terms of physical resources, there were four general hospitals, two specialized hospitals (one for psychiatry and a small one for leprosy), three rural hospitals, and eleven rural health centres (six of which have beds). The total number of hospital beds was 3529 (or 67 beds per 10 000 population, of which 58% were beds in government establishments).

Cyprus has not yet embarked on research, as it lacks higher educational institutions. Limited epidemiological studies are occasionally carried out.

1.5. Intersectoral cooperation

Many sectors have roles in health care development, and allocate a share of their resources for necessary activities. Some sectors of vital importance to PHC development include Education, Agriculture and Natural Resources, Finance, Labour and Social Welfare, and Communication and Works. Interministerial committees have been a regular practice, particularly regarding health prevention issues, environmental pollution and water supply. For example, the Department of Medical and Public Health Services gives advice to the Nicosia Sewage Board regarding the protection of the Board's personnel from the risk of infectious diseases.

Another form of intersectoral cooperation is that of intersectoral projects. The Pitsilia Development Project, in a less developed area of Cyprus, has just been completed. It included development in agriculture, animal husbandry, water supply, irrigation, education, development of a rural hospital and a number of PHC centres and sub-centres. Intersectoral coordination at district and local levels is effected through municipal and village councils. Health aspects are taken care of in development projects, whether in agriculture, industry or tourism.

1.6. International cooperation

Collaboration with WHO has been extended for many programmes. Examples are prevention and control of thalassaemia, hospital organization,

management, manpower development, development of health information system, and in PHC. There is also collaboration in the development of Regional training facilities for the repair and maintenance of medical equipment at the Higher Technical Institute, Nicosia.

In addition to WHO, external assistance is received from UNHCR, World Bank, IAEA, Council of Europe, Commonwealth Foundation and Kuwait Fund. There is also collaboration with a number of countries through bilateral arrangements. External support is usually satisfactory; funds are released in time, and almost 100% of the resources are received.

2. HEALTH STATUS

Registration of births and deaths is incomplete. For 1983, the estimated crude birth rate was 20.7 and the crude death rate 7.7, giving a rate of natural increase of 13.0, all per 1000 population. The infant mortality rate was 12.8 per 1000 live births, hence deaths under five years of age constitute less than 5% of all deaths; life expectancy at birth is as high as 76 years for females, and 72 years for males.

Data from public hospitals indicated that 92% of newborns had a birthweight at least 2500 g in 1982. Data on weight-for-age for children under five years are not available. Similarly, public hospitals data indicated that the main causes of death followed the pattern of developed countries being, in descending rank: cardiovascular diseases, accidents (mainly road traffic accidents) and neoplasms.

The main causes of hospital morbidity were diseases of the digestive system, injury and poisoning, diseases of the respiratory system and diseases of the circulatory system; these four groups accounted for 52% of all hospital discharges in 1983. With respect to outpatient attendances the leading causes were diseases of the respiratory system, of the circulatory system, of the musculoskeletal system and of the nervous system and sense organs; these four groups accounted for 61% of all outpatient attendances in 1983. No maternal deaths occurred in public hospitals during 1981 and 1982.

There seems to be under-reporting of the six EPI target diseases, with the exception of tuberculosis. The following numbers of cases have been notified during 1983: diphtheria, tetanus and poliomyelitis, none; pertussis 23, measles 183; tuberculosis 23; meningitis 7. Malnutrition is not a problem, but over-nutrition is more serious, with the accompanying problems of obesity, diabetes, cardiovascular diseases and problems of dental hygiene.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The health policies are relevant to the HFA policy and are incorporated in the development plan 1982-86. The main obstacle to the development of health policies in line with HFA is the political problem whereby priorities are directed to rehabilitation of the refugees. To a

lesser extent may be mentioned the existence of influential pressure groups that demand highly specialized, costly but not cost-effective, curative services. The health strategies reflect these health policies.

A reasonable proportion of government expenditures is allocated to health. If one includes the sizeable private health expenditures, the total direct expenditures for health would represent 3.2% of the GNP (but excludes major developments which are covered by other funds). A certain amount comes from outside sources. Physical and manpower resources are also adequate. The resources are fairly equitably distributed. The country is small, with a good communication network, reducing the significance of geographical distance. An important revision of health policy was the Cabinet's decision to raise income limits, thus enabling a larger proportion of the population to use government health services free-of-charge or at low cost.

Local health care covers 64% of the population, yet distances are short and no one is more than one hour's distance from such services. Besides, the above figure is for the public sector only, so that if we include the private sector (particularly in urban areas), coverage would exceed 95%. All essential drugs are available; Cyprus in fact faces rather a problem of polypharmacy, with one government pharmaceutical laboratory and two local private manufacturing units.

Safe water supply inside the home is available to more than 99% of the population, even in rural areas. Basic sanitation is of a good standard with strict regulations governing waste disposal and sewage, both in urban and rural areas. Municipalities and local councils in most villages provide refuse collection services. MCH services are provided in all rural and urban health centres and sub-centres. Almost all (99.5%) of mothers are delivered in medical institutions (one-third in government hospitals). About 56% of vaccinations are done by the private sector, and family planning is promoted by voluntary bodies.

Among the obstacles identified are: need for orientation of health workers to the principles of PHC and to teamwork; need for strengthening managerial capabilities at all levels; need for better intersectoral cooperation; inadequate information support to the managerial process; and a large, relatively uncontrolled, private sector.

3.2. Efficiency

In general, the results obtained so far from implementing the strategies have been positive in relation to the efforts spent. The activities have been conducted at the right operational level. The suitability of facilities and efficiency of manpower in terms of skill have contributed to satisfactory implementation. Intersectoral collaboration has been a positive factor. However, specific cost-efficiency studies are not carried out to a satisfying level.

3.3. Effectiveness

The increasing rise in the overall standard of living, improvement of hygienic conditions, availability of medical services and immunization campaigns have contributed to the prevention and control of many

traditionally common diseases. Most infectious diseases including malaria, poliomyelitis, tuberculosis, leprosy, and severe gastrointestinal diseases are now under control. During the ten-year period 1974-83, the crude death rate dropped from 10.8 to 7.7 per 1000, and the infant mortality rate from 27.8 to 12.8 per 1000. There have been no reported cases of diphtheria, tetanus or poliomyelitis in the few years. In terms of resources, the ratios per 10 000 population changed as follows: physicians from 8.8 to 12.8, dentists from 2.9 to 3.9, nursing-midwifery personnel from 32 to 40, and hospital beds only from 64 to 67 beds.

DEMOCRATIC YEMEN

The government did not submit a national evaluation report

DJIBOUTI

Djibouti, which lies at the southern entrance to the Red Sea, has a coastline of 370 km and an area of 23 200 sq.km. There is a narrow area of fertile highland, but most of the country is arid and desertic. Owing to unfavourable climatic conditions and an acute shortage of water, agriculture is almost non-existent. Cultivable lands cover 6000 hectares of which only 220 ha are actually cultivated. The development of fishing is practically nil. Therefore Djibouti's economy is weak and rests entirely on various services and trades, related to the activities of its airport, its harbour and the railway line connecting Djibouti with Addis Ababa. Moreover, the activities of these last two sources of income have been reduced by more than 40% as a result of the armed conflict which has engulfed the Horn of Africa.

The Gross National Product (GNP) per caput was US$269 in 1983, but for the population living outside the city of Djibouti the average GNP falls below US$100.

Population estimates vary. Some government sources published the figure of 350 000 for 1979, but the 1983 census estimate was 330 000 only. Also, there were about 52 000 Ethiopian refugees in 1981. The crude rate of increase was 6.6% for 1970-80. About 35% of the population live in urban communities.

Administratively, the country is divided into five districts. The two northern districts of Tadjourah and Obock are accessible from Djibouti by regular ferry service and by air. There is one paved road from Djibouti city to the Ethiopian border.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The draft health plan of March 1982 defined a health policy having HFA as its objective and a global, affordable, acceptable and efficient system as the tool to reach that objective. The health strategy does not yet fully reflect the HFA policy, since most of the human and financial resources are allocated to hospitals and curative medicine.

However, the health strategy under this plan calls for increased efficiency of the medical care delivery system, strengthening of the functional integration of preventive and curative services, adoption of a team approach to solve health problems and improvement of the knowledge of the people about health and health-related behaviour.

Health activities in the public sector are fragmented and divided among several ministries, with the Ministry of Public Health and Social

Welfare wielding the major responsibility and authority, while the Ministries of Labour, Defence, Interior and Ports have their own health delivery systems and make their own policies.

The health service infrastructure may de depicted as a pyramid of referral institutions. At the first level of contacts the system includes small units (including border military outposts) which provide health care to remote or nomadic communities. They also offer some MCH care. The middle tier of the pyramid consists of district health centres which provide primary, non-specialized in-patient and out-patient care to the population and supervise the activities of the rural health units under their jurisdiction. There is a tuberculosis in-patient and out-patient service attached to each district health centre. At the apex of the pyramid is one general hospital, "Hôpital Peltier" in Djibouti city, providing primary and specialized in-patient and out-patient services.

Efforts have been made since 1983 to strengthen preventive and promotive activities by incorporating in health units other PHC programmes, such as EPI, ante-natal care, monitoring of children's growth, etc. Hospitals do not, as yet, fully play their supportive role for small units as regards improved diagnosis, training of personnel etc.

1.2. Managerial process for health development

The Ministry of Public Health consists of the Minister, assisted by an expatriate technical adviser (French), and the Director of Public Health who has overall responsibility for the health system. All urban dispensaries and the four district health centres are under the responsibility of medical officers and function according to the policies and standards laid down by the Ministry of Health. No "Planning and Development Division" has yet been established in the Office of the Minister of Public Health.

Since the Seminar-Workshop on PHC held in Djibouti in 1982, a PHC Coordination Committee has been established; it meets twice monthly. It is headed by the "PHC coordinator" and its membership comprises the doctors in-charge of the health units, both in the districts and in the capital. In addition, there has been, since March 1984, a WHO-assisted unit for health statistics and epidemiological surveillance, which is also supported by the "National Statistics Committee".

According to the management process, each programme to which resources are being allocated should include a precise definition of the aims to be reached and the activities to be undertaken, according to a clear plan of action; this is so as to facilitate monitoring of implementation and continuous assessment using indicators. However, this management process is lacking in most programmes and the tasks to be performed by the various categories of health units or personnel have not yet been clearly defined.

It is to be noted that non-governmental organizations (NGOs), in particular the National Union of Djibouti Women, take part, in some health centres, in programmes related to MCH. So does the Red Crescent. But there is a lack of coordination among the actions undertaken by NGOs active in the health field.

1.3. Mobilization of resources

In 1983 expenditures by the Ministry of Public Health represented 64% of all public expenditures on health. The other 36% were accounted for by other ministries: Labour, Defence, Interior and Ports, for their workforce and dependents (called "le Service Médical Inter-Entreprise (SMI)". The percentage of GNP spent on health was 7.6% (MPH) or 11.9% (MPH + SMI). The health units which do not come under the MPH or the SMI, though very few in number, have an important role to play. In 1982, global (total) health expenditures represented 3% of the Gross Domestic Product (GDP).

The total government health budget in 1983 represented 8.2% of the national budget. Government health expenditures have been decreasing since Independence, from 14.3% in 1976 to 8.2% in 1985. The Director of Hôpital Peltier manages most of the public health budget. There does not exist, properly speaking, a budget line allocated to PHC but preventive care represents 10% of health expenditures as compared to 90% for curative care. In 1984, almost 61% of the health budget was spent on personnel. Budget management is centralized and financial resources for health centres are not separated from those allocated to hospitals.

At the end of 1984 there was a total of 72 physicians (or 2.2 physicians per 10 000 population), 5 medical assistants, 8 pharmacists, 4 dentists, 359 nursing/midwifery personnel and 144 auxiliary workers. There was also a total of 175 traditional birth attendants (TBAs) who had undergone some training and 28 student nurses in their third year of training. Of the above, those in private practice amounted to four physicians, five pharmacists, one dentist and eight nurses. Distribution among the five districts is quite inequitable. The four districts other than Djibouti, with 33.4% of the country's population, have only 8.3% of the physicians, none of the dentists, none of the pharmacists, 40% of the medical assistants and 12.3% of the nursing/midwifery personnel. Moreover, they received only 4.85% of the health budget in 1984.

There is no health personnel development plan; and for the existing medical and paramedical personnel no training related to HFA strategies has yet been undertaken. Nevertheless, a "community health" branch has been introduced in the training of student nurses. Its present enrolment is about 10 students who will not become fully operational until 1986. The number of students is very low. Moreover, this is the only such class in three years since, for budgetary reasons, recruitment subsequently stopped. Personnel job and task descriptions are lacking at all levels and for all categories. Some expatriate personnel, who will spend only a few years in the country, are not receptive to HFA reorientation. The lack of personnel supervision and training in HFA strategies is a constraint. Furthermore, the low level of some paramedicals and their lack of motivation can be a discouragement for trainers.

In terms of health facilities there were seven hospitals with a total of 855 beds at the end of 1984 (or 37 beds per 10 000 population). There were 16 urban and 13 rural dispensaries and five mobile teams (groupes mobiles) for MCH services. Equity of distribution of these health establishments over the five districts is far better than that for manpower resources.

The Ministry of Health does not yet have a well-structured research programme. The National Statistics Directorate (DINAS) endeavours to coordinate the various surveys to be carried out in the country. A survey on khat consumption (one of the social scourges of the country), and a survey on infant mortality were carried out in 1984, by the health statistics unit, in cooperation with other units.

1.4. Intersectoral cooperation

The draft health plan (1982) has not yet materialized into an official document. The socio-economic development plan nevertheless acknowledges that all activities aiming at improving health, in accordance with the basic principles of HFA, constitute a developmental investment.

Some departments are implementing a few projects conducive to the improvement of public health. The International Drinking Water Supply and Sanitation Decade has brought together several services. The weekly campaigns to help keep Djibouti city clean and for environmental sanitation are the results of a collaborative effort between the Sanitation Department, the responsible officials in the Ministry of the Interior and the neighbourhood communities. In addition, agriculture contributes to the fight against malnutrition through pilot projects for vegetable-growing and for fisheries.

At present there is no permanent interministerial committee. Neither is there a "health council". No legislation provides for the incorporation of preventive measures in industrial and agricultural projects. The lack of motivation of other departments as regards the importance of health in development is a problem; this is partly due to conflicts of interests between departments.

1.5. International cooperation

The analysis of the requirements for external assistance relates mostly to the under-privileged sectors of the population of the city of Djibouti and in the rest of the country. Aid from France is structural and remains an important factor. Assistance is also provided by the following countries or agencies: China, Egypt, Federal Republic of Germany, Libyan Arab Jamahiriya, EEC, USAID, European Fund for Development, WHO, UNICEF, UNDP, WFP, Red Sea Mission, and Catholic Relief Service. Priority needs have not been identified but tuberculosis, hygiene, sanitation, and drinking water remain major problems for the country.

The Donors' Conference plays a major role in the efforts being exerted to find sources of external funding for the various economic and social projects. However, obstacles exist at the level of inter-country cooperation.

Djibouti has been receiving assistance mostly in the field of curative care: this includes a great number of clinical physicians who stay for only two years, drugs and ambulances. The implementation of the national strategies for HFA does not seem to benefit from inter-country cooperation.

Assistance requested from WHO is focused on training of personnel. WHO has equipped and made available to the country the "Centre for the training

of health personnel". The Organization has also provided support in the areas of logistics and teaching aids and material, and several fellowships have been granted. The Centre coordinates NGOs' activities and channels them as to be useful to HFA strategies. Assistance is also being provided for the setting up of a system for collecting health information.

2. HEALTH STATUS

The reliability of available data is still doubtful since the health statistics programme is not yet firmly established; neither have the results of the 1983 population census yet been published. It is to be noted that there is no compulsory registration of births and deaths.

The nutritional status of children is far from satisfactory. 11.2% of newborns have a birth-weight below 2500 g (Maternity Ward, Hôpital Peltier, 1984) and for 33% of the children under 5, the weight-for-age is below standard by 80% (monitoring carried out by the Catholic Relief Service in 1984). Malnutrition is reported to be more acute in rural areas. The estimated infant mortality rate is 120 per thousand and life expectancy at birth is 50 years.

According to the data given by the paediatrics service at Hôpital Peltier, the main causes of mortality are: tuberculosis, tetanus, malaria, measles and diarrhoea. The main causes of morbidity (for all ages) are: diarrhoea, tuberculosis, malaria, measles and viral hepatitis; for children aged 0-4 years, the causes are: diarrhoea, malaria, tuberculosis, measles and pertussis.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The draft health plan (March 1982) defined a health policy; however, this draft has not yet been finalized. The policy formulated by the Ministry of Health has not been endorsed by legislation that would take health strategies into account. Consequently, there is no plan of action to specify aims, priorities and main lines of action such as the efforts to be undertaken to achieve equitable distribution of resources. The management process and mechanism are lacking in most programmes. There are no funds specially earmarked for PHC in the budget. The regions where health care coverage is still experiencing difficulties because of inadequacies in the road network are Obock, Tadjourah and Dikhil.

A PHC coordinating committee has been established. The evaluation process is one of the main responsibilities of the health statistics unit, set up in March 1984, although the evaluation focal point, as well as the evaluation mechanism itself, remains to be determined. The Ministry of Health has drawn up a list of requirements for the five years to come; it must be noted that 83% of the health workers requested are for curative care.

The tables in the Annex to Part I give an account of the progress achieved and of the status of health services development.

3.2. Efficiency

To date, no study on efficiency in implementing the strategy has been undertaken. Since, at present, there are no action plans for the various programmes, it is impossible to assess the degree of achievement. As an example it may be mentioned that, thanks to EPI, the rate of immunization coverage has increased markedly; however, there are no reference data available for comparison.

The low level of efficiency in programme delivery is due to the extremely high mobility of health personnel, both expatriate and national, who, in any case, have received no management training. Supervision is non-existent. The limited contribution of other departments and the low level of community involvement are further reasons for the lack of efficiency.

Dispensaries have to cope with an excessive number of out-patient visits (up to 400 patients in one morning) to the detriment of the quality of diagnosis and care. In the districts, out-patients still swarm to the hospitals for care. Since dispensaries are ill-equipped to carry out laboratory tests (which they would be envisaged as doing, in the strategy) there is an excessively high demand for hospital testing.

The rate of occupancy of hospital beds in wards for the destitute is very high in the capital. Moreover, no centre has as yet adopted a list of essential drugs; this lack obviously leads to waste.

3.3. Effectiveness

To measure the degree of satisfaction of the population the following indicators can be selected: increase in the number of health committees in neighbourhoods; increase in the number of activities carried out by these committees (community involvement) and proportion of households connected to solid and liquid waste disposal systems.

The satisfaction of the providers of health services is limited. It is not possible to make any valid comparison for lack of reliable data, but one can state nevertheless that there has been an increase in children's immunization coverage. However, the effectiveness and the impact of the strategy can be fully assessed only in at least three years' time, i.e. once it has been fully and correctly implemented. For the time being the few encouraging indicators to be taken into account are: the reduction of the proportion of malnourished children, and the decrease in incidence of tuberculosis, malaria, pertussis and diphtheria.

EGYPT

Egypt is situated at the north-eastern corner of Africa. Its total surface area is about one million sq.km, of which less than 4% are cultivable, the remainder being mostly uninhabited desert. The population is concentrated in the Delta and on both banks of the Nile. The overall population density amounts to 47 per sq.km. In the inhabited area, however, it amounts to 854 per sq.km, and in Greater Cairo to 28 000 per sq.km.

Between the 1966 and 1976 censuses, the net annual population increase amounted to 1.9%. According to the last census (1976), the population amounted to 36.7 million with an estimated 1.4 million residing abroad. In April 1984, it amounted to 47 million with 1.8 million residing abroad. At the present growth rate, it is anticipated that the population will amount to 67.7 million in the year 2000. Also, between the 1966 and 1976 censuses, the birth rate decreased from 41.2 to 36.4 per 1000. A greater decrease, from 15.9 to 11.9 per 1000, was recorded in mortality rates during the same period; and the infant mortality rate decreased from 127 to about 89 per 1000. This resulted in an increase in life expectancy from 47.5 in 1960 to about 57 in 1980.

The country is administratively divided into 26 governorates, 13 of which have a population exceeding 2 million each. The population of Greater Cairo was estimated at 9.7 million. There has been a large internal migration, particularly from Upper Egypt rural areas to the urban governorates. Greater Cairo now comprises 21% of the country's population and Alexandria has a population of 2.8 million (Cairo and Alexandria are the largest two cities in Africa). A large number of the population migrated abroad for work purposes.

According to the 1976 census, males represented 94% of the economically active population. Forty-six percent of males are engaged in agriculture, and 52% of females in services. Cotton still represents the largest national crop and is the main export. Other agricultural crops, together with many industrial products, are also exported.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The health policy in Egypt is in line with the global health policy which aims at achieving HFA/2000. It calls for the promotion of primary health care (PHC) services, satisfying the citizens' needs for drugs and family planning means at suitable prices, expansion of health insurance coverage and subsidizing medical care. This policy has been endorsed at all official levels. The Egyptian Constitution provides for the right of every citizen to health care. Government health services, including those

covering drugs, are provided gratis. Drugs are also available in private pharmacies at reduced government-subsidized prices.

The national health strategy reflects the health policy of the State. It is in line with the strategy of achieving HFA/2000 through free government services, health insurance, curative establishments and the private sector. It is based upon well-defined principles. These are: to keep abreast of the socio-economic and cultural development of the community, to rely upon a clear political commitment for its implementation, to ensure the involvement of the various sectors within the community, to encourage the role of the private sector in complementing certain aspects of the health plans, to widely apply decentralization with emphasis on the role of local bodies and to increase the existing financial resources. The objectives of the current Five-year Plan comprise the reduction of infant mortality and of that of children below the age of five.

The current health system has the basic characteristics of a PHC-based system, as determined by the Alma-Ata Declaration. These are represented in the comprehensive nature of the system that contains all the elements of basic health care, accessible to all individuals, families and the community and supported by other service levels, in providing training to personnel and guidance to communities, and in ensuring coordination at the central level which provides the necessary expertise for planning, management and training, as well as financial and administrative support. Moreover, the health policy calls for horizontal expansion in the provision of these services to all rural and urban areas, especially to the new urban extension areas, in addition to providing them in an integrated form to urban areas. While this policy applies in full to the health system in the rural sector, where the integrated health care elements are provided at one service site and by one health team, it varies in the way it is provided in the urban sector where PHC has been provided through various health establishments, such as MCH centres, school health units and health offices. The Ministry of Health therefore had already begun in the seventies to implement a plan for the establishment of urban health centres which provide integrated health care.

The present Five-year Health Plan (1982-1986) stresses the importance of PHC as a basis for the provision of health care services, with emphasis on preventive services. The national health system comprises the Ministry of Health, and autonomous health institutions which fall under the supervision of the Minister of Health (Health Insurance General Organization and Curative Establishments), Universities (University Hospitals), and health institutions attached to other ministries (such as the Ministries of Defence, Interior and Communications) and the private sector. The Ministry of Health is headed by the Minister of Health who is assisted by a number of under-secretaries of health. It formulates health policies and plans and carries out organizational, supervisory and training activities. However, the activities are implemented on a decentralized basis through local governments.

In the rural sector, PHC is provided through 1967 rural health units and 537 rural health compounds (each manned by at least one physician assisted by a health team consisting of nurses, technicians and auxiliaries) in addition to 50 rural hospitals. In the urban sector, the

services are still fragmented and are provided through 242 MCH centres, 158 school health units, 78 health centres (representing the start of integrated services), 150 comprehensive clinics, 365 health offices and five student hospitals. The secondary and tertiary levels of health care comprise 141 central hospitals, 37 general hospitals and a number of specialized hospitals.

1.2. Managerial process for health development

The planning process is accomplished annually through the preparation, in the various governorates or organizations, of projects as part of the national plan. The projects are thereafter compiled by the General Department of Planning, Ministry of Health, and the necessary modifications are made according to priorities. They are then submitted to the Ministry of Planning for discussion and approval at the national level within the comprehensive social development plan, prior to their submission for endorsement by the People's Assembly. A Department of Plan Affairs and Follow-up exists within each of the Directorates of Health in the Governorates or in the Health Sector Agencies. When finally approved, the plan is returned to the local governments for implementation, with periodic follow-up of its implementation by the Ministry of Health.

A comprehensive supervisory, follow-up and evaluation body has been established at all levels, from the service units, to the departments of health in the districts, the directorates of health in the governorates, to the various technical departments and the Information and Documentation Centre within the Ministry of Health. The pertinent activities are carried out by means of periodic progress reports, field supervision and follow-up reports, studies, research and statistical reports. The evaluation results are referred from one level to the next, with information feedback to the former level for notification of evaluation results.

Coordination takes place on a continuing basis between the technical departments of the health sector which are involved in PHC. Periodic meetings chaired by the Minister of Health are held to coordinate the work between the technical departments of the Ministry and the Directorates of Health Affairs in the governorates. The Chairmen of boards of directors of the various organizations attached to the Ministry of Health attend these meetings. A number of committees have been formed, such as the Higher Committees for the control of communicable diseases, endemic diseases, and health education. Paramount attention is also given by the Ministry of Health to the development of the managerial capabilities of health personnel of various levels through WHO-assisted training courses.

1.3. Community involvement

Local communities are involved through the People's Local Councils at the rural, urban and governorate levels (each council has a health committee), and the boards of directors of health institutions (local communities are represented thereon). Local communities are involved right from the start when the plan is formulated since health plans are initially prepared locally. They are thereafter involved in the financing process, either through self-financing of certain health projects or through contributing to the service promotion funds at various health units or hospitals by collecting minimal fees for certain services. They are also

involved as individual or organizations in the implementation of certain projects such as the national immunization campaigns, environmental sanitation projects and family planning. They are further involved in the supervisory, follow-up and evaluation activities through their representatives on the boards of directors of health institutions. No major obstacles are faced in community involvement, particularly after the organization of the local rule system.

The services of the various public information media are utilized to increase the awareness of citizens regarding health problems, their health care needs and how these are met. NGOs and voluntary organizations, including professional syndicates, scientific or charitable societies assume a complementary role by contributing to such activities as family planning, national immunization campaigns, diarrhoeal diseases control and prevention of dehydration, or by holding seminars and studies in support of the Government role in PHC and in finding solutions or alternative approaches.

1.4. Mobilization of health resources

Studies covering health services needs until the year 2000 were prepared by the National Specialized Councils. The manpower and material resources are distributed, according to these needs, to the various governorates through both a short-term and a long-term plan.

The budget of the Ministry of Health for the financial year 1984/1985 has increased more than two-fold since 1980. It now represents 2.47% of the total State budget. (The lowest proportion amounting to 1.59% only was in 1970). If the budgets of all the bodies and institutions attached to the Ministry of Health (Health Insurance General Organization, Hospitals General Organization, Teaching Institutions (other than University Hospitals), the Egyptian General Organization for Biological and Vaccine Production, Family Planning Agency and the Curative Establishments in Cairo and Alexandria) are added, the above percentage will increase to 3.62% of the total budget. Again, if we add the expenditure of other ministries on such activities as drinking water supply and waste diposal, environmental sanitation, education or provision of health care to their personnel, this percentage will amount to more than 5% of the total public expenditure. Part I (salaries and wages) of the budget represents about two-thirds of the total budget of the Ministry of Health, while investments represent 12% only. Of the budgetary provisions 84% are allocated to the local governments. The resources required for PHC and rural and urban hospitals are covered from these provisions. The per caput share under the budget of the Ministry of Health amounts to L.E. 7.96 (US$11.4), and would increase to L.E.11.69 (US$16.7) if the budgets of all the bodies attached to the Ministry of Health were added. In 1970 the above per caput share amounted to L.E.1.26.

A plan for health manpower development, particularly for development of PHC personnel, is being implemented. Physicians, nurses and other categories are distributed in accordance with PHC requirements at the governorate level. Admission to the technical health institutes takes place on the basis of geographical distribution and the local needs. Moreover, programmes of work, performance criteria, and responsibilities for each category are formulated. The basic education at the faculties of

medicine and nursing schools is being developed in the light of PHC needs. Members of the health team receive training prior to taking up their duties; their training takes place locally in training centres in the various governorates. This is in addition to the continued training of these personnel, each staff member attends a training course once every year at least throughout his service at PHC units. Training covers all technical and managerial skills. It has also been found necessary, under the development plan, to provide each urban health care unit with a medical record technician. As for the personnel engaged in PHC activities, there exists one physician per 4000 of the urban population, and one per 6200 of the rural population, as well as one nurse per 4500 of the urban population and one per 3300 of the rural population.

As for health establishments, there is one health unit per 9960 of the rural population and one MCH centre for 68 700 of the urban population. As a result of the annual population increase, which outstrips the increase in resources, hospital beds decreased from 2.1 per 1000 population in the seventies to about 1.9 per 1000 in 1985. The required increase amounts to 2600 beds per year at a cost of $100 000 per bed, which exceeds the current resources of the health sector.

The main obstacles which hinder the implementation of the plan comprise the insufficiency of funds to cover the cost of the services of the health sector in its entirety. External assistance is sometimes assigned to specific programmes. There is also a shortage in the funds needed for training purposes, and an insufficient number of trainers, particularly in view of the large number of trainees.

Many research activities are carried out in the field of PHC. In the Project for Strengthening Rural Health Services research in the field of health services administration was carried out. The Project for Health Services Evaluation required measurement of performance, exploration of the opinion of service providers and follow-up of those who utilize the service. There are also the Projects for Diarrhoeal Diseases Control and for Strengthening Urban Health Services (particularly conducting research in MCH). The Second Population Project required the study of feeding habits of pregnant women and children, the factors influencing the utilization of MCH services, family planning, and the efficiency of home visitors, in addition to studies on maternal mortality in Egypt, and community motivation in PHC. Research results are published, and symposia, which are attended by research workers, planners and policy-makers, are held in order to utilize the research results. The major obstacle in this area is shortage of funds, particularly since the external funding of most of these research activities is time-limited, a fact which does not ensure their continuity.

1.5. Intersectoral cooperation

The health strategy is a complementary part of the State National Development Plan, as reflected by the Five-year Plan 1982-1986. Cooperation exists between the Ministry of Health and other sectors which contribute to health development. For example, there is cooperation with the Ministry of Social Affairs in family planning, with the Ministries of Housing and Local Government in environmental health and with the Ministries of Education, Culture and Information in health education. Coordination is ensured by

the Board of Health, chaired by the Minister of Health and has representatives from all the ministries and bodies which play a role in providing health care. Joint coordination committees are also formed in the various areas of health services. Additionally, the Ministry of Health and its organs regularly call attention to the importance of the health component in the comprehensive socio-economic plan. Nevertheless, cooperation is lacking at times, such as in the case of certain economically sound projects which are planned without considering their effect upon public health and the environment.

1.6. International cooperation

External resources amount to 4.7% of the total budget of the Ministry of Health. They are assigned in toto to PHC projects, and to the control of endemic diseases, especially schistosomiasis. Cooperation exists with other countries in the fields of training and exchange of information and expertise. Joint malaria control activities are carried out in the southern part of Egypt and in northern Sudan. There exists a Joint Coordination Committee for this purpose. Pharmaceutical firms with a joint Egypto-Arab or Egypto-foreign capital produce drugs to the value of US$850 million. Bilateral cooperation also exists with a number of Arab countries where large numbers of Egyptian physicians, nurses and technicians work. Under the Egypto-African Assistance Fund, African countries are provided with Egyptian physicians, technicians and drugs. A total number of 107 Egyptian physicians are seconded to African countries.

Amongst the priority areas which did not receive external support are the supplying of hospitals in remote areas and "new communities", the control of infectious diseases, particularly tuberculosis, managerial technology, training, promotion of service economics, care of the disabled and provision of prosthetic appliances.

Continued cooperation exists with WHO in the fields of training, fellowships and exchange of expertise. However, the local authorities are self-sufficient in formulating, implementing and following up health plans. The success of this cooperation may be attributed in part to the fact that the WHO Regional Office for the Eastern Mediterranean is located in Alexandria, that WHO is easily accessible and that each party understands the needs of the other.

2. HEALTH STATUS

The crude birth rate is estimated at about 36.8 and the crude death rate at about 10.2 per 1000 population, and the infant mortality rate at 73 per 1000 live births. The nutritional status of children is satisfactory; and the percentage of infants whose birthweight is below 2500 g is less than 1% of all newborns.

The study of the trends of the diseases covered by the Expanded Programme on Immunization shows a decrease in notified cases of diphtheria, measles and whooping cough but no decrease in the occurrence of poliomyelitis, tetanus and tuberculosis cases, according to the statistics available up to 1981.

The leading causes of mortality are the diseases of the digestive system, followed by diseases of the circulatory and repiratory systems, perinatal deaths, infectious and parasitic diseases, injuries and accidents then neoplasms.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The national health policy is relevant to the HFA/2000 policy. All the political and executive levels of the State are committed to this policy. The national health strategy reflects this policy. The current Five-year Health Plan which is a complementary part of the State socio-economic plan, is in the process of implementation. The present health system, which is responsible for implementing the strategy, has the basic characteristics of a PHC-based system, as accepted globally. Data on coverage by PHC are shown in the attached tables (see Annex to Part I).

To implement the health strategy, the Government mobilizes the required financial and human resources and health establishments. Resources, subject to their availability, are distributed amongst the governorates according to need. The Ministry of Health is attempting to increase the internal resources by increasing the allocations for health in the various budgets, and to secure grants and loans from international organizations and friendly countries. Moreover, the Ministry is attempting to increase the spread of health establishments throughout the country, to promote their services and to provide the qualified manpower required, particularly in those areas where they are most needed. The Ministry is also keen on training health personnel at all levels in the managerial process for health development, as well as on reorienting them towards PHC.

3.2. Efficiency

The preliminary results currently available on the implementation of the health strategy seem to indicate that both the strategy and efforts made to implement it are in harmony, recalling the fact that the strategy has been in existence for quite a long time. Thanks to the wide distribution of the health services throughout the country, the suitable technical and administrative supervision designed to follow up the implementation of the strategy, the permanent flow of information on the various activities, and their monitoring and assessment, the level of efficiency has increased.

The implementation of the health strategy has led to an increase in the utilization of health services. Among the main causes of this success were: the provision of the necessary manpower of all categories to man these services, the interest taken in training and continued medical education, the continued cooperation with other ministries in strengthening PHC and health-related areas, and the attention given to promoting health awareness amongst the citizens. Trials are under way to issue family health records which will serve as a link between the grassroots services in health care units and front-line hospitals. They will be kept at PHC units. The issue of such health records has been prompted by the lack of a sufficiently effective system to link the services rendered in the field of health.

To improve the quality of health care, several programmes and activities are being carried out, some on a trial basis in certain regions, with a view to generalizing them once they prove efficient. These include the immunization programme, the home visiting programme (which aims at providing health care to the family) and the programme for strengthening and developing the referral system. The quality of service is assessed by analysing the data and statistics received by the technical departments. The improvement of the quality was due partly to (i) external assistance which was utilized to upgrade the level of training; (ii) cooperation between the various departments and hospitals in the utilization of modern and costly equipment and (iii) the utilization of research results. However, there exists a shortage in the funds allotted to improve the quality of the service and the amount of external assistance provided is insufficient to bring about the required improvements, particularly since the rate of illiteracy is high and health awareness of the public is low.

3.3. Effectiveness

The use of various methods to assess the degree of community satisfaction with the results yielded by the strategy, such as measurement of the utilization of the health services available by people of all categories, the study of community complaints against the services rendered and the study of public opinion trends in respect of the health services, has revealed a remarkable improvement in the degree of community satisfaction vis-a-vis health services.

The effectiveness of the strategy is evident from the substantial change in the vital rates between 1980 and 1983: the crude death rate decreased from 11 to 10.3 per 1000 population, the infant mortality rate from 89 to 73 per 1000 live births, and life expectancy increased to 57 years. Furthermore, no disease subject to the International Health Regulations occurred; and the rates of incidence and of death from infectious diseases, particularly those covered by the Expanded Programme on Immunization, has decreased.

ISLAMIC REPUBLIC OF IRAN

The Islamic Republic of Iran, with an estimated 43.4 million population and a surface area of about 1.65 million sq.km, is situated between USSR and the Caspian Sea in the north and the Gulf and Sea of Oman in the south. Afghanistan and Pakistan border the country to the east, and Turkey and Iraq to the west.

The climate varies considerably, being temperate in the northern mountainous range, but hot and humid in the southern sector. The central plateau, situated between the two ranges of mountains, has a dry variable climate and, except for inhabited fringes, is mostly arid and unpopulated.

Demographically, the population is rather young 46% being below 15 years of age. About one half lives in urban areas, the other half being scattered rural population. However, there has been a considerable shift of the population towards urban areas during the past decade. The capital city, Teheran, has grown from a population of less than one million to about seven million during the last two decades. Other cities with a population of over one million each are Tabriz, Meshed, Isfahan and Shiraz.

Administratively, the country is divided into 23 provinces (ostans) with a certain degree of autonomy in the local administration. One of the first ministries to be decentralized was the Ministry of Health; decentralization, however, is still by no means complete.

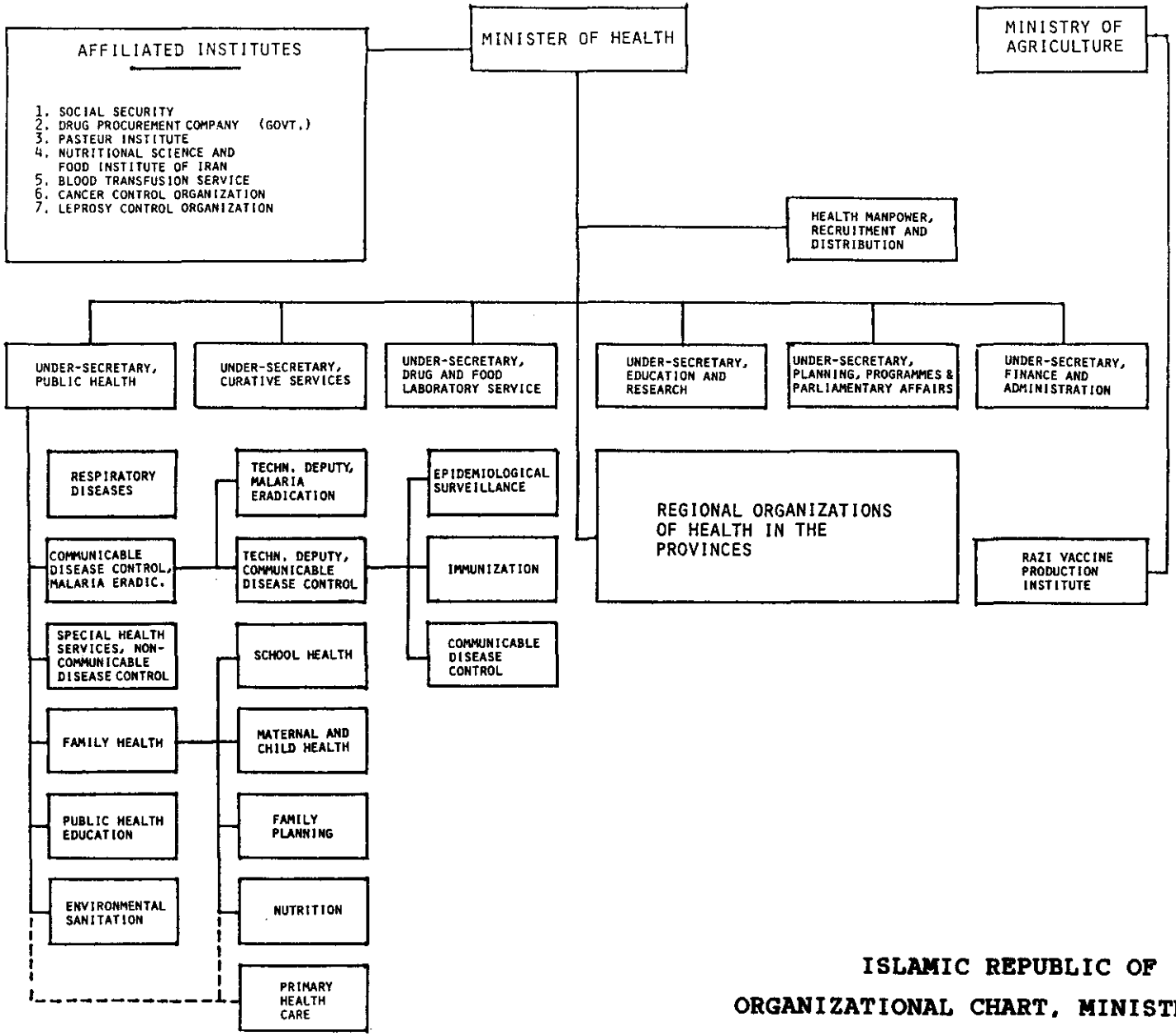
1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The national health policy is highly relevant to the long-term objectives of the goal of HFA/2000. It benefits from the overall socio-economic policy of the Government, giving priority to rural underserved areas and, accordingly, a greater share in reallocation of sources. The right of all citizens to health is embodied in the country's constitution.

The national strategy is based on the national health policy. Moreover, the national health plan is in full accordance with the overall socio-economic development plan, and identifies the following four guiding priorities: priority of rural over urban development; of preventive over curative services; of ambulatory over hospitalization services; and of general over specialized services.

After an experiment in primary health care in West Azerbaijan, a new system of health care delivery was initiated in Iran in 1976. In conformity with the national HFA/2000 health policy, it was necessary to



ISLAMIC REPUBLIC OF IRAN

ORGANIZATIONAL CHART, MINISTRY OF HEALTH

review the system and make adjustments so that it could be relevant to the socio-economic situation of the country. The revised PHC system is a four-tier network: (a) The base in the "health house" serving one to two thousand population and staffed by one male and one female auxiliary health worker. It offers immunization, MCH including family planning, sanitation, health education, nutrition, elementary case finding and first aid; (b) The Health Centre, run by a physician, and staffed by a dentist or dental hygienist and 5-7 health technicians; (c) The District Hospital, dealing with internal medicine, general surgery, obstetrics and gynaecology and paediatrics, and (d) The Provincial Hospital with a greater number of specialties.

1.2. Managerial process for health development

Provision of health services to the entire population is the responsibility of the Ministry of Health. It is headed by the Minister of Health, aided by six Under-Secretaries. A number of institutes/ organizations are affiliated to the Ministry. Razi Vaccine Production Institute is under the Ministry of Agriculture. Direct provision of health services is mostly regionalized (see Organization Chart).

The National Health Development Plan (1983-87) has been formulated within the framework of the overall socio-economic development plan. The integration of health services related to various organizations (e.g. Red Crescent, Road and Transport, Social Security and Social Services) led to better coordination of health services. To further improve such coordination, it is planned to hold quarterly coordinative meetings, bringing together the managing directors of provincial health departments and the authorities concerned in the Health Ministry.

A high council, called "High Council of Coordination and Supervision for the Innovative Development of PHC throughout the Country" was set up in early 1983, headed by the Minister of Health. The General Department of Family Health was reorganized in the Health Ministry through grouping of MCH, family planning and nutrition sections. A "National Consultative and Supervisory Committee" has been established, representing the Departments of Family Health, Control of Communicable Diseases, Health Education and Environmental Health. The Institute of Public Health and Research is collaborating with the Health Ministry in the field of evaluation of the PHC network as well as in health planning and public health research. The district health centre provides supervision of other health centres in the district, together with epidemiological surveillance of diseases. The provincial health centre provides planning and management expertise, teaching for specialized staff, research, and central logistic and financial support.

1.3. Community involvement

The communities are involved in the programming and implementation of the country's health services insofar as they are represented by labour unions and other organizations in district and provincial health committees. Yet there is little or no participation at the national level, i.e., in the decision-making and planning processes.

The Health Ministry has launched a country-wide health education campaign to obtain the cooperation of the entire population. Such a drive

includes involvement of religious leaders, introducing health education material into the teachers' curricula as well as those of medical students and other health personnel, and involvement of youth organizations, women organizations and the Medical Council in the health strategy. A Health Education Council has been set up in the Health Ministry to ensure coordination between the media and the Ministry.

1.4. Mobilization of resources

Priority is being given by increasing budgetary allocations for rural areas and allocation of additional resources for the provision of PHC, particularly for underserved population groups. Thus a separate allocation has been made for the immunization programme. Provision of PHC for the rural population is still unsatisfactory, in view of budgetary limitations resulting from the ongoing war; the Government is looking for local community contributions. Health expenditures (excluding the health components of other sectors such as the Ministries of Education and Defence, and excluding the private health sector) account for about 5.5% of the GNP*. Approximately 35% of the Health Ministry's budget is spent on the PHC system.

Health manpower development has been planned by the Ministry of Health, together with the Ministry of Culture and Higher Education, as relevant to the needs of the health system. Besides the training of male and female health auxiliaries, two new categories of polyvalent health workers will also be trained for posting in urban and rural health centres. There are the (female) Family Health Worker to be responsible for MCH including family planning, nutrition, immunization and school health, and the (male) Disease Control Worker. Efforts are being made to recruit students from the communities in which they will serve, and newly graduated physicians are required by law to serve 3-5 years in rural areas.

Available physical resources include 3598 health houses, 3019 rural/urban health centres, 124 district health centres, 14 provincial health centres, and 67 734 hospital beds (or 16 per 10 000 population).

Health research is included as an integral part of medical research, and a senior staff member from the Health Ministry (in charge of coordination and development of the PHC network) is a member of the Medical Research Council under the Ministry of Culture and Higher Education. The Institute of Public Health and Research is collaborating with the Health Ministry in the fields of health planning and public health research.

1.5. Intersectoral cooperation

The national health plan has been elaborated in conjunction with the overall socio-economic development plan (1983-87) ensuring a reasonable degree of integration and intersectoral collaboration. There is a Multisectoral National Health Council, headed by the Prime Minister, whose

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* This figure of 5.5% for GNP was quoted in paragraph 9.4 of the report. But the same 5.5% was given as the percentage of recurrent budget allocated to the Health Ministry (para 22.1 of the national report.).

members are the Ministers of Health, Education, Agriculture and Rural Development, Economy and Finance and several others. It is responsible for policy questions affecting health and socio-economic development and takes appropriate measures to prevent potential hazards of socio-economic development projects.

The Multisectoral Provincial Health Council (headed by the Governor-General of the province) and District Health Council, with membership of provincial (and district) counterparts to the members of the National Council, are responsible for the multisectoral approach to health problems at their respective levels.

Through the Multisectoral National Health Council, the Health Ministry is informed of the developmental projects before they become operational, thus ensuring the incorporation of appropriate health components. It is to be noted that, there has been less success in incorporating preventive measures in industrial schemes than in agricultural projects. Intersectoral collaboration, moreover, is not satisfactory at the provincial and district levels.

1.6. International cooperation

There has been no realistic assessment of the needs for external financial or material support, nor has such support yet been received. To date, there has been no collaboration with other countries towards the implementation of the national HFA strategy, nor have contributions been made to that of others.

There has been no specific WHO collaboration in the formulation of the national HFA strategy. However, several international staff made visits to collaborate in reviews of the implementation of the strategy, in such areas as MCH, immunization, PHC programme, control of diarrhoeal diseases, oral health, vector control, communicable diseases control, and health information system, as well as an overall Programme Review. WHO has been involved in the establishment of training courses for staff in charge of the immunization programme at both national and provincial levels.

UNICEF has also collaborated in the fields of training of technicians, the immunization programme and manufacture of oral rehydration salts.

2. HEALTH STATUS

Although legislation exists for compulsory registration of deaths, there is considerable under-registration in remote villages; registration of cause of death is often based on speculation in rural areas and is therefore not reliable. Notification of certain diseases is required from practising physicians, but this is not always observed especially by those in private practice. Thus data on notifiable diseases are usually based on reports received from the government sector.

The crude death rate is estimated at about 10 per 1000, infant mortality rate at 104 per 1000, and life expectancy at birth at 60.4 years. The nutritional status of children is considered to be adequate; 96% of newborns (whose mothers attended MCH centres) had a birthweight of at least 2500 g, although data on weight-for-age are lacking.

With respect to diseases covered by the International Health Regulations and International Surveillance, more than 100 cases of relapsing fever were reported in 1978. Cholera has been reported almost annually, reaching a peak of more than 10 000 in 1977, but the number of cases reported thereafter has been declining. Malaria is still a major problem in the south-eastern part of the country; the reported incidence rate of malaria in 1983 was 7.64 per 10 000 population.

Immunization has resulted in the control of diphtheria, but measles, pertussis, tuberculosis and poliomyelitis are still common. Large numbers of cases of viral hepatitis are reported annually, on average exceeding 15 000 cases per year during the period 1981-83. Meningococcal meningitis is also common, reaching a peak of about 1500 cases in 1978, but it is noteworthy that there has been a continuous increase since 1980, reaching almost 900 cases reported in 1983. Cases of schistosomiasis are also being reported.

Diarrhoeal diseases, in terms of morbidity and mortality, are a major health problem and take a heavy toll of children under five years of age, particularly in rural areas. Malnutrition and rickets, as well as riboflavin and vitamin A deficiency are major nutritional problems.

Based on cause-of-death statistics from selected cities, the leading causes of death in the total population were, in descending order: diseases of the circulatory system; injury and poisoning; ill-defined symptoms signs and conditions; diseases of the respiratory system; certain conditions originating in the perinatal period; neoplasms. For deaths under five years of age, the main causes were: certain conditions originating in the perinatal period; diseases of the respiratory system; infectious and parasitic diseases; diseases of the circulatory system; ill-defined symptoms, signs and conditions; diseases of the blood and blood-forming organs.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy, progress

The national health policy is highly relevant to the goal of HFA/2000, and received endorsement at the highest official level. The PHC approach has been accepted as the cornerstone of the national strategy, which is based on national health policy. The national health plan has been elaborated in conjunction with the overall socio-economic plan. It was necessary to revise the PHC system so as to become: (i) oriented towards a more integrated service, giving priority to preventive health services; (ii) adapted to the socio-economic status of the population and based on appropriate health technology; (iii) having realistic targets in line with the economic situation in the country; and (iv) aimed at more equitable distribution of resources.

Because of budgetary constraints and other problems resulting from the ongoing war, the strengthening and expansion of health services for the rural population is facing difficulties. It was necessary to make adjustments in the style and set-up of health houses and health centres rendering them less expensive to construct, using more appropriate

technology, and taking advantage of full community involvement. Besides, in view of the Government's concern with high infant mortality, additional national funds have been made available for special projects in the areas of immunization and oral rehydration, in collaboration with WHO and UNICEF. Otherwise, there has been no updating of the strategy or plan of action.

There has been rapid expansion of first-level contact, namely: the health houses and health centres, and increase in the amount of the budget allocated for rural areas and underserved population groups. Training of existing health personnel is receiving attention and two new categories of polyvalent health workers will also be trained to be posted in both urban and rural health centres. The Government has made efforts to bring about a more equitable distribution of resources than existed in the past.

A fairly good coverage with PHC has been achieved, as detailed in the tables in the Annex to Part I, but the coverage varied between the different PHC components. It was satisfactory with regard to the availability of local health care and essential drugs, safe drinking water and adequate sanitary facilities, less so with respect to immunization and least so in the field of MCH.

3.2. Efficiency

The progress made in the implementation of the various programmes has been assessed on the basis of field reports. Generally speaking, the results of the strategy seem to be positive, although no specific cost-efficiency analysis has been made so far. To make implementation more cost-effective, monovalent health workers are progressively being replaced by polyvalent workers.

Two main factors have contributed to more efficient utilization of the health services. The first factor comprises the efforts made to bring the services to the population by increasing the numbers of health houses and health centres and locating them more appropriately for easy access. The second is the "Reconstructional Crusade" which has played a major role in the construction of roads in rural areas, resulting in more transport and communication facilities and thus making the referral system more efficient. This second factor is rendering the service more acceptable to the rural population, through recruitment of health personnel from the same geographical area. However, because of shortage of qualified physicians, it is not possible to man all rural health centres with such physicians at present, and alternative solutions are being sought.

3.3. Effectiveness

The objectives of the First Five-year Plan for the Islamic Republic of Iran have been set for 1987. Hence it is too early at present (1985) to assess the effects of the strategy in reducing health problems. Any judgement in connection with community satisfaction would, at this stage, be unreliable and misleading. Reference has been made, however, to trends in some communicable diseases in Section 2. Health Status.

IRAQ

Iraq, bordered by six countries and a short coastline on the Gulf, has a surface area of almost 440 000 sq.km and a population approaching 15 million. Its two major rivers, the Tigris and the Euphrates, originate in Asia Minor and flow south towards the Gulf before joining which they unite. The country may be divided into four primary geographical areas. The alluvial plain to the south occupies about one-fifth of the country. A mountainous region lies in the north and north-east. The Steppe region is a small transitional area between the previous two regions. The fourth region consists of a desert plateau in the west and occupies about three-fifths of the country.

Due to variations in the topography Iraq has three types of climate, i.e. a hot desertic climate, a Mediterranean type in the mountains, and a transitional one in the steppes. It is estimated that about half of the land is cultivable and a quarter is suitable for pasture land; the remaining area is rugged mountains and desert. The best known agricultural product is the date; after oil, it is the largest source of foreign currency. Increased salinity of the soil is a problem hindering the development of agriculture. Livestock raising is an important source of income in rural areas. Manufacturing industries have grown markedly during the seventies, along with energy production. The cost of the ongoing war in the Gulf, together with the global cuts in oil prices, have had a deleterious effect on the economy. The per caput GNP for 1982 was just less than US$3000.

Administratively, Iraq is divided into 15 governorates (liwas), each further subdivided into a number of sub-governorates (qadas), districts (nahiyas) and villages or "quarters". In addition, there are three autonomous regions. Iraq has a long tradition of civil registration and compilation of vital statistics, but coverage is relatively low. The last population census was in 1977. The Iraqi population is young, 46% being below 15 years of age. According to the 1977 census, Baghdad Governorate had the highest density (613 per sq.km), while in the three largest (area-wise) governorates of Al-Anbar, Kerbala and Al-Muthanna a density of 4-5 persons per sq.km was registered. Internal migration to urban areas is progressing; average annual rate of growth for 1973-75 was 3.3%; urban 4.2% and rural 1.2%. International immigration has been marked in recent years, particularly of Egyptians.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The Ministry of Health is endeavouring to offer health services to all the people of Iraq by establishing a sound network of health centres in all

governorates, covering both urban and rural areas. The Government has adopted the philosophy that health development is part of the socio-economic development strategy. The national health policy is to have five-year planning, to be monitored annually.

The health system has been adjusted to suit the health policy. The entire infrastructure of the Ministry of Health was changed to give better services for implementing PHC, towards the goal of HFA/2000.

Most out-patient departments have been shifted outside the hospitals. Patients are expected to pay US$0.3 for each visit and US$0.3 for each supply of drugs. This change from a totally free-of-charge health service was carried out to reduce unnecessary out-patient visits, thus permitting better examination and better treatment.

1.2. Managerial process for health development

There has been adaptation and implementation of the new law of the Ministry of Health as support to the national HFA strategies. The adoption of health norms and objectives has been launched. There is a central PHC Council in Baghdad, headed by the Minister of Health with senior officials from the Health Ministry, other ministries, the central Popular Council, the Women's Federation Union, the Farmers' Union and the Labour Union. The Council is a decision-making body. There are similar councils at sub-national (liwa, qada and nahiya) levels.

1.3. Community involvement

The President of Iraq ordered that a five-year plan be implemented specifically to reduce child mortality and to increase immunization coverage. The Women's Federation Union is supporting the health services in providing antenatal care and protection of infants; a workshop was held for members of the Federation for these purposes, with the support of UNICEF. The Farmers' Union is making some contribution to this activity. Also, teachers, especially in rural areas, are active in health education, anti-trachoma campaigns and early detection of impairment of vision or of hearing. Reference has been made earlier (in section 1.1) to cost-sharing in health services by the citizens.

1.4. Mobilization of resources

There has been increased allocations of health resources for the State Organization of Health Services which is responsible for providing preventive and curative health services, including PHC, in terms of human, material and financial resources, taking into consideration needs for health projects and programmes and relevant cost-benefit studies. In terms of availability of resources, the physician:population ratio was 5.6 per 10 000; for total hospital beds it was 22 per 10 000.

1.5. Intersectoral cooperation

The national health strategy is fully incorporated into the national socio-economic plan adopted by the Government. The multisectoral national health councils (see 1.1. above) are one example of the contributions by other sectors to health development.

1.6. International cooperation

There is no reference to this aspect in the national report.

2. HEALTH STATUS

The crude death rate is estimated at 10.6 per 1000, the infant mortality rate at 72 per 1000 and life expectancy at 64 years. No studies on birthweight or weight-for-age have been carried out but the proportion of newborns with a birthweight of at least 2500 g is believed to be below 90%. Adults, on average, are believed to be well-built.

The leading causes of morbidity, in descending order, are: diseases of the urinary system, bronchitis and pneumonia, infectious and parasitic diseases, heart diseases, diseases of the upper respiratory tract and accidents. The leading causes of mortality are: pneumonia and influenza, malignant neoplasms, certain conditions originating in the perinatal period, heart diseases and intestinal infections.

With respect to diseases covered by the International Health Regulations and International Surveillance, four cases of relapsing fever were reported in 1978 and a few cases of louse-borne typhus have been regularly reported during the period 1976-1982. Cholera was reported during 1977-1978. Malaria is still a serious problem, although there is a downward trend; the average annual incidence exceeded 3000 cases during 1979-1983. For the six EPI target diseases there is still high incidence. Also, schistosomiasis and viral hepatitis are reported in large numbers, and some 150 cases of meningococcal meningitis are reported annually with an epidemic (close to 1900 cases) in 1982.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The health policies are relevant to the goal of HFA/2000, and the national health plan has been incorporated into the overall socio-economic development plan. A new law for the Health Ministry was issued in 1983 to be more in line with HFA/2000 strategy. More resources have been allocated for PHC activities.

The current health plan would appear to be somewhat over-ambitious. It spans the period from the present (1985) up to the year 2000; the Ministry has considered most of the health problems as priority problems; the information document used in the planning exercise proved to be of little value, due to inaccurate and outdated information; the country's financial situation may lead to neglecting technical and particularly institutional constraints.

Health care is available for 100% of the urban population. No real review as such was carried out to assess coverage of the rural population, but it is estimated to be at least 80%.

3.2. Efficiency and effectiveness

The strategy permitted better utilization of health services. This is reflected in: the increased number of families registered at MCH centres; increased proportion of institutional deliveries; better coverage with vaccination; increased use of oral rehydration salts; and increased out-patient attendances.

The reasons behind this are: increased number of health centres, physicians and paramedicals, particularly in rural areas; increased reorientation and training courses; better follow-up and field supervision by the responsible officials; and activities of the Women's Federation Union, the Farmers' Union, the Labour Union and the Popular Council.

The main obstacles are: insufficient trained manpower; high illiteracy rate; and the fact that some people have little confidence in newly graduated physicians.

The national report did not contain data for the assessment of the effectiveness and impact of the strategy.

JORDAN

The River Jordan, of which slightly more than 19 km run through Jordan, divides the country into two parts - the East Bank with 89 206 sq.km, and the West Bank. Since 1967 the West Bank, including East Jerusalem, has been under occupation causing sizeable population displacements. Except for its southernmost tip, the port of Aqaba on the Red Sea, it is a land-locked country.

Jordan has relatively dry desert weather combined with Mediterranean climate. Because of insufficient overall winter rainfall, the fertile north-west corner of the country supports a large proportion of the population. Acccording to the 1975 agricultural census, the land under cultivation was roughly 3900 sq.km, yet the cultivable area was about 13 000 sq.km. The extensive desert to the east occupies four-fifths of the area.

The population of the East Bank increased 2.4 times between 1961 and 1982, partly due to the high rate of natural increase, and partly due to forced migration from the occupied territories. Registration of births is almost complete, but some 60% of deaths are not reported. Jordan has a young population; about 51% are below 15 years of age. The overall population density in the East Bank is 27 per sq.km, but about 46% of the population live in the three cities of Amman, Zarqa and Irbid. Administratively the country is divided into five governorates for the East Bank (and three others in the occupied area). The average household size is seven persons.

The per caput GNP in 1982 was about US$1997. Phosphates and potassium are the main natural resources. The national economy depends upon mining, agriculture, industry and the trained manpower working in other Arab countries (about two-thirds of these are in Saudi Arabia). The country is totally dependent on imported oil as a single source of energy.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The Jordanian Public Health Act (1971) recognizes that health is the right of every citizen and that the Ministry of Health is fully responsible for all health matters. Additional health policies have been formulated to ensure equitable distribution and wider coverage and to improve the quality of health services. There is political commitment on the part of the Government to achieve the goal of HFA/2000.

The national health strategy reflects the national health policy. In 1980 the Health Ministry formulated its strategies and a preliminarry plan of action to achieve its defined goal of making health services accessible

to all citizens. The health plan has set the following priorities: mother and child health care; immunization and control of communicable diseases; provision of adequate safe water and sanitation; environment protection and occupational health; accident prevention or reduction; and reduction in the incidence of psychiatric and chronic diseases.

The health system has three component sectors, as follows:

(1) The public sector, with four main authorities. The Ministry of Health provides about 60% of the health services and is the principal authority responsible for the provision of preventive services. The Royal Medical Services looks after members of the armed forces (and their families), police and civil defence, through a number of hospitals and health centres. Jordan University has, as its share, the university hospitals. Lastly, the Social Security Organization provides services to those covered by social security through workers' clinics and contracting some public and private hospitals.

(2) The private sector runs 22 hospitals and several clinics.

(3) The international sector includes UNRWA and some non-profit-making societies; however, the scope of their services is rather limited.

The present health system is based on PHC, with its eight elements as defined in the Alma-Ata Declaration in addition to occupational health, school health and sport medicine. It provides services through the following:-

(a) As the first contact with the people there is a health centre for every 4000 persons, capable of providing the essential elements of PHC;

(b) Comprehensive health centres, one for every 20 000 persons, provides the essential elements of PHC as well as some specialized services;

(c) District hospitals: one general hospital in each district which contains all the medical specialities;

(d) Tertiary health care, provided through Al-Bashir Hospitals (Ministry of Health), Hussein Medical City (Royal Medical Services) and Jordan University Hospitals.

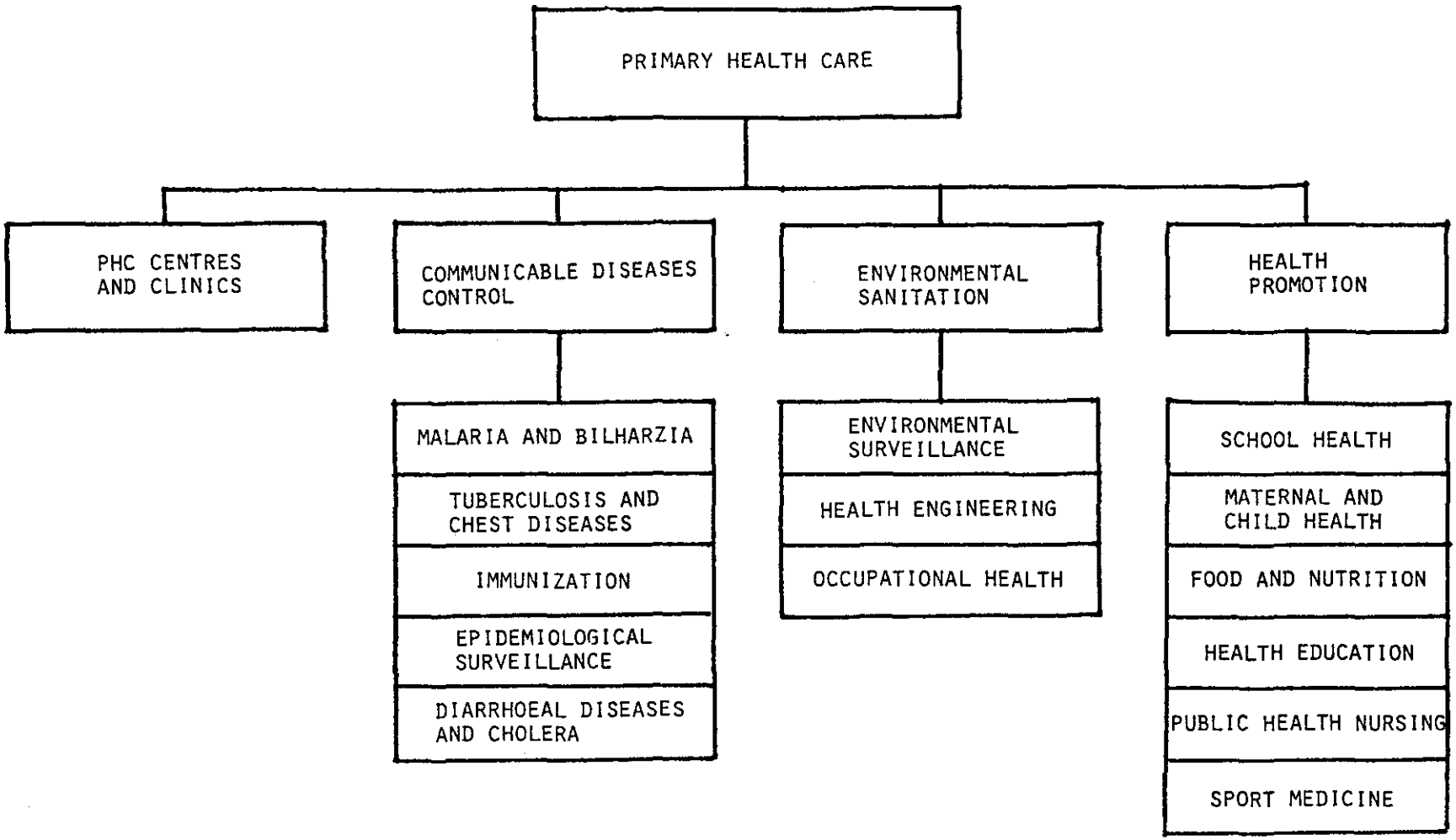
The PHC Directorate in the Health Ministry has four main divisions: the PHC centres and clinics; communicable diseases control; environmental sanitation; and health promotion.

1.2. Managerial process for health development

Formulation of national health policies, goals and priorities are usually set by the Ministry of Health in coordination with the Higher Health Council (chaired by the Prime Minister). The policy has to be approved by the Cabinet and endorsed by the King. Broad programming, programme budgeting, preparing the master plan of action and detailed programming are set by the Planning Committee consisting of the Ministry's senior staff. Implementation, monitoring and evaluation are carried out by the programme managers, division heads and by the directors of health in

JORDAN

ORGANIZATIONAL CHART. PUBLIC HEALTH CARE PROGRAMME



the districts. Reprogramming for revision and updating, if necessary, is also set by programme managers and division heads for approval by the Planning Committee. Continuous relevant information support to the managerial process is ensured by the programme managers and the Directorate of Planning, Training and Research at the central level, and by the directors of health at the district levels.

Collaboration among the various health sectors receives full attention at the Health Ministry. This is achieved through direct connections, permanent committees and ad hoc committees, as well as the Higher Health Council as the main coordinating body. Such coordination is generally adequate, mainly due to the fact that the officials in the various health sectors do recognize the importance and benefit of this collaboration, the presence of the Higher Health Council as the policy-making and coordinating body, and as a result of training.

However, it is not always easy to convince the private sector to collaborate with the Health Ministry in the fields of PHC, notification of diseases, and use of oral rehydration therapy. Besides, duplication and overlapping of health services among these sectors do exist, due to conflicting interests and the diversity of financial sources.

1.3. Community Involvement

Community leaders express their health needs and, to a less extent, they are involved in planning. However, community involvement in the implementation of health strategies is actually functioning. Community health councils (committees) have been established at district, subdistrict, town and village levels, composed of the local formal and informal communities. These councils hold periodic meetings to discuss health problems in the community and propose solutions, and their reports are directed to the governors and the Minister of Health. Various forms of contribution in kind or in cash are common. Examples include donating a piece of land or a building for establishing a health centre, or a house for the resident physician, or nominating a local girl for training in midwifery and PHC.

1.4. Mobilization of resources

The total expenditure on health by all health sectors in 1983 was estimated at 3.93% of the GNP, or US$62.5 per person. The budget for the Health Ministry represents only 1.3% of the GNP or US$20.4 per person. It represented just 2.7% of the general Government budget in 1985. The PHC budget represented 12.6% of the Health Ministry's budget for 1985; it should be noted that this percentage excludes salaries of the health personnel working in PHC which could not be itemized.

The total number of physicians in 1982 was 2662 (or 11.0 per 10 000 population), including 1300 physicians in the private sector. Those in the Health Ministry were 735 physicians; the corresponding number for 1984 was 911 physicians. The overall ratio for dentists was 2.2 per 10 000 population, but 72% were in the private sector. Nursing/midwifery personnel in the Health Ministry were 9.9 per 10 000 population in 1984.

The total number of beds in government service in 1984 was 4721 beds (or 18.2 per 10 000 population); of these, 1875 beds belonged to the

Health Ministry. In addition, the Health Ministry had 162 health centres, 93 MCH centres, 237 village clinics and 20 outreach teams.

The Directorate of Planning, Training and Research was established in the Health Ministry in 1980 to coordinate research in the health field. Priorities for medical research are given to national researchers, particularly those related to PHC. A number of research studies were (or are planned to be) carried out in collaboration with WHO or other government bodies such as the Department of Statistics, Jordan University, and Yarmouk University. The results of health research support decision-making and the execution of health programmes and also help in the better utilization of resources. Obstacles include limited funding allocated to research, insufficient trained and experienced research personnel, and poor orientation regarding priorities.

1.5. Intersectoral cooperation

The national health policy is an integral part of the overall Five-year Socio-economic Plan (1981-1985), which has been approved by the Cabinet and endorsed by the King. The Government is aware that socio-economic development needs healthy people, and that investment in economic development will bring about improvements in the quality of life and standards of living.

There is continuous collaboration with other sectors providing health-related services. The presence of the Higher Health Council (chaired by the Prime Minister) helps to achieve such coordination. Examples of these sectors include the Water Authority (provision of adequate water and sanitation), the Ministry of Agriculture (zoonotic diseases and handling of insecticides), Amman Municipality and other municipal councils (environmental health), Ministry of Industry and Commerce (importation and local manufacture of foodstuffs), Ministry of Education (school health services and health education), Civil Defence and Police Departments (accident prevention, drugs and narcotic control) and the Department of Statistics.

1.6. International cooperation

The Health Ministry has estimated its financial needs for the implementation of HFA strategies during the five years 1985-89 to be approximately $30 million. The Ministry hopes to receive $12 million as a loan from IBRD, the remaining $18 million to be met by the Government. Financial support already allocated over the period 1981-85 included $3.6 million from USAID for health services development and health education and $0.2 million from UNFPA for MCH and family planning services.

WHO support was not sought for the preparation of the national health strategies, yet there was collaboration in their implementation and evaluation. WHO collaboration covered a variety of fields including environmental protection, control of communicable diseases, management training, teaching and fellowships.

There is close cooperation, particularly with Arab countries, through such bodies as the Council of Arab Ministers of Health, the Arab Executive Health Committee and the Arab Medical Board. There is exchange of

information and experience in the areas of communicable diseases, pharmaceutical production and marketing, health education, training facilities, and reuse of sewage effluent for irrigation purposes. Collaboration has been adequate and fruitful. It is felt, however, that more collaboration is needed in implementation of the HFA strategies.

2. HEALTH STATUS

Important indicators on the health status are included in the tables (see Annex to Part I). The main points may be summarized hereunder:

The crude death rate is estimated at 11 per 1000, and the infant mortality rate at 60 per 1000 (although the urban-rural differential is not marked). Hence the life expectancy at birth is about 67 years. Institutional deliveries constitute less than 60% of the total, and maternal mortality among these is rather low (4.2 per 10 000 live births).

The nutritional status of children is considered adequate; 90% of hospital newborns have a birth weight of at least 2500 g, and among the children attending the MCH clinics 97% are within standard weight-for-age. About 30% of all deaths occur below 5 years of age.

There is lowering in the incidence of typhoid and paratyphoid, scarlet fever and meningitis, while infectious hepatitis, rubella, mumps and schistosomiasis (imported) are increasing. Regarding diseases covered by the immunization programme, there is marked reduction in diphtheria (no cases in 1984) and polio (one case), increase in measles, and no specific trend in the others. No cases of cholera have been reported after 1981.

The main causes of hospital morbidity in government hospitals, in descending frequency, are gastroenteritis, accidents and poisoning, respiratory diseases, complications of delivery and the puerperium, and urogenital and cardiovascular diseases. For mortality among hospitalized cases, the main causes are heart diseases, neoplasms, accidents, and gastrointestinal and respiratory diseases. For children under five years of age, the main causes of mortality are accidents, prematurity and congenital defects, respiratory diseases, gastrointestinal diseases and infectious diseases.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The national health policies are relevant to HFA/2000. When comparing them with those collectively defined for HFA, it was found necessary to formulate additional policies stressing the PHC approach. The national health strategy reflects these policies. The health plan is included in the national socio-economic development plan approved by the Cabinet and endorsed by the King. The health system is based on PHC with its essential elements.

There is adequate development of the managerial process for health development. Adequate physical and manpower resources to implement the

strategy have been mobilized, but financial resources, particularly from government sources, are rather limited in view of the prevailing economic and political constraints. Hence external financial input has to be sought.

Good progress has been achieved in the implementation of the HFA strategy. A permanent committee for monitoring progress and evaluation of the strategies has been established in the Health Ministry. Additional health policies have been formulated to ensure equitable distribution and wider coverage and to improve the quality of health services. Community participation has been developed and is encouraged. Coordination with other sectors has been strengthened. The proportion of the population to whom first-level contacts for appropriate treatment of common diseases are available within one hour's walk or travel is estimated at 80%. Good progress has also been achieved with respect to safe water supply and adequate sanitary facilities. With respect to MCH services and immunization, progress has been less substantial.

3.2. Efficiency

It is not easy to measure or assess the efficiency of implementing the strategy at this early stage. However, analysis of data so far obtained reveals that the programme activities are conducted at the right operational level, viz. the district level with support from the central level. Many activities have been accomplished within the stipulated time. A few PHC facilities, namely the village clinics, were considered unsuitable and will be gradually replaced by health centres capable of providing all health services.

The capabilities, skills and knowledge of the existing health manpower have been developed through continuous training which will have a positive impact on efficiency. Collaboration with other health sectors has contributed favourably to the efficiency of implementation, while the main impeding factors continue to be centralization and poor managerial capabilities. Decentralization cannot be easily achieved, but arrangements have been made to improve the managerial capabilities of health personnel through training in local academic institutions.

Some factors were identified to contribute to better utilization of health services, e.g. easy accessibility of services offered free of charge or at a very low cost, acceptability by the public and appropriateness of services, and an efficient logistics system ensuring adequate supplies and equipment. Obstacles arise when a health centre has to be established in a small community or an isolated area.

Coverage in terms of accessibility, acceptability and increased utilization may be used as a reflection of the quality of health care. However, a number of standards and norms have been set to assess that quality. Periodic visits are made to the health centres in which a comprehensive review of the resources and functioning of each centre is carried out and deviations from the set norms are corrected.

3.3. Effectiveness

The methods used to assess community satisfaction are subjective. The Health Ministry has invited and encouraged the public to participate in the

planning and implementation of the health strategy in their communities. This materialized in the form of several donations and could be considered to reflect community satisfaction. The number of children under five years who completed vaccination with DPT and polio vaccine nearly doubled between 1982 and 1984, while vaccination against measles increased by 50%. This increase is much more than what would be expected as a result of natural increase in the number of children during the same period. The providers of health services also feel satisfied with what has been achieved; the great demand on PHC services by the public; their concern and interest in the health education campaigns, as well as the growing community involvement, all tend to boost the providers' satisfaction.

Indirect methods of mortality estimations in 1976 placed the crude death rate at 15 per 1000, the infant mortality rate at 89 per 1000, and life expectancy at 54 years. The corresponding figures for 1983/84 are 11 per 1000, 60 per 1000 and 67 years, respectively. In parallel, there has been a sharp decrease in the incidence of communicable diseases in general and those covered by EPI in particular and a decrease in the incidence of diseases related to poor sanitary and hygienic conditions. No malaria cases were reported among the indigenous population. Moreover, with the use of oral rehydration therapy, the case fatality rate due to diarrhoea dropped from 20% in 1977 to 5% in 1983 among hospitalized children. There has also been a significant drop in cases of malnutrition among infants and pre-school children.

Between 1980 and 1984, the number of health centres increased from 88 to 162, and MCH centres from 62 to 93. Development in secondary and tertiary care went hand in hand with the development of PHC, especially insofar as the referral system was concerned.

Greater progress could have been achieved except for certain obstacles which persist. Important among these are the erroneous public beliefs about measles vaccination, treatment of childhood diarrhoea, infant feeding and weaning practices, and maintaining strong ties with TBAs. There is some duplication of services, as well as deficiency in quantity and quality of health personnel, limitation of financial resources for PHC and difficulty in convincing the private sector to pay more attention to PHC.

KUWAIT

Kuwait occupies the north-western corner of the Gulf. Except for Al-Jahra Oasis and fertile areas along the coast and in its south-east corner, it is mainly a flat desert. There are nine off-shore islands, some inhabited and others not; the largest are Bubiyan and Al-Warbah islands. The total area is 17 818 sq.km, and the coastal strip is nearly 320 km long. There is little fresh water within the country; mainly distilled sea water is used.

The Kuwaiti economy is heavily dependent on oil production which developed dramatically after 1946. In terms of oil reserve, the country ranks second after Saudi Arabia. A campaign of restricting oil production was started in the mid-seventies. Efforts have been concentrating recently on the diversification of the economy. Local industry is being developed, for fertilizers, cement products, sand-lime bricks, cement pipes, etc.

The population is largely cosmopolitan, concentrated within about 6% of the land area. The first population census in 1957 gave a total population of 206 473, of which 47% were non-Kuwaitis. The percentage increased to 53% in 1970, then 59% in 1980, and reached 60% in the 1985 census. The present population growth is 6.4% per year, mainly due to high fertility among Kuwaiti women and immigration of an expatriate labour force for the expanding economy. About 49% of Kuwaitis were aged below 15 years, while the corresponding proportion among non-Kuwaitis was 34%, as of the 1980 census.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

Kuwait recognizes health as an integral component of overall socio-economic development. National health policies have been developed, keeping in view the policy of HFA, the needs of Kuwaiti society and the constitutional obligations. Some articles in the Constitution ensure the provision of integrated and comprehensive health and social welfare services to all sections of the population. Article 9 deals with the family and protection of the mother and child. Article 10 deals with youth, Article 11 with health care of the elderly and Article 15 affirms the responsibility of the State for public health. The Alma-Ata Declaration has been fully endorsed. His Highness the Amir defines the goal for the health sector as "attainment of the best achievable level of health for our people."

The principles of the national health policies serve as basic guidelines for the preparation of health plans for Kuwait, as well as to guide future policy-making for the health of its people to the year 2000.

In outlining the health strategies, care has been taken to ensure that they reflect the basic health policies adopted by the State, the socio-cultural aspects of the society, and the feasibility for adoption, keeping in view the existing health care organization and its progressive development. A national Five-year Health Plan, as an integral part of the national Socio-economic Development Plan, has been prepared for 1981-86. A preliminary review of the Plan was undertaken in 1983 to identify the adequacy of the methodology used in its formulation, identify gaps, if any, and to suggest possible alternatives. More detailed health policies and strategies have been outlined in the comprehensive document "Kuwait Health Plan 1982-2000".

The basic goal of the National Health Plan is to promote and maintain the health of the people, to improve physical, mental and social well-being and to reduce mortality, disability and morbidity. Specific goals have been outlined in respect of environmental safety, health promotion, disease prevention and control, early diagnosis and prompt treatment of disease, rehabilitation and provision of adequate health services characterized by accessibility, comprehensiveness, continuity and quality. Priority problems have been identified and specific targets have been laid down. Starting in 1984 the planning process in Kuwait assumed an improved bias: the plan for each Ministry is seen as an integral, contributing component of the overall national development plan of the State of Kuwait. It is in this respect that the Health Ministry's Five-year Plan (1985/86-1989/90) is geared towards achieving the overall national objectives as they pertain to the health sector.

The Ministry of Public Health is the principal organization for planning and providing health services, both medical care and public health, in the country. His Excellency the Minister of Public Health guides the formulation of plans, broad policies and programmes. He is assisted by one Under-Secretary and a number of Assistant Under-Secretaries in charge of different sectors. Further down the hierarchy are department directors and divisional chiefs. In view of the importance and nature of some categories of work, certain divisions are kept under the direct supervision of the Minister. These include the Directorate of International Health Relations, the Office for National Health Planning, Environmental Safety and Pollution Control, Monitoring and Coordination, etc.

The characteristics of the present health system include: (a) provision of health services free of charge to all the population; (b) health facilities with easy accessibility; (c) components from the health sector and health-related sectors; (d) most essential elements of PHC at the first point of contact; (e) provision of secondary and tertiary care facilities for continuity of health care; and (f) a developed central level for planning, expertise and specialization.

Progressively, the health care delivery system is being regionalized. Health services are provided through six "health regions", each of which serves 20-35 thousand population. A supportive referral system has been established. Three levels of health care are defined. PHC is provided through dispensaries offering general practitioners' services and polyclinics with general and some specialized services. Secondary health care is provided through six regional hospitals. Tertiary care is provided through specialized hospitals or centres.

In addition to the Ministry of Public Health, a number of other ministries are associated in selected health programmes and services. Thus, under the Ministry of Education are special institutions for the blind, the deaf, handicapped and retarded children, and vocational rehabilitation. The Ministry of Social Welfare and Labour provides social security benefits for the aged and for workers. The Ministry of Planning carries out work on many aspects of pollution control, and the Municipality undertakes periodic inspection of establishments handling food products, as well as waste disposal. Over 95% of all health services are provided by the Government free-of-charge. There is a small private sector, under regulation and control by the Government, contributing to the curative health services. The Ministry of Public Health provides necessary guidelines for these bodies to ensure that they contribute in implementing the national health policies and strategies.

1.2. Managerial process for health development

The Government has adopted a scientific approach to systematic and comprehensive health planning. This was initiated in 1979 with the establishment of a Higher Committee for Planning, with representatives from outside the Health Ministry, e.g. the Ministry of Planning, Kuwait University Faculty of Medicine, and the Arab Institute of Planning. An executive committee and four sub-committees (for manpower, management and finance, health facilities and supportive and health information) were also set up. An Office for National Health Planning was later established, directly under the Minister of Public Health. Definition of policies and formulation of health strategies and programmes were effected, following guidance from these committees. Collaboration among different health services and programmes is ensured through well-defined distribution of functions of the various departments. The Ministry has arranged several courses in health planning and management for individuals in charge of different health schemes.

1.3. Community involvement

Direct and active involvement of the community in planning and implementation of health strategies has been given attention in the health plan. Health boards and committees with representatives of the community are proposed to be constituted at the district, regional and national levels. Active community involvement will be undertaken along with the implementation of regionalization of health services.

Elected members in the National Assembly convey the felt needs of the community to the policy-makers. In addition, in every region there is a council headed by the Governor, with representatives of different ministries including Health, and community representatives. The role of non-governmental organizations is looked upon as supplementary.

1.4. Mobilization of resources

Enough national financial resources are available. The Health Ministry's budget increased from KD 52.8 million in 1976/77 to KD 202.3 million in 1982/83, representing 2.3% of the GNP. However, if one adds the cost of health services rendered by other governmental bodies, the proportion will not be less than 5%. For 1982/83, the proportion of

expenses allotted to PHC was 25%; the per caput expenditure on health was KD 103 (or US$355).

A health manpower plan has been developed, up to the year 2000. The role and functions of different categories of health workers as well as job classifications have been worked out. A new category is the family health visitor, in keeping with the strategy of providing comprehensive family practice. The rates per 10 000 population in 1984 were as follows: 15.1 physicians, 1.6 dentists and 49.5 nursing personnel. There is an average of 3.1 nurses per physician. Only 9% of the physicians are in private practice. Of the physicians in the Health Ministry in 1983, only 18% were Kuwaitis, and 23% were females. For the nursing personnel, the figures were 6% and 91% respectively.

In terms of physical resources, in 1984 there were 54 maternal and child health centres, 25 preventive health centres, and 62 dispensaries and polyclinics. In addition there were 547 school health clinics and 140 dental health clinics. There were 17 government hospitals with 5304 beds, other than eight private (or company) hospitals with 582 beds, giving a total of 33 beds per 10 000 population. The average attendance at the dispensaries and polyclinics per person per year dropped from 6.9 times in 1979/80 to 4.4 times in 1984. The number of visits per child under 5 years of age was 9.2. There was an average of 116 hospital admissions (for 1065 bed-days) per 1000 population, of which 19% were in private hospitals, although private beds constituted only 10% of total beds.

A Council for Health Research has been constituted under the chairmanship of H.E. the Minister of Public Health, and a Department of Health Research has been set up with the main objective of fostering health research activities. The Office for National Health Planning is concerned with health service research. In addition, the Faculty of Medicine and the Kuwait Institute for Scientific Research perform research in health-related fields.

1.5. Intersectoral cooperation

Coordination between various health services and programmes is ensured through well-defined distribution of functions for each department, with departmental committees and general administrative circulars. The Health Ministry works in full collaboration with other ministries or agencies involved in health-related functions. The establishment of a higher committee for planning, the National Board for Environmental Safety, and the National Board of Medical Education provide examples of coordinating bodies.

1.6. International cooperation

Kuwait has continued to provide financial and material assistance to many developing countries, through bilateral arrangements or through contribution to international agencies. There is special cooperation with Arab countries in the Gulf and with other Arab countries. Some regional organizations have been established, e.g. the Regional Organization for the Protection of the Marine Environment (ROPME). Facilities for specialized treatment in Kuwait hospitals are available to other countries and regular periodic visits of medical specialists (e.g. cancer and kidney diseases) are made to some Arab countries.

2. HEALTH STATUS

The health status in Kuwait is rapidly changing. Between 1970 and 1984, the crude birth rate changed from 45.5 to 31.5, the crude death rate from 5.0 to 2.5 and the infant mortality rate from 39.5 to 18.8, giving life expectancy at birth estimated at 68 years for males and 73 years for females. Child (1-4 years) mortality rate is as low as 0.78 per 1000 children. Such reduction in mortality may be attributed to improved living conditions, better health care, higher living standards, public health services, etc. The nutritional status of children is adequate and it is estimated that more than 93% of newborns have a birthweight of at least 2500 g. More detailed data may be found in the attached tables (see Annex to Part I).

Adequate data on mortality and morbidity patterns are available. The leading causes of mortality during the first year of life are perinatal conditions, congenital anomalies, pneumonias and intestinal infectious diseases. For children 1-4 years, all accidents including motor vehicle accidents are in the forefront, followed by pneumonias, congenital anomalies and diseases of the nervous system. Considering all ages, the main causes of mortality are ischaemic heart disease, transport accidents, malignant neoplasms, perinatal conditions and congenital anomalies, hypertensive disease and cardiovascular accidents.

With respect to the EPI target diseases, no cases of diphtheria and poliomyelitis and only two cases of tetanus neonatorum were notified in 1984. There were 14 cases of pertussis (354 in 1983), 608 of measles (against 1590) and 812 cases of respiratory tuberculosis (against 856 cases in 1983). Viral hepatitis, typhoid and paratyphoid, imported malaria cases and chicken-pox increased between 1983 and 1984, while rubella, mumps, bacillary and amoebic dysenteries went down. Diseases of the respiratory and of the digestive system account for 40% of the visits to primary care units, and diseases of the skin add another 8%. Putting aside obstetric cases, the main causes of hospital morbidity are diseases of the respiratory and digestive systems, diseases of the genito-urinary system, accidents, injuries and poisoning and diseases of the circulatory system, followed by infectious and parasitic diseases.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The present health policies are adapted to the HFA policies. In outlining the national health strategies, care has been taken to ensure that these reflect the basic health policies. The present health system meets, to a large extent, the essential elements of a system based on PHC. The components of the system have been described earlier. There are no major obstacles, yet the need for continuous review to effect changes for improvement is well recognized and such review is being undertaken. Furthermore, health is recognized as an integral component of overall socio-economic development, and the national health plan is part of the national socio-economic development plan.

Financial, physical and manpower resources are adequate. In planning for the year 2000, plans are made separately for each category of staff and

by type of facility, specifically for PHC and other types of health care. A large proportion of the manpower is expatriate, and this will have to continue for years to come. Intersectoral collaboration is being strengthened. Health research is being promoted and directed towards the pressing health problems in the country.

Details of achievements are given in the Annex to Part I. In short, local health care with the essential drugs is available to all the people within less than a one-hour walk. About 86% of houses are provided with piped water, while for the remainder safe water is available at near distances or carried to the homes. Similarly, 82% of dwellings are linked with a sewerage system, and other houses are served by sewage tankers. More than 98% of pregnancies and deliveries, and nearly all infants, are cared for by trained persons. Vaccination coverage of infants reached 100%.

3.2. Efficiency

The Kuwait health plan includes projects aiming at improving health of the population. While assessment of the efficiency of these projects is still contemplated, their implementation is believed to be fruitful. In planning the facilities, the distribution of existing primary health centres and dispensaries has been carefully reviewed to cater for the increased population and for geographic spread. Secondary and tertiary health centres continue to be reviewed to provide adequate support to PHC needs. The referral system works quite efficiently; with an average of one car for every three persons, and in view of the fact that the nearest health facility is not farther than 5 km distant, accessibility in the case of referral is easy. It is estimated that about 5% of patients manage to have direct access to hospitals and higher specialities via the emergency/casualty departments.

3.3. Effectiveness

There are improvements in health status and quality of life, as has been detailed in the Annex to Part I. This observation can be better quantified and more firmly established with improvements in the health information system and when the data for two or three years of the plan become available. There has been no systematic study to assess the degree of community satisfaction, and it is hoped that the results from the National Health Survey for which field work has just been completed will throw light on this aspect.

LEBANON

Situated on the south-western coast of Asia, Lebanon has a coastline of about 210 km and covers an area of 10 400 sq.km. To the north and east is a long series of mountains which divide it from the Syrian Arab Republic. Beginning at the seashore, the terrain slopes upward. In the interior, the large and broad Bekaa Valley lies at an altitude of about 1000 metres.

Lebanon enjoys a Mediterranean climate but it may be cold and snowy on the mountains in winter. The variations in terrain and climate make possible a great deal of diversity of agricultural products and attractions for tourism. Roughly one-third of the country's area is agricultural land, mostly in the narrow coastal plain and in the Bekaa.

The principal crops along the coast are citrus fruits, while the interior produces grains, pulses and vegetables. Agriculture and livestock production, however, are insufficient to meet the country's needs. THe development of the industrial sector is of relatively recent origin. Before the armed conflict, about 60% of the labour force was employed in the service sector, and 10% in the industrial sector. Industrial production accounted for 15% of the national income. Banking and tourism were other flourishing activities.

Due to several constraints there have been no population censuses since 1932; demographic data thereafter were based on estimates. The last demographic survey was conducted in 1970. The population in 1975 was estimated at 2.55 million; after this date reliable estimates of the resident population are difficult to provide due to the absence of reliable figures for the reportedly large numbers who emigrated. Thus the United Nations estimate for 1983 was only 2.35 million. National estimates are about 3 million for 1984. Palestinian refugees account for 200-250 thousand. About half of the population lives in the capital, Beirut, and its suburbs.

There are five broad administrative divisions (governorates). Except for Beirut governorate which contains only the capital, each governorate is further divided into about six districts (qadas).

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The national health policy formulated in 1983 is intended to lead the present traditional curative hospital-based health services into a public health system that would bring together preventive and curative activities, health promotion and rehabilitation at all levels. It has recognized that health, in its fullest definition, is a constitutional right for all

citizens, an integral component of human rights. It also calls for the citizens to be full and effective partners in the planning, programming, implementation and evaluation of health services. The HFA/2000 policy has received official endorsement at the highest level.

Within the concept of "centralized planning and decentralized implementation", health services have been regionalized, establishing "health regions", through a law issued in 1983. Although the situation in the country has not permitted any degree of implementation of the strategy and plans for HFA/2000, the Ministry of Health and Social Affairs has remained committed to these goals and to their achievement through implementation of PHC. In order to be equipped to carry out its duties, reorganization of the Health Ministry and decentralization of its executive powers have been proposed. It is also proposed that the PHC system be initially implemented in certain regions, to be later extended to the entire country. Once established, the health regions are expected to ensure the provision of the following services to the entire population: MCH, dental and school health, environmental sanitation, vaccination, referrals, hospitalization and medical and surgical treatment.

The health system has the following characteristics:

(a) Services are provided by the public sector (free-of-charge) and the private sector (free-of-charge at the dispensary level, and with payment for investigations and hospitalization).

(b) First contact is through dispensaries or out-patient clinics, which are widespread, and situated as close to the population served as possible.

(c) According to the Regionalization Law, dispensaries are to be replaced by health centres.

(d) There is easy referral, from the point of first contact to the highest levels.

(e) Distribution of essential drugs is ensured.

(f) Health education is a part of the system, especially the promotion of breast-feeding.

(g) MCH services are part of the system. So is family planning, although not to be same extent in all regions.

(h) Vaccination is adopted and is always being implemented unless hindered by the security situation or enforced population displacement.

(i) There is promotion of good nutrition and proper environmental sanitation.

1.2. Managerial process for health development

The Ministry of Health is responsible for the provision of health to the entire population. The strategies for HFA/2000 call for a certain degree of regionalization of services. However, health administration has

remained pyramidal in structure. Service units at the periphery (provincial departments, district offices, hospitals, dispensaries, etc.) carry out implementation. Yet they always depend upon the central administration in matters related to budget, supplies and expenditures. Policy-making has always been central.

To allow for a certain degree of autonomy for local health authorities, legal steps have been taken, but very little implementation has taken place, in view of the local security situation and curtailed communication between different parts of the country.

Efforts have been made to improve coordination within the health sector. Meetings are held with Social Security, Army Medical Services, the Faculties of Medicine and the private hospitals. These are involved, for example in the accreditation of hospitals, through a joint committee. The Red Crescent, the Red Cross and other non-governmental bodies are consulted and charged with certain services, e.g., vaccination. Norms and standards for health services are discussed with the private sector before being adopted. It is to be noted that the Lebanese Red Cross administers the Blood Bank service through contractual agreement.

1.3. Community involvement

The politico-security situation during the past decade has given rise to a situation of forced community participation. Many local and non-governmental organizations have been established, and several local autonomous or semi-autonomous health administrations have been formed. These activities, however, are far from being coordinated or oriented toward the same direction.

There are some legislative provisions in the health policies for community involvement. Examples of these are the Law on Health Regions (1983) which envisages community involvement in the planning and implementation of the HFA strategy, the Law on Autonomy of Hospitals (1978) which nominates a governing body for each hospital with 50% of its members from the community. There is a need to ensure that health officials are better informed, especially at the community level, of the group responsibility for the strategy.

1.4. Mobilization of resources

It is estimated according to an IBRD Report (1983), that a little more than 10% of the GNP is spent on health; half of that amount is for the public sector, and half for the private sector. It is difficult to calculate the proportion of national health expenditures allocated to PHC. Although efforts are made to allocate more resources to peripheral areas, there is no indication that these resources are indeed equitably distributed. In fact there has been little, if anything, spent on the development of health services; most of the Ministry's budget, apart from paying for salaries, is channelled to the private hospitals that care for victims of war and unrest.

Resources in personnel are important, particularly for physicians, the ratio being approximately one physician per 900 population. The availability of nursing/midwifery and other health personnel is not known

with accuracy. However, there is a concentration of health personnel in the cities and suburban areas. In terms of physical resources there are at present 400 dispensaries, 120 hospitals and a total of 1800 hospital beds (of which 572 beds belong to the public sector).

In view of the prevailing conditions, health research is absent among the activities of the Health Ministry.

1.5. Intersectoral cooperation

The policy of investment, including that in health, is prepared by a central body, the Council for Development and Reconstruction (CDR). Intersectoral collaboration has been foreseen for a long time. A "High Council of Health" was established in the nineteen-sixties, but the Council has been virtually in abeyance for many years now (1985).

However, there are at present several areas of collaboration, e.g., (a) with CDR for the construction and upgrading of hospitals and dispensaries; (b) with the Ministries of Economy and of Finance regarding food control and hygiene; (c) with the Ministry of Agriculture regarding zoonotic diseases; (d) with CDR and the Ministry of Water Resources in the fields of safe drinking water and waste disposal; (e) with the Ministry of Education in school health programmes; and (f) with experts from the universities who are frequently used as advisers by the Ministry of Health in the planning and organization of programmes.

Several measures have been imposed to protect health aspects in industrial development projects, particularly those regarding industrial waste, stagnant water, noise and occupational health.

1.6. International cooperation

A systematic analysis of needs for external aid has not yet been carried out. However, many years of conflict in Lebanon have attracted a multitude of donors, both bilateral and international. The relative quietness during 1983 attracted many organizations with ambitious development plans but most of these had to be abandoned when hostilities started again near the end of that year. Examples of international cooperation are: two health centres which were completed through external aid; several dispensaries and hospitals that have been repaired; considerable help provided in the form of pharmaceuticals and supplies, including dialysis equipment (donated by Austria); construction with Italian aid of a centre for the rehabilitation of the handicapped; and construction of a hospital (with support of the EEC). A unit of health planning in the Ministry of Health has been established and is supported by foreign aid.

There has been substantial collaboration with WHO in the preparation, implementation and evaluation of the strategy. A joint WHO/UNHCR Mission in March 1983 helped in the preparation of a plan for the reconstruction of the health system. However, the security situation did not permit a proper and coordinated utilization of the assistance offered.

2. HEALTH STATUS

Health statistics in Lebanon have not been available for many years. Although the unit of health planning in the Health Ministry started partial

collection of data in 1983, these are far from being conclusive. Thus the data given below are the result of isolated studies or estimates.

The crude death rate is estimated at 8.8 per 1000, the infant mortality rate at 48 per 1000, and life expectancy at 66 years. (1981/82 data). More than 90% of newborns have a birthweight of at least 2500 g and more than 90% of children are within weight-for-age norms (1983).

A minor epidemic of cholera occurred in 1977, and two imported cases were declared in 1981. A few cases of malaria are reported annually. The main causes of morbidity are: diarrhoeal diseases, typhoid and paratyphoid, hepatitis, tuberculosis and salmonellosis.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy, progress

There is no doubt concerning the relevance of the programmes as far as they cover all aspects of HFA/2000. The national policies are realistic, to the point and relevant to the needs of the country only if the conditions allow their implementation. There does not exist, as such, a national socio-economic development plan.

Lebanon had one of the most progressive health systems before the last decade. The internal strife has not only halted progress but in many areas has caused deterioration. The prevailing politico-security situation has resulted in: (a) disintegration of the Ministry of Health due to separation of the two parts of Beirut city and lack of proper and sustained communication with the peripheral health units; (b) inability to plan for medium and long-term programmes, interruption of ongoing programmes due to loss of personnel, equipment and property; (c) preoccupation of all sectors with the immediate problems of war and safety and diversion of budgetary and other efforts towards emergency relief and short-term activities.

Accordingly, the organization of the Health Ministry is not adequate at present to achieve the goals set for HFA/2000. However, necessary provisions are made in the decree on the reorganization of the Ministry. In the event that normal working conditions are restored in the country, the Health Ministry would not only start the programmes, but would also need to organize reconstruction, repair of damage done etc. Considering the background of a somewhat higher standard of living, the availability of human resources and comparatively high literacy rates, these tasks should not be difficult to accomplish.

The proportion of the budget allocated for health is considerably higher than the Regional average; it should suffice for the tasks ahead when normal conditions are established. Besides, one may envisage the continuation of much external aid, the return of many of the health personnel who have left, and the possibility of bringing about a more equitable distribution of resources.

3.2. Efficiency and effectiveness

The strategies have had no chance of full implementation. However, whatever has been accomplished seems to be reasonably positive if one takes

into consideration the prevailing circumstances. This has been achieved through the devotion of certain health officials, and great support from the private sector and non-governmental organizations. The utilization of health services at the level of primary contact (dispensaries and out-patient departments) has undergone a reasonable increase, and referral has been effective.

Most efforts during the past years have been devoted to maintaining the status quo. The huge burden of dealing with many war casualties and repairing and replacing damaged properties and equipment has not permitted utilization of resources in the right directions. However, available data show that:

- there have been no major epidemics during the past years;
- the state of nutrition of the population, especially that of children is at an acceptable level;
- infant mortality has not increased, nor has life expectancy decreased;
- there is more health awareness among the population, an important positive factor, caused by participation in many non-governmental health activities;
- there is increased confidence by the citizens in the effectiveness of programmes launched by the Health Ministry, e.g. vaccination.

The providers of health services feel that the delay in implementing the reorganization of the Health Ministry and in the establishment of units to be explicitly in charge of implementing the strategy is somewhat unjustified.

LIBYAN ARAB JAMAHIRIYA

Situated in North Africa, the Libyan Arab Jamahiriya overlooks the Mediterranean with a coastline of 1900 km. Its surface area is estimated at 1 760 000 sq.km, thus making it the fourth largest country in Africa. The Jamahiriya is divided geographically into three main zones: the north coastal strip, into which a number of valleys penetrate and become full of water after rainfall; the northern coastal highlands, which include the heights of the Green Mountain or El Jabal El Akhdar; and, finally, the interior plateau and the southern heights, which occupy most of the area of the country.

According to the 1984 census, the total population was estimated at 3 637 000, with no more than 11% expatriates. Half of the population of the Jamahiriya is under fifteen years of age and the average household size is 6.4 persons. About two thirds of the population are concentrated in the coastal strip, in particular round the main cities, especially Tripoli and Benghazi; hence, population density varies throughout the country.

The Jamahiriya is divided into 25 municipalities.

The agrarian sector constitutes a cornerstone of the socio-economic development of the country. Agriculture is largely dependent on rainfall, although in some parts it relies on the water of springs and wells. The cultivable area is estimated at 5% of the total area of the country. However, the currently cultivated part does not exceed half of this area. The industrial sector, based on the manufacture of raw oil and natural gas, is the backbone of the national economy, as oil and gas products constitute 97% of the total national exports. Of the population aged 15 years and over, 48% are economically active; the corresponding percentage is 41% among Libyans (69% males and 12% females) and 81% among non-nationals (97% males and 23% females).

1. DEVELOPMENT OF THE HEALTH SYSTEMS

1.1. National health policies, strategy, system

The health policy of the Jamahiriya is geared towards providing "health for all and by all", as well as towards achieving a comprehensive and equitable distribution of services amongst the population.

The first article of the Public Health Law No. 106 of 1973 stipulates that medical and health care is the lawful right of all citizens and is guaranteed to them by the State. Other articles of the same Law provide for supervision of public health, preventive health and other related matters.

As the current Five-year Development Plan (1981-1985) shows, this health policy is reflected in the health strategy, which aims at: extending health facilities; improving, upgrading and developing health services; giving attention to the quality side by side to the quantity and giving priority to basic health care, to the integration of therapeutic and preventive services, to training health manpower and to increasing the percentage of Libyan nationals therein. The strategy aims, furthermore, at strengthening the health care provided to children, mothers, youth and the disabled; giving due attention to occupational and mental health and health education; lowering the general mortality rate and that of child mortality, as well as promoting applied scientific research. Since providing "health for all and by all" is the means of developing citizens who are capable of productive work and willing to perform it, the health strategy is considered an integral part of the comprehensive, socio-economic development policy.

The health system has several health care levels. The first of these is represented by basic health care units (formerly known as dispensaries), which provide curative and preventive services to two to five thousand citizens. The second is represented by basic health care centres (formerly known as health centres) each of which serves from 10 000 to 26 000 citizens and provides certain types of specialized therapeutic care to referred cases, in addition to delivering preventive measures, school health, health education and vaccination of various kinds. The third is represented by combined units, which play an important role in cities, as each of these provides basic health care to a number of citizens (varying from 50 000 to 60 000) in addition to delivering specialized services. A fourth level is represented by rural hospitals, which render bed services to patients referred to them from basic health care units and centres and which confine their activities to providing curative care. At a fifth level, there are the central hospitals, which are to be found in cities and densely populated areas. A sixth level is represented by the specialized hospitals, which provide specific clinical services, such as those concerned with heart, chest and mental diseases.

1.2. Managerial process for health development

The third article of the 1977 Declaration vesting all powers in the people, provides that the people's direct authority shall be the basis of the system in the Jamahiriya. The people exercise power through people's congresses and committees, syndicates, unions, occupational associations and the People's General Congress. In 1979, a decision reorganizing the internal system of the Health Secretariat was issued by the Secretary of the People's General Health Committee. A number of health institutions are directly affiliated to the Secretariat of the People's General Health Committee, including the National Drug Establishment, the National Establishment for Medical Equipment, the Libyan Arab Red Crescent Society and the educational health facilities. The Secretary of the People's General Health Committee is assisted by the Under-Secretary for Health, and work is distributed among eight departments.

The National Strategic Health Plan in the Jamahiriya is formulated according to the following stages: firstly, the plan is studied by the general departments and sub-divisions of the Secretariat of the People's General Health Committee, as well as by the secretariats of the people's

specific health committees in the municipalities, in order to specify its requirements and determine its regular budget, as well as the development budget assigned to each municipality. The plan is then submitted to the Basic People's Congresses, for study and approval, and eventually finalized by the People's General Congress in the form of binding decisions and the promulgation of laws with an approved budget. The implementation of the plan is carried out on a decentralized basis through the People's Committees which are to be found throughout the country and of which the most important is the People's General Health Committee.

1.3. Community involvement

The basis of the political system in the Jamahiriya are the Basic People's Congresses, which have the right to issue all laws, regulations and decisions; they exercise full authority and control the country's wealth.

1.4. Mobilization of resources

The per caput share of the regular health expenditure increased from 8.3 L.D. in 1969 to 39.4 L.D. in 1980, then to 54.0 L.D. in 1983. Similarly, investment expenditures (Development Budget) increased between 1969 and 1980 at a compound annual growth rate of 25.3%, it being noted that the aforesaid financial expenditure (the equivalent of a total of US$257 per caput) was, until 1978, confined to the health services presented by the Secretariat of the People's General Health Committee, excluding insurance sectors, the Armed Forces, petroleum companies and the private sector. The Development Budget constituted 26.1% of the total health expenditures and 3.2% of the total Development Budget of the Jamahiriya for 1983.

The Jamahiriya provides the necessary quantity of health manpower and strives to increase the number of Libyan nationals amongst all its categories. During 1983 alone, 207 physicians graduated from the two medical faculties of the Jamahiriya, in addition to 20 dentists, 42 pharmacists, 21 graduates of the High Institute of Technology (laboratory division) and a number of graduates of foreign universities. Hence, in 1983, the ratio of health manpower for every 10 000 population was as follows: 13.8 physicians, 1.1 dentists, 1.7 chemists and pharmacists, 7.8 female nurses and midwives (in addition to an approximately equal number of male and female assistant nurses) and 7.6 health technicians. Training is also provided for paramedical elements in health institutes, which, in 1983, amounted to 29, in addition to 16 training schools for assistant nurses. In 1979, the percentage of Libyans working in the Health Secretariat was as follows: 8.4% among physicians, dentists and pharmacists; 59% among nursing staff and 40% among assistant technicians.

As for health institutions, in 1983 there were 64 general hospitals and 22 specialized hospitals, with a total of 18 344 beds, i.e. fifty beds per 10 000 population (72% of these are in general hospitals), with an annual admission rate of 129 per 1000 population and a bed occupancy rate of 70%; in addition, there were 82 basic health care centres, 682 basic health care units and 18 combined clinics (i.e. 2.1 of these establishments per 10 000 population).

A centre for medical and drug research has been established in the Jamahiriya. It carries out applied health and drug research and qualifies national scientific personnel in the health and drug fields. It collaborates with the national and international health organizations concerned with scientific research, organizes study and training courses, compiles and classifies health and drug research and studies and seeks to formulate a general plan for scientific health and drug research to serve public health purposes in the Jamahiriya.

1.5. Intersectoral cooperation

The People's General Health Committee cooperates with the educational sector in education and training, with the agricultural sector in monitoring and controlling food and issuing legislation to ensure food hygiene, with the Secretariat of Public Utilities in environmental sanitation and providing safe drinking water supply, with the housing sector in providing healthy, suitable housing, with the industrial sector in programmes of pollution control and occupational health, and with the Social Insurance Secretariat in providing insurance care and in rehabilitation programmes. Great attention is devoted to the health component of the plans of economic development to ensure that agricultural and irrigation projects, for example, do not contribute to the breeding of malaria-transmitting mosquitoes or schistosomiasis-transmitting snails, that industrial projects do not pollute air with smoke and dust, and that chemicals do not pollute water.

1.6. International cooperation

Both the Regular and Development Budgets of the Jamahiriya are financed from national resources. However, foreign resources may be utilized to support the health sectors. WHO cooperates through the provision of technical assistance to some health sectors and also by means of training courses and technical conferences.

2. HEALTH STATUS

There is under-reporting of vital events in many municipalities. In 1983, the crude birth rate was estimated at 43.1, and crude death rate at 4.6 per 1000 population; while in 1982 the infant mortality rate was 32.8. In 1981, life expectancy was 57 years. The most important causes of deaths as reported by the hospitals of the Jamahiriya were: pneumonia, dysentery, diarrhoeas, accidents, cardiovascular diseases and neoplasms. The most important causes of death of newborns were: low birth weight, infections, birth injuries, haemolytic diseases and hypoxia. Studies also revealed that 99% of live births weigh at least 2500 g.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The national policy is, on the whole, well suited to the goal of achieving HFA/2000. Under the strategy, well-defined objectives have been set to implement this policy. Moreover, the health strategy is an integral

component of the comprehensive socio-economic development policy of the Jamahiriya, since the ultimate aim of health development is to develop citizens who are capable of productive work.

As the basis of the health policy is to achieve "health for all and by all", effective community participation in formulating and implementing the health strategy was a determining factor contributing to the great progress achieved in implementing it, particularly insofar as such participation was coupled with a mobilization of sufficient resources, both material and human. In 1984, health expenditure amounted to almost double what was spent only five years previously and constituted a substantial percentage (13.1%) of the total current public expenditure. In 1983, the percentage of health expenditure amounted to 3.46% of the Gross Domestic Product (GDP) and 3.22% of the Gross National Product (GNP), excluding expenses incurred on utilities, housing, agriculture and other health-related services. Furthermore, it is worth noting that the manpower:population ratio is progressively improving.

With the availability of reasonably sufficient resources, it was only natural that primary health care (PHC) be extended to all the population (100%), and 90% of the population have access to safe drinking water in the home or within a walking distance of 15 minutes only therefrom. The percentage of child vaccination coverage has reached 75% for DPT and poliomyelitis and exceeded 95% for BCG and measles. MCH has received due attention, so much so that the percentage of institutional deliveries rose from 22% in 1970 to 71% in 1979.

3.2. Efficiency and effectiveness

The implementation of the national health strategy has, so far, yielded positive results, considering the efforts made and the material and human resources expended. Among the factors which contributed to the efficient implementation of the strategy were: managerial decentralization, according to which each municipality exercises autonomy within its region as far as implementation and monitoring are concerned; the involvement of the people, who are the decision-making body which exercises implementation control; and coordination among the various municipalities, within the health sector, in general, and among the various sectors which contribute to health development, such as those of economy, industry, utilities, education and housing.

In order to improve the available health services, both quantitatively and qualitatively, public, specialized and rural hospitals (as well as combined units and basic health care units and centres) have been established and equipped with medical, paramedical and technical personnel, as well as with the most up-to-date equipment and medicaments. Special attention has also been given to the referral system in order to derive maximum benefit from the health services available.

The implementation of the health strategy has proved instrumental in upgrading the health level of the population. Hence, the crude death rate per 1000 decreased from 8.7 in 1971 to 4.6 in 1984. During the same period infant mortality decreased from 56.5 to 32.8 per 1000 live births as did the incidence rate of many infectious diseases. Between 1973 and 1983, the following downward trend was detected in the incidence rate (per 100 000 of

the population) of such diseases: from 60.9 to 16.6 for tuberculosis; from 1.6 to 0.05 for diphtheria; from 3.9 to 0.2 for epidemic meningitis; from 1.8 to 0.6 for tetanus; from 7.3 to 0.8 for pertussis; from 169 to 27 for measles; from 2.5 to 0.8 for poliomyelitis and from 130 to 0.6 for schistosomiasis. However, there was an increase in the incidence rates of hepatitis, dysentery of all types, scarlet fever, goitre and malaria.

OMAN

Oman occupies the south-eastern corner of the Arabian Peninsula and has a coastline of about 1700 km. The Musandam Peninsula, the northernmost point, is separated from the main body of the Sultanate by part of the United Arab Emirates. The Government reports its area to be 300 000 sq.km, of which 15% are mountains, 82% are valley and desert areas, and only 3% are inhabited coastal plains. Oman has sovereignty over some off-shore islands. Geographically, the mainland falls into ten distinct areas, of which the southern region (Dhofar) constitutes one third of the total area. Administratively, the Sultanate is divided into 41 "wiliyat", each administered by a Wali, in addition to the capital area (Muscat) administered by a Governor.

No population census has so far been carried out. However, for planning purposes the population has been assumed to be 1.5 million since 1974, and all the rates in this Review are calculated accordingly. The UN estimate for 1983 is 1.131 million. About 45% of the population are under 15 years of age. The population is mostly concentrated in the capital area, in the Coastal Region, the Southern Region and Oman Interior. No more than 15% are believed to be urban; 75% are rural, and 10% are nomadic and semi-nomadic (seasonal migration). The average household size is 5.9 persons. International migration has been an important fact in the demography of the country. Agriculture is the main economic activity.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The guiding policy of the Government is to achieve a reasonable level of socio-economic development for all the people. Consequently, in the health sector, Health for All has been endorsed as a national policy at the highest official level, being a constant concern of the Head of State.

To achieve this goal, the Government issued in 1980 a statement of strategy, then in keeping with the Regional and global strategies, but currently emphasizing the role to be performed by PHC. All elements of this strategy will be considered for inclusion in the "Third Five-year Development Plan" (1986-90) at present under preparation. The formulation in 1983 of a high-level "Technical Committee for Upgrading Basic Care" aims to achieve the same goal. Its function is to formulate the strategies necessary to implement the policy as regards basic health care, which is considered the core of all levels of health services and should be available throughout the Sultanate. Eight main priorities have been outlined as follows:

(a) strengthening curative services, particularly in rural areas;

(b) preventive services, stressing control of common communicable diseases;

(c) immunization of children against the six target diseases of EPI;

(d) furthering PHC through a comprehensive delivery system reaching all population sectors;

(e) furthering environmental health and related services;

(f) reorientation and training of existing health personnel and of other staff towards PHC;

(g) intensifying the development of national health manpower resources;

(h) attempting to correct deficiencies in the supply of candidates for training in health careers at the primary level and, concurrently, to mobilize community participation.

The health care delivery system can be divided into three broad sectors: the Ministry of Health, other government bodies (Ministry of Defence, Royal Oman Police and Petroleum Development of Oman), then the private sector.

The Ministry of Health is headed by the Minister and one Under-Secretary. Then it is divided into 11 "directorates", of which there is one each for "curative services" and "preventive medicine" and one for "statistics, planning and follow-up" (See Organization Chart). There is, however, an "Organization and Planning Committee" directly under the Minister of Health.

PHC is provided through several channels. The data for 1984 show that there are 54 dispensaries, providing mainly curative with minimal preventive services, headed by health assistants but currently being progressively replaced by physicians. For the rugged Southern Region with sparse, mostly nomadic population, rural health services are based on 24 static health facilities (dispensaries) and five mobile units. There are also 54 preventive medicine units, of different types, providing preventive services, disease control and MCH care. Proper MCH care, however, has not yet reached all the villages (only two MCH centres and four maternity centres). The third channel are 20 health centres, staffed by one or more physicians, providing mainly curative services. Lastly are outpatient departments in 15 hospitals, also accessible as first line of contact with the health care delivery system. Essential drugs are available in all these units. With this system, PHC now covers 92% of the total population (urban 100%; rural 90%).

Secondary care services are provided through the 15 hospitals, many of them with highly specialized departments.

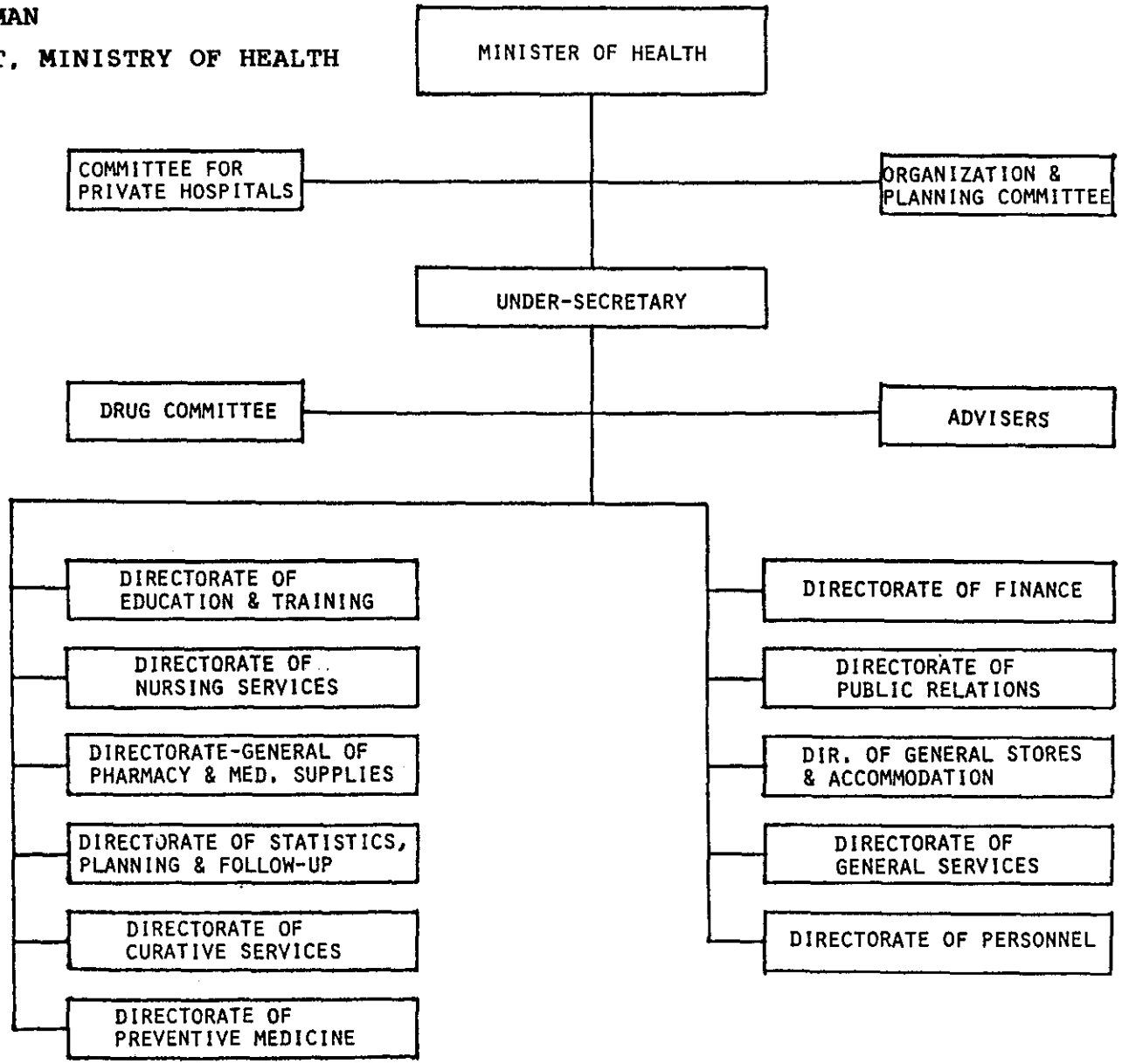
The private clinics (214 in 1983) are licensed by the Ministry of Health which provides the necessary guidelines to ensure that these follow national policies and strategies and to monitor their operations.

1.2. Managerial process for health development

The long-term development plan reflects expansion targets and related development budget only; this is outlined in the "Five-year Development

OMAN

ORGANIZATIONAL CHART, MINISTRY OF HEALTH



Plan". The yearly plan, following the schedule given in the long-term plan, reflects implementation priorities and related recurrent and development budgets.

In the Ministry of Health the Department of "Statistics, Planning and Follow-up" coordinates the inputs of various departments and actively attempts to follow up the other stages of the managerial process. Coordination at the Ministry level is assured through various mechanisms, starting from the Under-Secretary, through various ministerial committees. Coordination is still lacking at intermediate and basic levels of health services. The coordination of PHC will render full coordination at all levels easier.

1.3. Community involvement

Although the utilization of health services (particularly hospital-based) by the communities has been over-enthusiastic, their participation has remained marginal. The causes of this attitude are being recognized and efforts are being made to improve awareness and hence participation. To this effect a "Community Development Programme" (in collaboration with the Ministry of Social Affairs and Labour, UNICEF and UNDP) is now under review. The Programme aims at providing self-help and community participation in dispersed areas and localities. A number of operational activities are identified.

The main obstacle in the way of adequate community involvement is the low level of general education and the acquired attitude of considering the State as the provider of all services. This is partly due to the "new wealth" and to the transition from a locally guided society to one of national dimensions.

1.4. Mobilization of resources

The resources for health services are distributed equitably, so as to serve areas and groups of population at a disadvantage. Thus rural areas received during the Second Five-year Plan more than 60% of the allocations for the health sector. Financial resources for the health sector are adequate. During 1983 the actual expenditure of the Ministry of Health was about 1.7% of the GDP, while it was 6.2% of the total expenditure of the Government (for civil purposes only); the proportion was 3.2% for development expenditures and 9.3% for recurrent expenditures. The per caput health expenditure during 1983 was US$88. It is noteworthy that recurrent expenditures by the Ministry of Health were just 1.1 million rials in 1971 and jumped to 33.6 million rials in 1983. Moreover, 1983 data show that development expenditures by the Ministry constitute about 27% of its total expenditures.

The policy of the Government is to progressively increase the proportion of qualified nationals engaged in the socio-economic development of the country. Hence, the Ministry of Health is launching a major training programme. Health manpower development must be a long-term process, depending upon the existence of a stratum of basically qualified young nationals. The Institute of Health Sciences has training facilities for about 250 students, mainly in nursing, in addition to multipurpose

health assistants and medical technicians. The Faculty of Medicine is scheduled to open in 1986.

As of end 1983, there were 784 physicians (or 5.2 per 10 000 population) of whom 466 were in the Ministry of Health. There was an overall total of 47 dentists, 120 pharmacists (and 96 assistant pharmacy personnel), 1734 nursing/midwifery personnel, 136 medical and health assistants, 340 environmental sanitation personnel and 312 laboratory, dental and X-ray technicians. Reliance on expatriate health personnel will have to continue in the foreseeable future.

An account of physical resources has been given above (Section 1.1). There was an average of 4.0 outpatient visits per person per year. For a total of 2485 beds (or 16.6 per 10 000 population) the average was 57 admissions per bed per year. Government health establishments had 2133 beds.

1.5. Intersectoral cooperation

The health plan is an integral component of the national socio-economic plan. There is a Council for the Protection of the Environment and Prevention of Pollution, a high-level interministerial organ chaired by H.M. the Sultan, with the Minister of Health as one member. All economic development schemes are examined by the Council, and strict health safeguards are introduced in implementation plans.

Several Governmental bodies are involved in health-related activities or directly in the provision of health care. Concerning the planning and implementation of health and health-related programmes, while intersectoral cooperation is satisfactory at the central level, lack of decentralization by various Ministries and lack of recognized administrative regionalization at the regional or peripheral levels, pose an obstacle.

1.6. International cooperation

A systematic analysis of requirements for expertise in different fields has been made with the assistance of WHO, UNICEF and the World Bank. Most needs for collaboration through provision of technical assistance by international Organizations have been met; however budgetary limitations affecting them have resulted in some negative or partial responses to certain requests.

WHO has been intimately associated with the Ministry of Health in the preparation of HFA/2000 strategy. The main programmes assisted by WHO are: health manpower development, MCH, community water supply and sanitation and environmental health, expanded programme on immunization, diarrhoeal diseases control, prevention of blindness and malaria control.

Other activities of the health sector, e.g. malaria control and procurement of drugs are adequately coordinated within the Gulf Cooperation Council in view of cooperative endeavours in the respective domains. Efforts are being made for cooperative production of essential drugs and medical supplies.

2. HEALTH STATUS

In the absence of a country-wide system of vital registration, indicator values for vital rates have been based so far on broad estimates. The crude birth and death rates are high, estimated at 48 and 17 per 1000 respectively. There is a dearth of reliable information which is proceeding into detailed analysis. Life expectancy at birth was 50 years in 1984 and infant mortality "above 100" per 1000 in 1983. However, preliminary results of recent studies appear to indicate that IMR is now "below 100".

Concerning the nutritional status of children, past data from limited samples pointed to an unsatisfactory situation in some strata of the population, attributed to traditional practices and habits rather than to food scarcity or economic status of families. However, there are recent indications that the nutritional status of Omani children has improved. The problem of low birth weight is under assessment. According to preliminary information, incidence ranged between 9.8-18.2% in 1983.

Mortality data derive only from hospital records. Those on morbidity are collated from reports of all ministry of health facilities; other government services and the private sector are not included. The main causes of mortality for adult inpatients in 1983, on the basis of such hospital records, are ischaemic heart diseases, cerebrovascular accidents and intracranial injuries. Among infants and children the main causes of mortality are immaturity, diseases of the respiratory and gastrointestinal systems, septicaemia, asphyxia and measles.

Morbidity due to the six diseases preventable by immunization appears to be at a rather low level; morbidity among inpatients is mainly due to malaria, enteritis, complications of pregnancy and delivery, respiratory diseases and measles.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance

The national health policy aims to achieve at the earliest possible time a status of health of the country's population which would conform with that globally defined for Health for All. Development of the health services forms an integral part of the overall socio-economic development plan; in fact, all elements of the national strategy emphasizing PHC are included in the Third Five-year Plan currently under preparation.

A review of the health system is being carried out as a continuing process, so that the strategy based on PHC becomes increasingly part of it. Of particular relevance is the continued activity of the "Technical Committee for Upgrading Basic Care" which, among other results, made it possible to hold the first "National Workshop on Primary Health Care". Reorientation and training of existing health personnel in PHC are priorities.

3.2. Adequacy

No figures can be given at present on the population covered by all components of PHC. Yet prevention and control of locally endemic diseases,

appropriate treatment of common diseases and injuries and the provision of essential drugs attempt to cover the totality of the population. Supply of safe water and adequate sanitary facilities is registering significant advances, though still of low coverage in rural areas. Maternal and child health care has not yet reached the village level. Activities of health education of the population, particularly of mothers, will be further strengthened in coordination with programmes of various ministries as well as that of Health, in a climate where general education has been greatly expanded and the rate of adult literacy shows an increase from its very low levels some years ago.

The managerial process for health development still needs more precise structuring. In this context the recommendations of the "National Primary Health Care Workshop" (16-21 February 1985) are an adequate framework for further development of strategy-relevant managerial capabilities.

3.3. Progress

Oman has been opened to the world only some years ago. At that time a national infrastructure was virtually non-existent. Thus in 1970 there were only three primary schools and one hospital with 12 beds. Transition from a tribal or locally-guided society to one of national dimension must proceed slowly, being critical. Hence, progress achieved in the implementation of the strategy must be considered sizeable when viewed against the above-mentioned background, even if in absolute terms there is still a long way to go. The initiation and operation of the high-level "Technical Committee for Upgrading Basic Care" and holding the first "National Workshop on PHC" have been cardinal pivotal points towards formulating a comprehensive PHC strategy.

The main obstacles have been: the dearth of qualified national health manpower and of candidates for health careers, the basic curative-biased orientation of the existing personnel responsible for the delivery of health services at primary level and, finally, the overall "top-down" and centralized planning attitude.

3.4. Efficiency and effectiveness

Demographic, statistical and overall health information systems at present are not yet developed enough to allow exhaustive quantitative assessment of various parameters of the health situation and of the running of health services. Being limited to a more qualitative than quantitative appraisal of the various components, a distinction between efficiency and effectiveness with respect to achievements is not possible. No assessment of satisfaction with the results has yet been carried out.

The tables in the Annex to Part I give an account of the effectiveness of the strategy. Infant mortality is coming down. The incidence of diseases controlled through immunization is declining. Safe water and adequate sanitary facilities are becoming available to a larger proportion of the population. A strengthened programme of health education and health promotion reaches an increasing number of people. The Government expresses its opinion that, added to the factors indicating achievements and progress in health "are other socio-economic developments which have resulted in extraordinary improvement of the quality of life for all citizens of the country".

PAKISTAN

Pakistan, with a total area of about 796 000 sq.km, consists of three physical regions. The western off-shoots of the Himalayas cover its northern and north-western parts, exceeding 8000 m. In the central part are plateaux, while the Indus plain, the most fertile and densely populated part of the country, is in the south. There is a general deficiency of rainfall. Pakistan has an agricultural economy, with a network of canals irrigating a major part of the cultivated land. Wheat, cotton, rice and sugar-cane are the principal crops; fruits are grown in abundance. The main natural resources are natural gas, coal, salt and iron. Cotton textiles, sugar, cement and chemicals are the main industries, fed by vast hydro-electric power.

Administratively it is divided into four provinces, each with a great deal of autonomy, in addition to Azad Kashmir and the Federal Capital Territory. Population estimate for 1985 is 94.7 million. According to the 1981 Census data, population density ranged between 230 per sq.km in Punjab (with more than 47 million) to 12 per sq.km in Baluchistan (with less than five million). Three cities exceeded one million population each; the overall household size was 6.7 persons. Only 28% of the population are urban.

The population is young; 45% are under 15 years of age. The vast majority are Muslims. Adult literacy is low, only 26% for those aged 10 years and over (urban males 55%, rural females 7%). Urdu is the medium of understanding throughout the country, but each province has its local language(s). The civilian labour force constitutes 30% of the total population or 44% of those aged 10 years and over; 53% of the employed population are in agriculture.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The Government is fully committed to the Alma-Ata Declaration and to the goal of HFA/2000. The current national health plan (1983-87) envisages major policy shifts to be in line with HFA policy, e.g. consolidation of existing facilities while planning expansion only to unserved areas; emphasis on preventive care; community involvement in PHC; each rural health facility to be manned by a qualified physician; proper management training for health personnel; introduction of users' charges, and rapid expansion of the private sector. The national health plan has set defined quantitative targets.

The health strategy reflects the HFA policy. The nation-wide health care system should provide a systematic link between the village community

and the modern health system. Moreover, the present programmes for EPI, diarrhoeal diseases control, TBAs' training and malaria and tuberculosis control will become part of the nation-wide health care system. PHC is now introduced as the "Primary Health Care Project" as collaboration between the Government of Pakistan and USAID, with progressive expansion in implementation, with the target to serve the whole rural population.

The first level of the health care system is the "basic health unit" (or BHU) to serve 5-10 thousand with comprehensive health care including, among other things, MCH, immunization, diarrhoeal diseases and malaria control, child spacing, mental health and school health services. All BHUs will be staffed by one physician and 2-3 paramedics/technicians. Outreach services will be provided primarily for MCH through trained community health workers. The second level is the "rural health centre" (RHC), with about 25 beds, X-ray, laboratory, and minor surgery facilities, linking 5-10 BHUs. Acting as a focal point, the RHC will have three physicians (including one lady doctor) and a dentist. The three tiers: the community health worker in the village, the BHU and the RHC constitute the "Integrated Rural Health Complex" (IRHC).

The most important difficulties facing the public sector health service are insufficient funds to meet the recurring expenditures, non-cooperative attitudes of physicians, and poor supervision of field staff.

1.2. Managerial process for health development

High-level federal and provincial advisory councils have been set up to formulate policies and to provide effective leadership. These councils, project managers, district health officers (DHOs) and other key officials involved will be given technical support as necessary. Management workshops are being held for health personnel at all levels.

To ensure better coordination within the health sector, health projects are prepared in consultation with provincial health authorities. Various health programmes, e.g. EPI, diarrhoeal diseases control, malaria control, etc., are planned to be implemented through the PHC programme. In addition, major health projects are cleared by the Health Section of the Planning Division in order to ensure their relevance to the overall policy objectives of the National Health Plan.

Lack of incentives and proper career structure for officials working in the projects and inadequate transport facilities for field supervision are important obstacles. Another particular obstacle is that most vertical programmes have separate staff with different grades and pay structure; hence they resist any changes, particularly if their pay or grade would be affected. Provincial health departments need to make efforts to remedy this situation for successful implementation of the projects. It may be reiterated here that provision of health services is largely a provincial responsibility.

1.3. Community involvement

Health committees are being formed in the villages; they are composed of village and religious leaders, schoolteachers, etc. They select local

community health workers (CHWs) to be trained by the medical technician in the BHU of the area. The committees also provide assistance and moral support to the CHWs in performing their jobs. The medical technicians provide health education to the people through the CHWs to help them understand their health problems. As community involvement is a rather new concept in the country, active cooperation is still limited.

1.4. Mobilization of resources

The capital expenditure on the health care system has averaged between 3-4% of total development outlays. With respect to expenditure met from revenue, this amounted in 1983/84 to 265.5 million Pak.Rs from the Federal Government, representing a minute fraction (0.41%) of total non-development expenditures. However, the corresponding expenditure by the Provincial Governments was 1263.9 million Rupees (or 5.86% of the total). Combining both sources, health expenditures would be 1529.5 million, equivalent to US$1.24 per person per year. Approximately 1% of the GNP is spent on health. Fortunately, nearly 54% of the national health expenditures are devoted to the PHC programme.

The provincial health departments have drawn up plans to develop training of medical technicians. For the training of the trainers, national training workshops were held. After successful completion of their training, the new medical technicians are deployed to the various PHC units. Reorientation of existing health workers towards PHC is imparted through workshops. Management training workshops have been planned for health officials and medical technicians at district level and for the medical officers in charge of the PHC units. The output of health personnel in 1981 was 2139 physicians, 158 dentists, 818 nurses, 247 lady health visitors, 739 midwives and 385 nurse-midwives.

As of January 1982, there were 613 hospitals with a total of 50 323 beds; out of these only 18% were in rural areas. The State public hospitals and federal hospitals under the health services numbered 309 hospitals with 32 617 beds (or 65% of total beds); 25% were in rural areas. In addition, there are at present 304 rural health centres and 1679 basic health units.

Research programmes in the areas of biomedical, behavioural and health systems research are being coordinated through the Pakistan Medical Research Council. Its findings and recommendations are given due consideration while preparing the national health plan. It has established research centres attached to all teaching medical colleges.

1.5. Intersectoral cooperation

A federal coordinating committee (the Federal Committee on PHC) as well as provincial steering committees have been constituted to review periodically implementation of the PHC project. Major health projects are examined by various committees, e.g. the Central Development Working Party and the Executive Committee of the National Economic Council, with representatives of various sectors including federal/provincial authorities. Adequate cooperation at federal level is maintained with other related ministries, e.g., Ministry of Food and Agriculture (in the area of nutrition), the Population Planning Division (for family planning

activities), Ministry of Industries (production and importation of drugs). Adequate cooperation is being sought by the provincial health departments with counterpart departments. The health components in economic development schemes, such as irrigation, artificial lakes, small dams and industrialization are being developed. The national health strategy is fully incorporated into the national five-year socio-economic plan.

The main obstacles in intersectoral cooperation are inadequate motivation, untrained staff and lack of health knowledge among the masses.

1.6. International cooperation

External support is needed in a number of fields, both technically and financially, in relation to PHC activities. The Government, for example, is receiving support and financial assistance from USAID, mainly in the areas of training in management skills at different levels, procuring training aids or equipment, vehicles, etc. There is participation in conferences/meetings in other countries to exchange information. However, existing cooperation with other countries is considered inadequate. WHO is collaborating in the development of the PHC programme in the form of international staff, supplies and equipment, or fellowships for training.

2. HEALTH STATUS

General mortality is lower than earlier levels but infant mortality is still high (100 per 1000 live births). The nutritional status of children is not adequate. Thus some 25-30% of newborns have a birth weight less than 2500 g. A recent nutrition survey among children up to two years of age showed that 39% had grade 1, and 33% had grades 2 and 3 of malnutrition.

The main diseases affecting the health status of the population are the group of "infectious and parasitic diseases". Malaria, tuberculosis and childhood diarrhoea head the list. Malaria is still a major problem, and about 50 000 parasitologically-confirmed cases occur every year. The number of reported cases of tuberculosis usually exceeds one quarter of a million. Tetanus, whooping cough, diphtheria and poliomyelitis are very common. Anaemia and other nutritional deficiencies are prevalent. Complications of pregnancy, childbirth and the puerperium constitute a serious problem; Pakistan is one of the very few countries in the Region with life expectancy lower among females than among males.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The national health policies are in line with the HFA/2000 goal. Similarly,the national strategies are relevant to these policies. At the time of the preparation of successive five-year plans, policies and strategies followed during the preceding national health plan are systematically reviewed to remedy any shortcomings. Accordingly, the current National Health Plan 1983-87 reflects major policy shifts in favour of PHC. The Government fully recognizes that health development cannot

take place in isolation; further improvement in the health status of the people would depend on concurrent development in other socio-economic sectors.

The PHC project is in conformity with the aims and objectives of the Sixth Five-year Plan in the health sector. It consists of five integrated components. Training of medical technicians and other categories of health personnel is in progress; a comprehensive written curriculum, both for paramedicals and community health workers, has been developed. Improvement in management skills in various areas is concurrently implemented through training workshops, e.g. in programme planning and evaluation, supervision, personnel and supplies management, and development of information support to management. Construction of BHUs and RHCs is proceeding satisfactorily. A baseline survey was carried out to establish bench-mark values of indicators so that progress and impact can be assessed. The last component is an "accelerated health programme" regarding production of vaccines and oral reydration solutions. Financial input from government resources is rather inadequate, but external support tends to shorten the gap.

Regular monitoring and evaluation are followed as a continuous built-in process in major health projects. In addition, progress in the PHC project is being assessed annually during evaluation workshops involving federal and provincial health personnel. Good progress has been achieved in the development of necessary manpower. Thus, comparing with the targets for the 1978-83 plan, achievements with respect to medical and nursing personnel reached 75-90% of the target, while the figure was 55% for the paramedics/auxiliaries and barely 20% for the CHWs. With respect to physical facilities, only 20-35% of the targets have been achieved. Evidently achievements would have been better if adequate budgetary allocation could have been made available.

Though good coverage of the urban population has been achieved, about half only of the rural population is provided with local health care. Coverage with safe water supply is low (about 38%); it is worse still with respect to adequate sanitary facilities and vaccination of infants. Data on coverage with care for children and mothers are not available.

3.2. Efficiency

Considering efficiency of implementing the strategies, the results obtained so far seem to be reasonably positive compared to the efforts expended. WHO collaboration in training and in the supply of equipment have been instrumental in achieving these results. Similarly, efficiency of the utilization of health services has been reasonable. The facilities are established in or close to the villages where most of the population live. Availability of trained staff stimulates confidence in the people, and supervisory visits by district health officers or their assistants augment that effect.

Lack of financial resources for the PHC programme, deficiency in management skills, lack of transport facilities for adequate supervision in the field and lack of proper career structure, are obstacles that deserve attention.

3.3. Effectiveness

Some improvement in the level of general mortality has been effected; the crude death rate dropped from 14 in 1978, to 12 in 1983, per 1000 population. But reduction in infant mortality during the same period was marginal, from 105 to 100 per 1000 live births. Accordingly, life expectancy increased by just one year during that period, still being higher for males.

Incidence of malaria and diphtheria started to decline. On the other hand, there is an increasing trend in the incidence of measles, polio, tetanus and tuberculosis. Insufficient coverage by vaccination is one factor, but one cannot exclude improved notification of cases.

QATAR

The government did not submit a national evaluation report

SAUDI ARABIA

Saudi Arabia, an Islamic monarchy, occupies approximately four-fifths of the Arabian Peninsula. Geographically there are five distinct zones: (a) Nejd, a high plateau in the centre; (b) Hijaz and Tuhamah, a narrow coastal plain along the Red Sea; (c) Aseer, a mountainous area near the Red Sea on the borders of Yemen; (d) Al-Ihsaà, a lowland with plenty of water to the east of the country along the Gulf where the main oil-fields exist; and (e) The Rub' Al-Khali, the world's largest continuous sandy area. There are no lakes or permanent streams. Rain falls mainly on the highlands in Aseer. About 10% of the total area is cultivable.

The first population census was carried out in 1962-63, then the second in 1974. From a population of about 2 million in the early 1930s, it was estimated at 10.200 million in 1984. According to the 1974 census, 27% were classified as bedouin. Overall population density is low, except in the south-west corner. Seven cities had a population of 100 000 or more. Urban population represented about 55%; the average household size was 5.8 persons. The national population, as in other Gulf countries, is a relatively young one. In 1974, non-nationals comprised 12% of the total, and 67% of them were men, predominantly between the ages of 15 and 40 years.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The national health policy and strategies are an integral component of the overall socio-economic development plan. The health policy is generally committed to HFA/2000. The Government voted in favour of the global goal of HFA at the WHA, and the Alma-Ata Declaration on PHC as the main vehicle to reach that goal. The objectives of the Third Five-year Health Plan (ending March 1985) and of the Fourth Plan are in line with the HFA policy. However, health professionals (most of whom are expatriates) need to be extensively exposed to, and to be oriented about, the PHC concept.

The Saudi Arabian strategies emanating from the national health policy generally conform, in intent, with those defined for HFA. This health policy is translated into 5-year plans (the fourth plan is for the period 1985/86 - 1989/90). The broad ideas contained in these strategies still remain basically valid in their present form. They do not need further updating; rather they need more specifications and refinement along with detailed plans of action to accompany and translate them into operative terms. This situation has probably resulted from the difficulty in making available adequate and reliable information from sectors involved in health and health-related activities, in addition to the scarcity in general of national health workers (at regional levels). Nevertheless, much has been

accomplished in the various areas of development of the health services, as will be mentioned below.

Some changes have been effected in the national health system, although health care is still provided by the two traditional preventive and curative channels. A ministerial decree issued in 1980 integrated preventive services offered by the health bureaux and by MCH services with the curative ones delivered by the dispensaries, to function as PHC centres. Immunizations that used to be delivered in health offices are now undertaken by PHC centres under the supervision of the preventive section.

Implementation of PHC started a few years ago. Health centres have been considered as the community level of the system. Most of these centres have been providing some elements of PHC, e.g. MCH, vaccinations, curative services and essential drugs. Other elements are being undertaken with great variation. Some activities, such as water supply and sanitation, are the responsibility of other sectors. Limited reorientation and continuing education programmes have recently started; yet it needs massive efforts to reorient the current traditionally structured, sophisticated, highly technical and expensive secondary and tertiary medical services to the new approach of PHC and/or to establish links between them and the PHC centres.

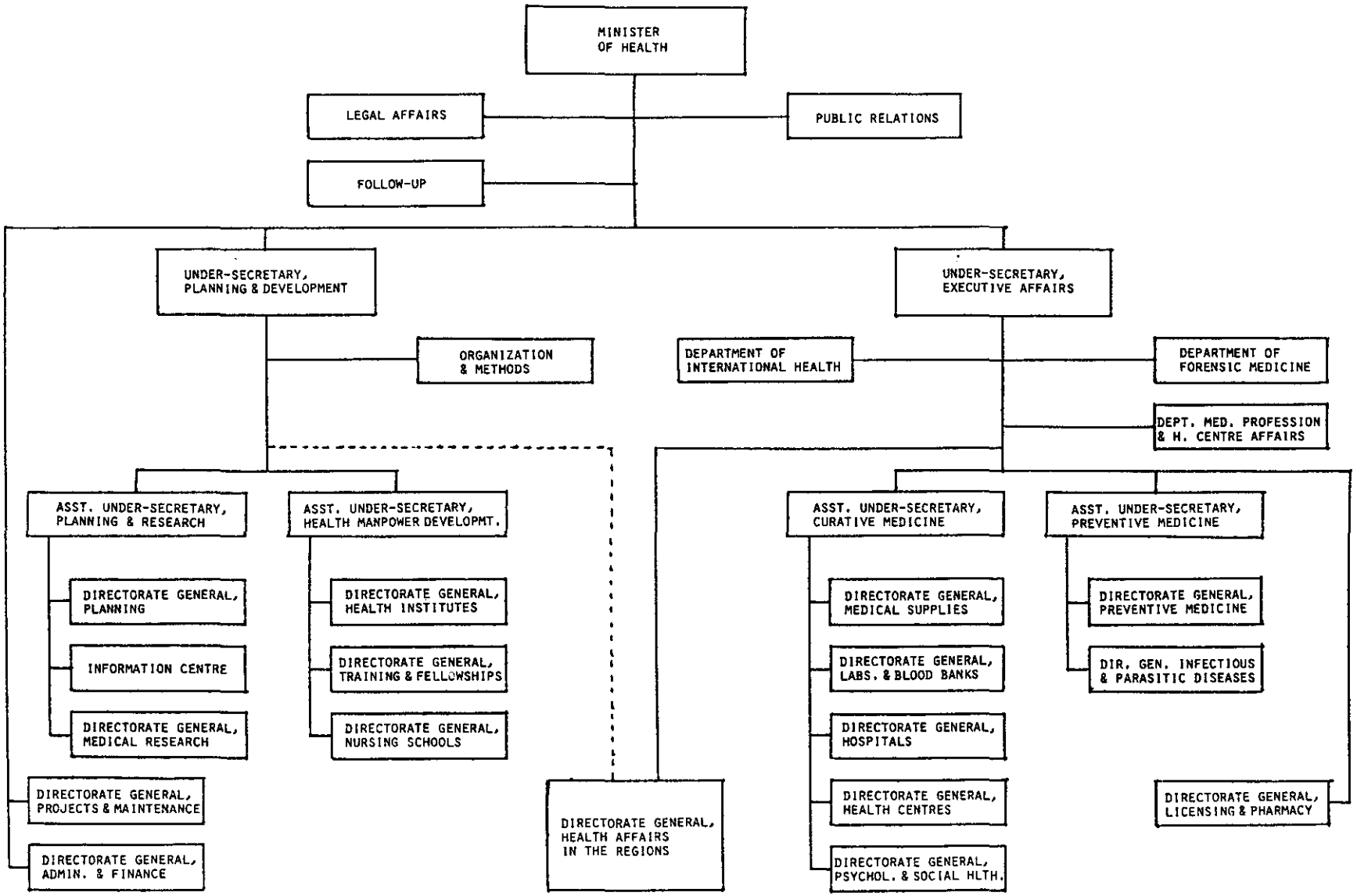
1.2. Managerial process for health development

There is good will to train national managers, in the Institute of Public Administration in Riyadh or elsewhere, to improve their managerial capabilities and to make them more efficient for implementation of the HFA strategies. One outcome of that will was to host the WHO Intercountry Workshop on Managerial Process for National Health Development in May 1984, where a number of officials from the health and related fields participated. However, the shortage of interested suitable nationals to be trained in the area of administration and management jeopardizes the effect of that will. In recent years the Ministry of Health introduced decentralization in administration of its health services, by dividing the country into eleven "health affairs directorates". More authority has been given to these zonal "directorates" while maintaining central policy formulation and planning. A post of Under-Secretary for Planning and Development was established with the main responsibility for short-term, medium-term and long-term planning. Under him are departments for research, statistics and information systems, training and manpower development.

The main problem facing appropriate health management is that the health system is still functioning according to the traditional style of preventive and curative services. A programme has been initiated for the implementation of the concept of PHC and the utilization of the family health record in more than eighty health centres to date and completion of that programme in all health centres is in progress. In addition, there are thirteen other governmental and private sectors that provide medical and health care, a situation that dilutes and weakens coordination. To achieve better coordination a committee for the coordination of health services has been established, headed by the Minister of Health.

SAUDI ARABIA

ORGANIZATIONAL CHART, MINISTRY OF HEALTH



1.3. Community involvement

The Council of Ministers issued in 1983 decree No.3/1403 on the formation of rural councils for socio-economic development in the villages, including health (particularly environmental sanitation). More efforts are needed to explore and identify ways to effectively involve the community in health promotion and development, as defined in the Declaration of Alma-Ata. These village councils, besides the Youth and Women Organizations that have recently been formed, are good potential for that issue.

1.4. Mobilization of resources

Financially speaking, Saudi Arabia is self-sufficient; there is no need for any internal or external fund-raising. The per caput GDP in 1983 was US$11 573. The Budget of the Health Ministry represented 4.13% of the governmental total budget in 1984 (against 2.2% in 1982), yielding a per caput expenditure of US$293 per year. In view of the nature of the health system described above, it is difficult to estimate with accuracy the percentage of national health expenditure devoted to local health care.

Health facilities in 1984 included a total of 2059 health centres, or an average of about 5000 population per centre; of these, 1430 centres were under the Health Ministry. There was a total of 145 hospitals with 26 410 beds, representing 26 beds per 10 000 population.

Health manpower development receives particular attention; there were 29 health technical institutes that graduated 550 students in the various fields, in 1984 alone. However, rapid expansion of health services necessitates resorting to large numbers of expatriates from countries with different nationalities, languages and cultures. In 1984 there were 14 267 physicians (or 14 per 10 000 population), 23 785 nursing/midwifery personnel, and 11 587 technicians. More detailed analysis shows the following: of a total of 5123 physicians working in 1982 in the Health Ministry, female physicians comprised 16%, hospital-based physicians 67% while those working in the health centres or other units accounted for only 33%. By nationality, Saudi Arabian physicians represented 6.1% (for males 5.9%, and for females 7.2%); however, for hospital-based physicians Saudi Arabians represented 7.0%, against 4.3% Saudi Arabians for physicians in the health centres; all Saudi Arabian female physicians were hospital-based. The proportion of Saudi Arabian physicians increased slightly from 5.7% in 1978 to 6.1% in 1982.

Thus there seems to be an "uneasy" situation in the reluctance of Saudi Arabian physicians to work in administration and public health. But what might be considered as "alarming" is that while, Saudi Arabians represented 20.9% of nursing/midwifery personnel in 1978, the proportion dropped to 10.5% in 1982. Similarly, out of all "technical" (non-administrative) staff excluding physicians, the proportion of Saudi Arabians dropped from 30.1% in 1978 to 17.5% in 1982, despite the increasing number of health technical institutes, this resulted mainly from the wide expansion of health facilities and workers therein who have been mainly expatriates.

A health services research plan has been laid down identifying research priorities. A new Directorate-General for Medical Research has

been recently established in the Health Ministry to coordinate research. The National Centre for Science and Technology provides financial support to research carried out by the various educational and health institutions. There is need to develop health manpower experienced in, and devoted to, health research.

1.5. Intersectoral cooperation

The health plan is included in the general socio-economic development plan. Coordination between the various bodies involved in health and health-related activities is primarily achieved through the Council of Ministers. Other "venues" for coordination may be found in joint studies, rural development centres and the Committee for the Protection of the Environment established in 1979. There is still scope for further intersectoral collaboration.

1.6. International cooperation

The Government has agreements with many UN agencies, particularly WHO, UNDP and UNICEF. Technical collaboration with WHO covered a variety of fields, such as malaria control, PHC, rehabilitation, health manpower development, etc.

Saudi Arabia is an active member of the Council of Arab Ministers of Health, the Council of Ministers of Health of Arab Countries of the Gulf Area, (CMHACGA), and the Arab Board of Medical Specialties, as well as several international bodies. Through the Secretariat-General of the CMHACGA, joint activities in different areas have been determined, e.g. in health legislation, health planning, malaria control, MCH and anti-smoking campaigns. The main achievements in this respect were the joint purchase of drugs and other medical supplies and joint manufacture of drugs. There are also bilateral agreements with several countries in the health fields, for exchange of technical expertise, information technology transfer and manpower training.

Saudi Arabia is providing support to many countries in Asia and Africa, through construction of health institutions, fellowships, salary subsidies and specific funds.

2. HEALTH STATUS

Generally speaking, there is a dearth of up-to-date valid information. Recently, some information on a study carried out during 1982 has been released by the Central Department of Statistics of the Ministry of Finance. The following is an overview of available information.

The estimated crude birth rate for 1982 is 48, and crude death rate 10, per 1000 population. The infant mortality rate is estimated at 85 per 1000 live births; a survey is being conducted in collaboration between the Health Ministry and the Central Department of Statistics, the results of which are expected during 1985. Life expectancy was estimated at 62 years in 1982.

Sample studies showed that 94% of newborns had a birthweight of 2500 g or more, and that 93% of children under 5 years were within standard

weight-for-age. The diseases considered important as causes of morbidity and mortality include diarrhoeal diseases, respiratory diseases (including tuberculosis), malaria, childhood infectious diseases, road accidents, cardiovascular diseases, parasitic infections and metabolic diseases.

Malaria has been eradicated in the Northern and Eastern areas and parts of the Western and Aseer areas. There are pockets in the mountainous regions between Aseer and Hijaz. Efforts are being made in malaria control in Gizan area. The incidence rate dropped from 4.9 in 1982 to 2.8 in 1984, per 1000 population. With respect to schistosomiasis, there is also a downward trend. The snail infection rate dropped from 12.4% in 1982 to 3% in 1984. Prevalence of S. haematobium dropped in Gizan area from 18-30% to 8-13%; and that for S. mansoni from 20% to 7.3% in Riyadh, but only from 9.5% to 8.5% in Medina, between 1982 and 1984.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance

The national policy is generally relevant to achieving HFA/2000. The strategies contain the main and broad lines that translate the policy. However, the following areas need more strengthening:

- formulation of specific, quantified time-scheduled targets;
- formulation of accountable detailed plans of action;
- promotion of effective community involvement;
- improvement and strengthening of the existing system of health statistical data collection and utilization;
- training of more nationals in health management in PHC;
- reorientation of health professionals to PHC;
- reorientation of curricula of health and medical institutions to PHC;
- promotion of intra- and intersectoral and international collaboration.

3.2. Adequacy and progress

Laying stress on PHC to cover a larger section of the population is a major task in itself, owing to the extensive geographical area of the country. Nevertheless, coverage by health services reaches 90% of the population. Not all of them are covered by the "full" package of PHC. Availability of local health care, safe water supply, and vaccination of infants, have all reached extensive coverage. Streamlining of the activities of the different departments of the Health Ministry needs to be geared towards PHC. This will maximize health benefits and the impact of the progressively developing activities in the health field. Further community involvement in planning, implementation and evaluation of PHC has to be undertaken.

Quantitatively and qualitatively, health services are progressing and developing continuously, with great hope for and interest in orienting them towards PHC. The authorities are very conscious of the importance of monitoring and evaluating these services (and hence the HFA strategies) on a continuous basis. Yet the lack of managerial capabilities and lack of coordination tend to be a hindrance. Ad hoc surveys and research activities are being conducted, yet measurements of the quality and impact of health care are lacking.

The tables in the Annex to Part I give an account of the achievements of the strategies. Some additional data include the following: There was an average of 2.5 visits to the health centres per person per year in 1983, compared to 1.9 visits in 1980. The corresponding figures for visits to outpatient departments in hospitals were 1.6 visits in 1980, increasing to 1.94 per person per year in 1983.

3.3. Efficiency

No studies have been undertaken, so far, to show whether or not there has been better utilization of the health services. With such lack of valid information, it is difficult to identify the factors that have helped or hindered better utilization of the services.

Some actions by the Health Ministry are on the right course towards achieving better equitable distribution and better efficiency. Thus there has recently been revision of several health programmes or projects with the aim of achieving better results at less cost. Furthermore, there has been a revision of job descriptions for workers in the health centres towards improved coordination of work. Procedure manuals are under preparation for the different central administrative units and service units with the aim of maximizing the utilization of manpower and financial resources.

The Health Ministry is endeavouring to establish an appropriate referral system between the PHC units and secondary or higher health care levels. This is being implemented in health centres where family health records, according to the PHC concept, have been introduced, and there are plans to expand the implementation of that system.

3.4. Effectiveness

The data in the tables (see Annex to Part I) reflect the effectiveness of the HFA Strategy in reducing mortality and morbidity. Reduction in crude mortality rate, infant mortality rate (from 109 in 1979 to 85 in 1982), and increased life expectancy (from 56 in 1977 to 62 in 1982) are all important indicators. Increased vaccination coverage and better health care have resulted in a general downward trend in the incidence of many communicable diseases (e.g. poliomyelitis, tuberculosis, whooping cough, measles, amoebic dysentery and typhoid). Reference has been made earlier to improvement in the situation for malaria and schistosomiasis (see Section 2). Incidence of some diseases has increased, most probably due to better and more complete case detection (e.g. diphtheria, tetanus, infectious hepatitis and mumps).

Data on mortality are not available; steps are being taken to introduce the medical certification of the cause of death. It is hoped that such data would be available during the Fourth Five-year Health Plan (starting April 1985).

SOMALIA

Somalia, which includes the "Horn of Africa", lies at the extreme east of the continent. Geographically it is divided into five zones. In the north is a mountainous range, mainly pastures. The west is a calcareous uneven highland with meagre vegetation and the east is an arid high plateau. The south-central zone between the Shebelli and Juba rivers is a densely populated fertile agricultural area, while the south-west zone is covered with thick bush and some forests. Water resources are relatively scant, with only occasional rains. Somalia's two rivers originate in the Ethiopian highlands. Hence, of a total area of about 638 000 sq.km, only 13% are cultivable, yet only 10% of the cultivable area is actually cultivated. The coastline is about 3300 km. Administratively, Somalia has 18 regions which are further sub-divided into 86 districts.

The first population census was carried out in 1975; the results were published only in 1984. The total population, almost entirely Muslim, just exceeds five million, with uneven distribution. About 65% are nomads or semi-nomads, and 25% are farmers. Livestock raising is the main occupation, and some cultivation of cereals, fruits (particularly bananas) and vegetables; there is also some fishing along the coast. In fact, live animals and livestock products account for 80% of the exports and 60% of the GDP. Communications are difficult outside the main towns. The per caput GNP is low; Somalia is designated as one of the least developed countries. Lately, influx of refugees has added to the country's problems.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

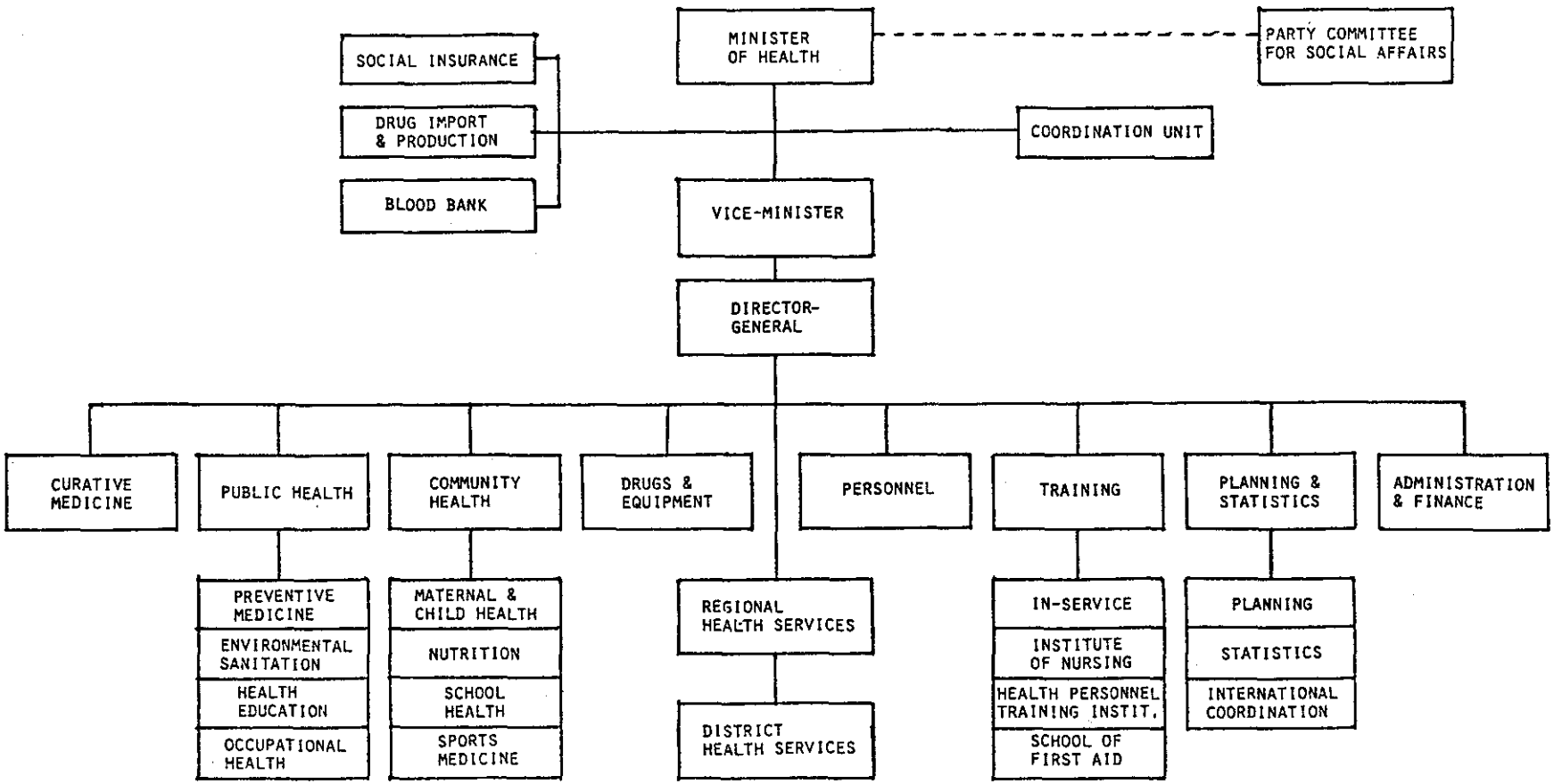
Somalia is officially committed to HFA/2000 policy and to the Alma-Ata Declaration. Articles 55 and 56 of the Republic's Constitution confirm the right to health for all the people; the family is the core of the society and the Government is committed to provide free health services to it. Accordingly, a systematic review of the health policies is being carried out.

The health strategies reflect the HFA policy, with PHC as the approach. The first National Health Plan (1980-85) stresses the following aspects: decentralization with integrated approach to major health problems; proper coverage through a better organized and accessible network of peripheral services; the district as the base for the provision of health services, being the first step in the referral system; and integration of hospital and preventive services. Cost-benefit analysis will be given particular stress.

The health system has subsequently been reoriented towards PHC. The starting point is the "Primary Health Care Post" at the village level

SOMALIA

ORGANIZATIONAL CHART, MINISTRY OF HEALTH



(planned as one post for every 3000 population), manned by one locally recruited community health worker and one traditional birth attendant. Then comes the "Primary Health Care Unit", serving 10-15 thousand population, staffed by one public health nurse (PHN), one nurse-midwife and one sanitarian. In addition to health care delivery to the population, these facilities offer in-service training and supervision of the staff of the "PHC post". The "District Health Centre" cares for four PHC units, i.e. one for every 40-60 thousand population, and is staffed by two senior PHNs, two senior midwives, one senior sanitarian, one statistical clerk, plus one senior physician who will combine the district health centre and district medical officer responsibilities. The "Regional Health Centre" is virtually the district health centre of the regional capital; the "Regional Health Coordinator" also provides administrative and technical supervisory services for the district health centres, with an additional administration and finance officer, a pharmacist and a store-keeper. At the regional level will be a "PHC Training Centre". Curative services are offered at the district and regional hospitals.

Similarly, the Health Ministry has been reorganized, by the establishment of three directorates within the Ministry, one each for: preventive medicine (with units representing the main components of PHC), curative medicine, and administration and planning.

A number of constraints have been identified, e.g. reluctance of different agencies to follow the Ministry's guidelines and requirements in terms of standardization; no real targets have been set up; lack of reliable figures on relevant indicators; no monitoring procedure has been followed so far; inadequate awareness of coordination at central level; and poor understanding of PHC philosophy.

1.2. Managerial process for health development

The first National Health Plan (1980-85) has been based upon a semi-qualitative breakdown of health problems, to rank them in priority order and to rationalize the limited money available. Since no quantitative reliable results have been produced so far, the Health Ministry has become aware of the necessity for a better arrangement. The negative attitude of external aid agencies and of different service units within the Ministry towards accepting integration and coordination prompted the establishment of a strong central coordinating body. A Coordination Unit has been set up, responsible for coordination, monitoring and evaluation. The Department of Planning has been strengthened with the addition of a statistical cell.

The following main areas of weakness have been identified: shortage of planners and economists; lack of integration of planning; the budgetary system and economic policy formulation; weakness in project implementation and monitoring. In general, there was lack of experience in management of health services. To upgrade the decision-making process and its administrative potential, a specific Programme for Strengthening Health Management and Administration has been initiated with WHO collaboration. It is hoped that a more systematic approach will be followed in reformulating the national strategies for the Second Five-year Health Plan (starting 1985).

1.3. Community involvement

This is not easy in Somalia. Villages are made up of different communities. For a nomadic population, villages and towns are never communities in themselves. Nevertheless, some developments are encouraging. Local committees have been set up at the village and district levels, and are gradually motivating the community to participate in health activities. A basic component of community participation is self-selection of the front-line health workers, the community health workers and the traditional birth attendants, for training; they are paid by the community they serve.

Village leaders are requested to identify health priorities and to select possible remedies. They are also required to establish and support health posts, and to finance in cash or in kind and to take part in any health initiatives such as construction of latrines or digging wells. Health education services are conducted regularly. Youth organizations, women's organizations and the Ministry of Education unit are cooperating in some regions to orient the community towards participation in health promotion and protection.

1.4. Mobilization of resources

The Health Ministry receives 2.53% of the total Government budget, representing US$1.2 per person in 1984. However, if we add health budget from external aid, it will become US$3.6, still a very low figure. Thus, 67% of the total health budget comes from external aid. The Government allocates 5.8% of the national budget of the Health Ministry to PHC. However, they direct 61% of the health budget from external aid to PHC; thus the overall proportion given to PHC will be 43% of the total budget of the Health Ministry. It may be mentioned here that a Country Resources Utilization review has been completed during the second quarter of 1985.

The National Health Plan (1980-85) provided estimates of health manpower requirements for different categories and specifications of the role and functions of each category. The Plan also provides for the deployment of health teams for PHC in the regions where PHC is being implemented with the support of donor agencies, giving attention to orientating and training health workers in keeping with the HFA strategy based on PHC. A new policy calls for recruitment of nursing personnel from within each region. However, the Plan has contributed little so far in balancing training and optimal utilization of manpower. The main obstacle is low motivation due to inadequate salaries, leading to crowding in urban areas. There is an average of six physicians and 0.1 dentist per 100 000, but while in 1983 there was one physician per 2340 population in Benadir Region, the figure was one per 339 000 population in Madug Region. Fortunately, inequity of distribution is less marked with nursing/midwifery personnel, with an overall ratio of 63 per 100 000 population. Health manpower norms are yet to be evolved. Certain actions should be taken to improve the utilization of health manpower, e.g. developing and disseminating a manual of job descriptions for all categories of health personnel, strengthening of supervision by means of a hierarchical organization structure, and promoting staff motivation by providing a career path and at the same time enforcing disciplinary sanctions for the employees.

In terms of physical facilities there are 67 general regional and district hospitals and 13 specialized hospitals. Their bed capacities are 3267 and 1860 beds, respectively, giving an overall ratio of 9.5 beds per 10 000 population; but the inequity of their distribution is marked, ranging between 2.4 and 28.2 per 10 000 population, due to the location of the specialized hospitals. For beds in general hospitals, the ratio is 5.9 beds per 10 000 population, ranging between 2.4 and 13.1 beds in the different regions. In addition, there are 86 MCH centres and 219 outpatient clinics. The PHC programme is now operating in seven regions, and there are 99 PHC units.

A number of research projects have been carried out during the last few years. These covered a variety of areas such as biological aspects of malaria control, leprosy, childhood communicable diseases, and traditional and herbal medicine. Anthropological studies have been performed in three of the regions under the PHC umbrella, and a few sectorial KAP (knowledge/attitude/practice) studies have also been carried out in urban areas. A national morbidity survey covering about 1% of the population in all regions was carried out in 1980/81. Nevertheless, no systematic review of research possibilities and capabilities has been performed, nor was any attempt made to make proper utilization of research findings. The worst aspect, identified by the Government, is lack of formal agreements with foreign scientists and collaborating scientific bodies from abroad for regular and formal feedback to ensure follow-up.

1.5. Intersectoral cooperation

The Ministry of Planning and Coordination acts as a centralized planning unit. Six national development plans have been formulated so far; the last was for 1982-86. The health section of each plan has always been restricted to project design, especially those projects vertically organized and supported by external donors. The first National Health Plan (1980-85) was formulated to remedy that situation. However, it has become obsolete, although still valid in its general principles and commitments.

Primary health care, water supply, sanitation, household energy conservation, nutrition, etc., are to be considered a package of services which must be made available at village level. Hence intermediate and local levels of government, and communities are to be involved. The PHC programme envisages establishing an interministerial committee for intersectoral coordination as well as comparable committees at regional, district and village levels. There is a technical and advisory committee. The Health Ministry is a member of the Water Decade Committee. The water and sanitation sectors have taken into consideration the need for cooperation, particularly with the Ministry of Mineral Resources and Water; water-borne diseases are a major health problem in Somalia.

The health component has a low profile in economic development schemes. In water development schemes little consideration is given to potential health hazards. No particular plan for coping with the high urbanization rate has been evolved. Schistosomiasis and malaria control vertical programmes are not involved in feasibility studies on agricultural development.

1.6. International cooperation

A Country Resources Utilization review has been carried out recently; it will then be possible to have a systematic analysis of requirements for external support. However, available data on findings of the Public Investment Programme showed that foreign sources amounted to US$239 million in 1983, of which only US$84 million were grants and the rest loans; about US$11 million are planned for the health sectors. The corresponding figures for 1985 are estimated at US$200 million (of which only US$105 million are grants) and US$19 million for the health sector. The assistance received represents about 88% of the help requested.

There is intercountry cooperation with several countries; the task of development is far beyond the capacity of the country on its own and beyond the capacity of any single donor. Egypt, France, Tunisia, UK, as well as the Arab League have provided technical assistance to an amount of about US$1.1 million in 1984. The Faculty of Medicine in Mogadishu together with the teaching hospitals, the Institute of Tropical Medicine and the Pharmaceutical National Institute, all receive substantial funding from Italy.

The heavy dependence on foreign aid has led to unplanned expansion of infrastructures. The Government is stressing to the international community that programmes are to be preferred to individual projects, that grants and soft loans are more important than 'more hard' loans, that project formulations are to be delivered in a standard format to save money and time spent on analysis of projects, and that efficiency of implementation tends to shorten pauses in output delivery.

WHO collaborated in a spirit of full partnership in developing the country's health system to implement the national strategies; allocations from WHO's Regular Budget for the biennium 1984-85 amounted to US$5 million. One significant area was the introduction of the managerial process for health development in formulating and monitoring the implementation of national strategies and plans of action, aiming to promote self-sustained national health programme development. There was also cooperation in project formulation and negotiations with bilateral, multilateral and non-governmental organizations in seeking external resources support.

2. HEALTH STATUS

It should be stressed that available statistics are sparse and inaccurate. Regular registration of vital events does not yet exist and various estimates are being used. Notification of communicable diseases has just started in four regions. Information on causes of morbidity and mortality is mostly based on impressions of clinicians and health officials. A statistical unit has been recently established in the Health Ministry.

National estimates for the crude death rate are 13-15 per 1000 population for 1975-80 (compared to UN estimate of 21 per 1000 for 1980-85). The infant mortality rate is 146-180 per 1000 live births. Deaths under five years account for one half of all deaths and about one

quarter of children in that age group die every year. Not surprisingly, life expectancy is short: estimates from the 1975 Census gave 45 years for urban areas and 40 years for rural areas. However, estimates from the 1980 Population Survey ranged between 46 years for nomadic females and 55 years for rural females.

The average daily per caput supply is 2000 calories and 62 g of proteins. No data are available on birth weight. From a survey in 1975, it was found that protein-calorie malnutrition was common, increasing from 21% among infants less than six months of age (5% of second and third degrees) to 40% during the third year of life (22% of second and third degrees). These were the figures from MCH centres in Mogadishu region. The picture was much worse from MCH centres in Hargeisa region: the figures were 33% under six months of age (11% of second and third degrees) to 91% during the third year of life (79% of second and third degrees).

A study in Mogadishu in 1978 identified the main causes of mortality among children under five years as diarrhoea, tetanus, measles and respiratory diseases. However, the national health survey of 1980-82 gave high prevalence of parasitic infections, anaemias, communicable eye diseases and malaria. Blindness in one or both eyes affected seven per 1000 population. When a kind of scoring system was used, a different ranking of priority health problems emerged: tuberculosis, common communicable diseases of children, diarrhoea, malaria, schistosomiasis and malnutrition.

An epidemic of cholera broke out in refugees camps in Hargeisa region during March 1985, with relatively high case fatality rates at the beginning of the epidemic. It has now been brought under control and, till the end of June 1985, sporadic cases are still being reported.

3. ASSESSMENT

3.1. Relevance, adequacy and progress

The health strategies are relevant to HFA policies to which Somalia is politically committed. This is accompanied by explicit resource allocation and reorientation of the health system to PHC. The Health Section of the Five-year Development Plan has been reformulated into a more articulated health plan reflecting integrated PHC expansion, and has been based on careful selection of priority disease problems and main fields of action.

Financial resources are inadequate, and there is dependence to a sizeable extent on external sources. The strategies adopted stress reorganization at central level, training in management for all ministry personnel performing managerial duties, preparation of operational manuals including duty statements, information flow, administrative rules and methods, research and development studies and upgrading buildings and office facilities.

A unit responsible for coordination, monitoring and evaluation has been established. Mid-term revision of the National Health Plan has been carried out with a complete overview of investments in health. Inadequate awareness of the importance of coordination at central level, with a poor

understanding of PHC philosophy, have been the major obstacles. Interministerial cooperation leading to intersectoral integrated development plans is being improved.

PHC programmes are now operational in seven regions only that represent 50% of the total population. The urban area of the capital city is being included in a pilot urban PHC programme which will extend PHC services to cover 70% of the population. However, this does not necessarily mean that all PHC elements are actually readily available to everyone in these areas.

3.2. Efficiency

PHC is felt to be not the cheapest way to achieve results but the most cost-effective. The best results come from an integrated development approach with a partial, relevant share given to health. However, control from the Health Ministry over the implementing agencies and its support to the periphery have been inadequate; different approaches have therefore been carried out in areas situated close together, even within the same district.

No evaluation of the efficiency of the utilization of health services has been carried out by any of the international agencies involved or by the Health Ministry. Through the newly established Coordination Unit, the Ministry will try to tabulate available information emanating in a non-organized format from projects, e.g. MCH, immunization, nutrition, family health, drug supply. The weakness of the national logistic, transport and communication network is probably the main obstacle.

Two major studies aiming to assess not only the objective quality of care delivered but also the public's satisfaction with it, are in progress in rural areas. One is carried out by the Faculty of Medicine and is more a part of a research project. The other is an in-built system involving also the socio-anthropological definition of the human environment in which a community medicine programme is to be implemented. Evidently, integration, analysis and related reformulation of targets, better design of development schemes, and coordination within and between sectors should receive due attention as the key factors in utilizing limited resources for achieving best results.

3.3. Effectiveness

No results are yet available about the degree of community satisfaction, but community participation is satisfactory in many regions. The research study supported by WHO on the use of community health workers and traditional birth attendants will give reliable information.

The best result so far achieved is probably the final understanding of PHC contents and strategies by the central bodies. Their awareness of the logic and the scientific value of the PHC approach is still growing. Communities have been paid due attention and have the chance of expressing their own opinion on health and health services. Although efforts are being made to establish a health information network that could provide the necessary data for monitoring progress and impact, the Ministry is

confident that major achievements are taking place, such as from integrated development activities in West Galbeed region and in most of the refugees' camps.

SUDAN

Sudan, the largest country in Africa, lies in the north-east of the continent, bordering on eight other countries. It has a 480 km coastline along the Red Sea, having an area of about 2.3 million sq.km. It consists primarily of an extensive plain rising gradually to mountains in its north-eastern part near the Red Sea, and plateaux and low mountains in its southern and western parts. Bare sand, rock and gravel in the dry north give way to grass and savanna in the central plains. The tropical south is covered with extensive swamps in the east and south and high wood savanna and tropical rain forests to the west. The Gezira area between the Blue and White Niles has been developed into an integrated project for both commercial and subsistence economy and now comprises the most affluent and agricultural area in Sudan. Transport is heavily dependent on the State-owned railways which carry 80% of freight and 60% of passenger traffic. A road network exists, albeit inadequate, and large sectors of the Nile are navigable.

Population estimates vary. The Health Ministry gave the figure of 17.7 million for 1981 then gave 21.6 for 1983 in the Evaluation Report. With high birth and death rates the population, as expected, is a young one where 54% are under 15 years of age. Only one quarter is considered urban population. Sudan's economy is largely based on agriculture, although only some 10% of the land available for cultivation is actually cultivated, due to shortage of water. It has deposits of some minerals, and oil has been recently discovered. Administratively, Sudan is divided into six regions (other than the capital) with a great deal of autonomy in administration; each is further subdivided into a limited number of provinces.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The country is politically committed to HFA/2000 as reflected in declared commitments. Health is an essential human right, an integral part of development, and is the responsibility of the State. Concurrently, it is the duty of all citizens to participate and take part in activities concerning their own health care. To attain the objectives of HFA/2000, attention should be paid to the equity of distribution of services, and it is essential for a number of socio-economic sectors to work in harmony and to coordinate their efforts.

The health strategy reflects the above-mentioned health policies. In fact, Sudan started implementing PHC since 1977, before the Alma-Ata Declaration. The National Health Plan Programme (1977-84) had PHC as the major component, with strategies almost the same as for HFA. However, based on experience gained during the past seven years, new strategies may be

called for during the formulation of the new Plan of Action (1985-89). There have been no obstacles to implementing the national strategies.

Maximum coverage of the whole rural and nomadic population, described as one community health worker (CHW) for every 4000 settled population or for every 1500 nomadic population, was aimed at by 1984. Having attained that, it was revised in early 1983 to become one CHW per 1000 population. Now, after the People's Revolution of April 1985 and after revision of the responsibilities of the Central Ministry of Health, the whole PHC approach will be revised with the objective of strengthening the health care delivery system, through promoting the rural and district hospitals and training and re-orienting doctors working in these hospitals towards PHC. In addition, the revision will also take into consideration the upgrading of dispensaries and PHCUs so as to be in line with the new approach.

1.2. Managerial process for health development

The Local Government Act of 1973 decentralized significant powers to provincial authorities. Decentralization was enhanced by the Regional Government Act of 1981. Implementation and day-to-day management of programmes, as well as planning and development of health services that could be implemented using local resources, were carried out by the regional health authorities. According to the recommendations made by the meeting held during Ramadan 1405 A.H. between H.E. the Minister and the Senior Staff of the Central Ministry of Health and the Regions, which recommendations were passed to the Council of Ministers and approved, the Ministry of Health will be responsible for planning, supervision and evaluation of health services. Consequently, the Policy of the Ministry of Health shall be obligatory to all regions.

Coordination within the health sector has been given due attention. The Departmental Council of the Ministry of Health, composed of the Directors of the various Departments, holds regular weekly meetings in the Under-Secretary's Office. Several meetings have also been held recently between those responsible for the PHC programme and some departments in the Ministry to coordinate activities at the regional and central levels. It is felt that coordination is practised more at the regional and district levels than at the central level.

International and bilateral technical assistance and financial support (particularly from WHO/UNICEF and USAID) have contributed a great deal to the development and strengthening of the managerial process. Starting in 1981, short courses in management were held for the senior and middle-level health personnel. A workshop was held in Khartoum (1985) and was attended by the Directors of Health in all regions, participants from the Faculties of Medicine, international agencies and the Central Ministry of Health. They discussed important problems in the areas of planning, management, evaluation, training and coordination.

The most important obstacles facing the development of the managerial process are financial constraints, problems of transportation for field supervision and insufficient training.

1.3. Community involvement

Through self-help numerous health projects have been established and they have succeeded. This initiative and responsibility have been generally left to the community. To ensure guidance and coordination, self-help efforts are exerted through existing community organizations.

The administrative and political organizations which have been administrating and supervising the health care services are now suspended. After the People's Revolution the Ministry of Health has been restructured and its responsibilities revised, as previously mentioned.

Voluntary and non-governmental organizations have been given full encouragement to participate in health-promoting activities and are now working mainly with refugees, displaced persons and those affected by drought and desertification.

1.4. Mobilization of resources

The Ministry of Health has taken measures to reallocate its resources for the implementation of the strategy. The percentage of GNP spent on health has dropped from 10% to 4%. Since health activities are now integrated, it is very difficult to calculate the percentage of health expenditures allocated to PHC. Following decentralization and regionalization, financial resources have been allotted to the regions according to their needs. In fact, all PHC resources have been distributed to reach the unserved populations. Furthermore, external material and financial resources are allocated to programmes and activities carried out in rural areas.

A health manpower development plan has been formulated as an integral part of the national strategy. This plan calls for the establishment of a new cadre of health worker, namely the community health worker (CHW); thirty schools for training of CHWs have been established, and the target of the plan, as previously mentioned, will be revised so as to fit the new approach of Sudanese PHC, with clearly defined roles and functions; development of curricula for training of all front-line health workers; in-service training for health personnel working in rural areas; and training and orientation courses for village midwives and traditional birth attendants. The main obstacles in the implementation of the plan were initial reluctance of nurses and some paramedicals regarding the acceptance of the new cadre of CHW, due to professional jealousy; lack of local resources, transport and communication; and "hardship" climatic and geographical factors.

As of 1983, the ratios of Health Ministry personnel were as follows: physicians 0.9, dentists 0.07, assistants 1.9, technicians 0.7 and nursing/midwifery personnel 7.3, all per 10 000 population. However, their distribution among the regions is not equitable; they are mainly concentrated in Khartoum. There were 2183 PHC units, 1396 dressing stations, 856 dispensaries and 251 health centres, again not equitably distributed. The ratio for Health Ministry hospital beds was 8.2 per 10 000 population.

Priorities for research in the health field are drafted by the Medical Research Council then submitted to the Health Research Sector Congress

chaired by the Minister of Health (with membership from academic staff in the universities and specialists and research workers from the Ministry of Health). The Health Research Sector Congress is held every three years to review health research strategies and to disseminate research findings. The health research priority areas as set up by the Congress in 1982 were: endemic diseases, environmental health, nutrition, MCH, medicinal plants and vaccines and sera. There are two major constraints: brain drain of research manpower and shortage of foreign exchange for research facilities and training abroad.

1.5. Intersectoral cooperation

The health strategies are well integrated into the national socio-economic plans. There is adequate intersectoral collaboration through a number of multisectoral boards and committees, e.g., National Council for Research, High Committee for Child Welfare, National Committee for the Promotion of the International Drinking Water Supply and Sanitation Decade, the Blue Nile Health Project Board and the Steering Committee of the Joint Nutrition Support Programme. Intersectoral cooperation is more successful at the local levels than at the national level. Such committees could be more beneficial if they met more regularly.

Much had been learnt from the Gezira Irrigation Scheme where traditional control of malaria and bilharzia are lacking. This has been taken care of in the Blue Nile Health Project. In the recently established Rahad and Kenana Irrigation Schemes, prevention and control of malaria and bilharzia, and the health services in general, were incorporated into the plans and the health budget was integrated into the general budgets of the schemes.

1.6. International cooperation

The country has made a systematic analysis of its needs for external support. Several bilateral and international agencies are cooperating in specific health projects. Examples of these are: the Blue Nile Health Project (several agencies); malaria control (AGFUND, Qatar); PHC programme (WHO/UNICEF, USAID, ADB, Italy, Netherlands); central and regional medical stores (USAID, Netherlands); specialized training hospitals (Japan); rural hospitals (Saudi Arabia); and vaccines laboratory (UNIDO). There is also fruitful cooperation with friendly countries in the areas of training.

It is estimated that over 50% of external resources needed have been received. Reasonable proposals, submission of feasibility studies and proper utilization of assistance provided are factors that have contributed to fruitful cooperation. However, there are important areas that received inadequate support, particularly transport facilities, control of endemic diseases, training, hospital equipment and environmental health. Moreover, some donors have policies not in line with national policies and requirements.

WHO has collaborated in the preparation, implementation and evaluation of the national strategy and plan of action. Sizeable financial support has been received from WHO and UNICEF in PHC and other programmes.

2. HEALTH STATUS

The Sudan is characterized by a high birth rate (50 per 1000), a high death rate (25 per 1000) and a high infant mortality rate (140 per 1000). As a result, life expectancy is rather short: about 48 years. The nutritional status of children varies widely in different parts of the country; it is particularly low in the Red Sea and Darfur provinces. Severe malnutrition accounts for 4% of all cases reporting to the health facilities and occurs mainly during the second and third years of life.

Over the period 1978-82, the commonest causes of morbidity were respiratory tract infections and measles, malaria, gastroenteritis and diarrhoea, accidents, then malnutrition and anaemia. With respect to mortality the main causes were accidents, neoplasms, respiratory diseases and measles, tuberculosis, then cardiovascular diseases. With respect to notifiable diseases, relapsing fever is regularly reported. Cholera cases had been reported in 1979 and 1980; as this disease had appeared in neighbouring countries in 1985, it was feared that it might spread into Sudan, particularly among the refugees camps in the drought-affected areas. Malaria is reported in the range of one or two million cases yearly. Among the EPI target diseases tuberculosis, measles, whooping cough and tetanus are very common. Some 30-50 thousand cases of viral hepatitis are reported yearly. Schistosomiasis is very common, and the number of meningococcal meningitis cases reported yearly is far from negligible.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The national health policies are relevant to the HFA policies, and are reflected in the national strategies. The Government has systematically compared the health policies and strategies with those defined for HFA/2000 and they are almost identical. Furthermore, the national health plan is relevant to, and incorporated into, the overall socio-economic development plan, and the major development schemes have been considered in the national health programme. The health system is based on PHC, having as its main feature community involvement in the development of the system.

National and external resources have been mobilized to implement the national strategy, but these are not adequate. Decentralization of services improved the managerial process. Several evaluation activities of the health services have been carried out, through national workshops or as joint activities with international agencies such as WHO, UNICEF or USAID. There have been no obstacles to the development and implementation of the HFA strategies as the country had started implementing PHC in 1977. Similarly, there have been no obstacles in the incorporation of the national strategy for health into the overall socio-economic development plans.

Local health care, within one hour's walking distance, is available to about 70% of the population. The corresponding figure for coverage by safe drinking water is 40%; and for adequate sanitary facilities about 20% for urban population, although almost zero for rural population. Immunization

of infants against the six EPI target diseases did not exceed 3% in urban areas and was almost zero in rural areas. Only 20% of women are cared for by trained personnel during pregnancy and at childbirth.

3.2. Efficiency

Implementation of the strategies is proceeding efficiently. It has led to marked improvement of coverage with basic health services for rural and nomadic populations. The health manpower plan catered very well for the quality and number of health personnel required to run the services efficiently. Political commitment of high authorities, community involvement, and contributions by international donors together gave rise to efficiency of implementation of the strategy. However, drought and desertification, international inflation, the local economic situation, lack of transport facilities for supervision and insufficient managerial training were the main, formidable, obstacles.

Efficiency of the utilization of health services has also improved, thanks to the good distribution of facilities, improved quality of health personnel, community involvement in planning, supervision and evaluation of health services, and the availability of all kinds of essential drugs.

Several actions have been taken to improve the quality of health care. A number of management training courses were arranged for senior and middle-level health personnel and are to continue during the next (1985-89) plan. Courses for training of trainers were held in Khartoum at the Faculty of Medicine. Several seminars and workshops were held in the Ministry of Health and in the Khartoum Faculty of Medicine to discuss health problems and set guidelines for health planning. Due to shortage of transportation facilities for supervisory responsibility over the PHC workers, the community organizations were given some supervisory responsibility over the CHWs. In addition, the communities were allowed to purchase their requirements of essential drugs for distribution through the health system.

3.3. Effectiveness

Community satisfaction with the results was assessed by the health authorities or in collaboration with international agencies, e.g. the joint evaluation of PHC by the Government, WHO and UNICEF. Most of the CHWs were found to be active also in the areas of prevention and control of endemic diseases and in promotive activities. They were often members of one or more of the community organizations. The communities were involved in PHC, were willing to contribute to health expenditures and were asking for more PHC facilities, all being signs of satisfaction with the results of the strategy.

In terms of coverage, the target of one PHC unit for every 4000 settled population or 1500 nomadic population has already been achieved. The gap between the served and unserved populations is narrowing. About 90% of the PHC units were built through community efforts. Utilization of services increased despite some shortage of drug supplies.

Because of the lack of accurate data, it is difficult to assess impact in terms of reduction of morbidity and mortality.

SYRIAN ARAB REPUBLIC

This evaluation may seem rather brief in some of its parts, if compared with those of other countries, owing to the brevity of the national report on strategy evaluation, which, unlike all other reports, was written on the pages of the Common Framework and Format for the Evaluation.

The Syrian Arab Republic is situated on the eastern coast of the Mediterranean. It has a coastline of 183 km and its total area is estimated at 185 000 sq.km. The country is geographically divided into four regions; a mountainous area, comprising the mountains and heights that extend parallel to the coast, a coastal area that lies between the mountains and the sea, an internal or valley area east of the mountains, and the desert area consisting of plains in the south-eastern part along the Jordanian and Iraqi borders. Rain falls in winter on the coast and the mountainous area, but is scant in the desert.

The country is administratively divided into 14 governorates (the capital city of Damascus is considered a separate governorate) and each governorate is subdivided into regions, districts, towns and villages.

In 1984, the population was estimated at 9.9 million, 48% of which was urban. The average household size is 6.3 persons and the population density 54 per sq.km. Approximately half the population is under the age of 15 years. The economically active population constitute 24% of the total population (42% among males and 6% among females).

The country's economy is mainly dependent on agriculture and, hence, is greatly affected by variability of rainfall. However, the Euphrates Dam project has made it possible to irrigate larger areas of land and, hence, to increase agricultural production. Agriculture constitutes almost one-fifth of the Gross Domestic Product (GDP) and absorbs half the manpower of the country. Cotton and grain are considered the most important agricultural crops. Manufacturing industries, including textiles, and mining are flourishing and so are the phosphate and petroleum industries.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The Health for All policy has been endorsed at the highest official levels. The country's constitution provides for the right of every citizen to health, and both the Ministry of Health and the Party committees are committed to the goal of achieving Health for All. A remarkable change has lately occurred which is reflected in the great increase in the human and financial resources allocated to primary health care (PHC),

particularly in rural areas. Although no additional health policies have been formulated, the country's policy, in this connection, has been reviewed and refined within the framework of the Sixth Five-year Plan (1986-1990), with due attention given to health-related matters connected with safe drinking water supply, sanitation and environmental protection.

The health strategy is incorporated in the Government's Five-year Plans of socio-economic development. Although no systematic comparison between the country's health strategy and that of HFA has been attempted, yet it is evident that these two strategies are not in any way at variance. The national strategy is particularly geared toward securing the involvement of local communities in the formulation and implementation of plans. No modifications have been made to the health plan since 1982. However, under the 1981-1985 Five-year Plan, a systematic review was carried out to ensure that the plan embodies the basic characteristics of a PHC-based system.* The strategy evaluation report did not include a description of the health system.

1.2. Managerial process for health development

A committee has been established at the central level to coordinate, plan and implement PHC programmes, and a health sector committee was, likewise, established to formulate the Sixth Five-year Plan. The Research and Planning Directorate, Ministry of Health, is the body responsible for following up the plans designated to implement the strategy. At the end of each of the stages of the Five-year Plan, a comprehensive evaluation of the health activities is conducted to detect any shortcomings, pin-point problems and determine an order of priority for the health problems that should be included under the next Five-year Plan.

1.3. Community involvement

The application of the system of local government at the governorate and district levels secures the involvement of local communities in the planning and implementation of various national programmes and strategies. Such involvement takes place in the light of the citizens' actual needs and according to the available resources, through the village and city councils and the executive councils of governorates. In this connection, the Ministry of Health sought the assistance of peoples' and syndicate organizations, as well as that of the mass media, to promote the citizens' awareness as regards health problems.

1.4. Mobilization of resources

The need analysis approach was applied by the Ministry of Health in connection with costs, material and the allocation of available resources, according to the priorities of the necessary health projects. This experiment proved the suitability of the measures adopted, as it achieved maximum utilization of the allocations available. However, no comprehensive study has, so far, been made on the cost-effectiveness of the various health programmes.

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* The strategy evaluation report did not include a description of the health system.

Health expenditure constitutes about 3.5% of the Gross National Product (GNP). According to the system of local government, independent financial allocations are placed at the disposal of the directorates of health in the governorates and are to be utilized flexibly under the supervision of the governor. It is impossible, at present, to specify the percentage of the national expenditure allocated to PHC, as such a breakdown is not detailed in the general budget. However, there is a fairly equitable distribution of expenditure assigned to the PHC services provided to all the regions of the country, with a certain emphasis placed upon less privileged rural areas.

A plan for manpower development has been formulated. Moreover, the training and teaching curricula of the mid-level health institutes, and the nursing and midwifery schools, have been developed so as to become more PHC-oriented. The Ministry has, furthermore, increased the enrolment of students in the mid-level health institutes and the nursing and midwifery schools, and has established new schools for assistant nurse-midwives (community nurses). However, the roles performed by the members of the health team have been maintained unchanged, being well suited to the tasks entrusted to them as members of the PHC team. Continuing training is provided for physicians, health auxiliaries and health centres personnel, and training courses have been held for TBAs in all governorates.

In 1983, the health manpower ratios per 10 000 population were as follows: 5.1 physicians, 1.8 dentists and 8.8 nursing and midwifery staff. However, there is inequitable distribution of manpower amongst the governorates. During the decade 1974-1983, the number of physicians increased by 86%, that of dentists by 157% and that of nurses and midwives by 99%. As for health institutions, in 1983 there were 39 government hospitals and 130 private hospitals (with a bed ratio of 11.5 per 10 000 population) unevenly distributed among governorates in addition to 434 health centres, and 47 specialized health centres (for tuberculosis control, MCH, malaria eradication, etc.). It is worth noting, however, that in 1983, bed occupancy did not exceed 65%, with an average bed-stay of four days per patient.

There is no developed scientific research at country level, although various limited research projects are carried out such as those of the productive medical camps and on infant undernutrition, in addition to other separate subjects of research. Neither does any plan exist for scientific research in the field of health or for bringing together researchers and policy-makers. Hence, the results yielded by this research are not utilized in the formulation and implementation of the strategy.

1.5. Intersectoral cooperation

The Supreme Planning Board, which is attached to the Cabinet (Council of Ministers), studies and approves the socio-economic development plans of the country (including that of health development); its decisions are binding upon all ministries and concerned organizations. Due consideration is given, in all development projects, to health hazards that are likely to arise, and, hence, necessary preventive measures are taken to ensure the safety of workers and the environment. To achieve coordination, all socio-economic development plans are studied by representatives from the various ministries and organizations in the country.

There is, moreover, a Supreme Health Board attached to the Presidency of the Council of Ministers. It is the supreme authority entrusted with the task of securing cooperation and coordination amongst the various ministries and institutions that provide health services. Hence, cooperation and coordination in health-related fields exist between the Ministry of Health and other ministries and organizations, such as the Ministry of Higher Education (faculties of medicine and university hospitals), the Ministry of Education (school health), the Ministry of Housing and Utilities (drinking water supply and sanitation), the Ministry of State for Environmental Affairs (for ensuring environmental protection and studying and controlling environmental pollution of all types), the Ministry of Social Affairs and Labour and the Ministry of Industry. There are also other supreme councils and joint committees, concerned with certain specialized health issues, in which ministries and organizations are represented. Examples of these are: the Supreme Malaria Control Council, the Supreme MCH and FP Council, the Central Committee on Zoonoses Control, the Committee on Drug Importation and the Committee on Man and the Environment, established within the Supreme Science Council.

1.6. International cooperation

There is adequate cooperation with countries of the Eastern Mediterranean Region, and genuine friendly relationships with friendly countries bound by special bilateral relations, in the areas of information, expertise of exchange and training. Continued cooperation exists, furthermore, with international organizations and agencies. However, health projects are dependent on the local material resources available and the State does not receive any external support save the technical assistance and equipment offered by international organizations.

WHO spares no effort in providing the country with assistance and expertise, whenever these are needed. However, no WHO support was sought in connection with the preparation, implementation and evaluation of the national strategy and the plan of action.

2. HEALTH STATUS

The crude death rate is estimated at 8 per 1000 population, while that of infant mortality is 57 per 1000 live births. Life expectancy is relatively high and is estimated at 64 years for males and 65 years for females. Newborns with birthweight of at least 2500 g are estimated at 91%. Besides, 75% of children below the age of five are well-nourished while the remaining 25% suffer from mild undernutrition.

Except for malaria, no reporting took place for any of the diseases subject to International Health Regulations and International Epidemiological Surveillance. However, one case of relapsing fever was reported in 1975, and numerous cases of cholera reported up to 1979. A large number of new malaria cases and a relatively large number of EPI target diseases, particularly tuberculosis and measles, are still reported annually. There is less reporting in the case of viral hepatitis and acute infant diarrhoea. As for meningitis and schistosomiasis, only a few cases were reported.

Obstetric and gynaecological cases represent more than 25% of hospitalized cases. Next in frequency are: accident injuries, diseases of the digestive system, infectious and parasitic diseases, diseases of the respiratory system and those of the circulatory system. Symptoms, signs and ill-defined conditions account for two-thirds of deaths, which fact renders the cause-of-death statistics doubtful and unreliable owing to inaccuracy in certifying the causes of death. Next to these, come the diseases of the circulatory system, the respiratory system and accident injuries.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

The national health policy is relevant to that of HFA/2000. The same is true of the health strategy which is incorporated in the socio-economic plan of the country. The health system reflects the basic elements of a PHC-based system, as determined by the Alma-Ata Declaration.

All the possible resources of the country have been mobilized for the implementation of the strategy. Emphasis has been laid more on under-served rural areas and on the involvement of local communities in the preparation and implementation of plans. Special attention has been given to the managerial process for health development and its mechanism. PHC, including the provision of at least 20 essential drugs, covers 80% of the population, and 70% of the population are covered with safe water supply and adequate sanitary facilities. The percentage of antenatal, postnatal and paediatric care up to, at least, the first year of life supervised by trained personnel is 70%. However, vaccination against the six EPI-target diseases does not cover more than 50% of infants.

Great progress has been achieved in the monitoring and evaluation of the strategy, both of which are the responsibility of the Directorate of Research and Planning, Ministry of Health. Moreover, the national health plan has been revised and no need has been felt hitherto for any additional health policies or for modifying the existing ones.

3.2. Efficiency

The Ministry of Health is quite satisfied with the implementation of the Five-year Plans for achieving the HFA strategy, within available resources. Several factors have contributed to the efficiency of implementation, namely: the increase in the financial allocations to health programmes, the increase in the number of the various categories of graduates from the mid-level health institutes, the success of the TBAs' training programme and the involvement of the category of assistant nurse-midwife in public health services.

It is hoped that better results will be achieved, in future, when more financial and human resources become available.

The HFA strategy endeavours to expand health services and render them more comprehensive, so as to cover the whole country. For this purpose it attempts to increase and develop the network of health centres, as well as

to expand the scope of the services provided by health institutions so as to become more easily accessible to all citizens and, hence, better utilized. The Ministry has, furthermore, taken a number of measures to improve the quality of the health care provided. Examples of this are: holding training courses to upgrade the efficiency of health manpower, completing the requirements of medical supplies and equipment, improving the referral system, treatment and health education, in addition to improving the system of health institution management and supervision.

3.3. Effectiveness

A feeling of satisfaction exists as regards the results of the implementation of the strategy. This feeling is based on the results of analysing the present status of health services in order to formulate the Sixth Five-year Plan (1986-1990), as well as on observing the development achieved during the period of the Five-year Plan.

There is also a general downward trend in the incidence of childhood diseases, insofar as measles, diphtheria, tetanus and whooping cough are concerned; malaria cases have begun to decrease; no remarkable change is observed in the status of tuberculosis, yet cases of poliomyelitis, meningitis and viral hepatitis are on the increase.

TUNISIA

(The national report did not follow the Common Framework and Format for Evaluation (DGO/84.1), hence the paucity of some pertinent information).

Tunisia, on the coast of North Africa, has a land area about 164 000 sq.km and a population estimate of a little below 7 million. About 52% are urban population, but one-third of these live in the two largest metropolitan areas of Tunis and Sfax. One-third of the rural population live widely dispersed in more than 4500 locations with low population density.

Administratively, the country is divided into 23 governorates which are further sub-divided into districts and sub-districts. This is in line with the general Government policy to facilitate to the people, wherever they live, access to the governmental structure and to decentralize developmental activities.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The country has adopted the goal of HFA/2000, endorsed the Alma-Ata Declaration, and its policies, based on primary health care, have been endorsed at the highest official level. The strategy has been elaborated on the basis of these policies.

Education and health have always been two priority areas in national development policy. The Sixth Five-year Development Plan (1982-86) has selected several priority areas for investment in the health sector: expansion of the peripheral and rural infrastructure, restructuring of the functions of PHC and the first referral level, redefining of the tasks of the different categories of health personnel towards a team approach at the district and sub-district levels, upgrading of management, further decentralization of logistics, strengthening of supervision, introduction of evaluation and institutionalization of continuous education.

As regards primary health care, the objective of the strategy is two-fold:

(a) to ensure coverage of the whole national area with basic health centres (PHC centres); these deal with general care, all preventive activities and health education.

(b) to provide all "sub-districts" (circonscriptions) with a second (first referral) level health centre (general care, basic specialities, obstetrics, radiology and laboratory). In 1981, at the time of the

formulation of the Sixth Five-year Plan, 64% of these sub-districts did not yet have this type of structure.

To achieve this objective, the Ministry of Public Health has made use of:

(a) programmes specific to the Ministry of Public Health, financed either by the latter or by loans (World Bank, USAID) or by grants (USAID, Federal Republic of Germany, Sweden);

(b) programmes of the Ministry of the Interior: rural development projects and recently, integrated rural development projects;

(c) social security programmes

(d) municipal programmes

(e) community participation

The private and social security health care services are concentrated in the large metropolitan areas; they play a small role in the provision of health care, and obey the rules set by the Ministry of Public Health which has been, in the last few years, restricting the growth of the private sector in the big cities and encouraging a better complementarity with the public sector.

The large majority of the total population, however, are served by the State health system. The health administration has been decentralized. The Ministry of Public Health was restructured in 1982 to adapt to the new decentralized administrative setting, to give better technical support to the regional administration and to integrate the curative and preventive services, aiming at ensuring coverage of the most underprivileged areas, as regards health care. Within each region, choices made take into account regional priorities so as to achieve a balanced and harmonious strengthening of health services. Consideration has also been given to regional habits (for the grouping together of localities) and to physical (geographical) accessibility (road conditions, public transport routes).

The pyramid of the health infrastructure has four levels. An extensive network of basic health centres, MCH centres, dispensaries and health posts forms the base. An extensive renovation and expansion programme for these facilities is in progress and, ultimately, all would provide the same comprehensive package of PHC services. At the second level are the district hospitals which provide primary, maternity, general inpatient and outpatient care. These two levels should cover most of the needs of the local communities. The second referral level consists of the regional hospitals. At the top of the pyramid are the teaching hospitals and specialized institutes.

1.2. Managerial process for health development

PHC services have begun planning at the regional level, although it must be noted that the "region" and the "sub-district" are not yet defined by legislation.

Most health care regional services prepare annual reports on the implementation of the strategy, and draw up plans of action for the following year that take into account the national objectives that have been set, either as part of the national programmes or by referring directly to the objectives of the Sixth Five-year Plan when they have been specified. The aim is to formulate an annual national plan of action based primarily on the regional plans of action which would themselves be based on sub-district plans of action.

The first stage in the implementation of the strategy was the preparation, as early as 1983, of an outline for separate budgeting of PHC. A new chapter is now included in all hospital budget documents, the formulation of which has so far been left entirely to hospital directors. The second stage should be that of programme-budgeting. In other words expenses will be related to the objectives of PHC coverage and eventually the budget will be correlated with objectives and results. This type of programme budgeting should start in 1987. Meanwhile, the budget is still formulated along running-expenditure lines rather than along health care activity lines, as should be the case for a programme budget.

There are a number of intersectoral national committees, specialized in areas such as occupational health, environmental health and sanitation, drinking water, infant foods and food control. Furthermore, focal points for PHC have been designated at the regional level and were given the responsibility, under the control of the Regional Director, to coordinate all activities related to the strengthening of PHC. An ambitious programme is in progress to build up an accurate information system with two way communication to facilitate planning, monitoring and evaluation of health activities and their impact on the well-being of the population.

This management process requires a cadre of trained and competent technicians and managers. In spite of the training effort undertaken by the (health) department since 1982 not all sub-districts and regions have such personnel yet. The number of public health doctors, paramedical and administrative staff to be trained is such that their training will necessarily have to be organized at the country level and on a continuous basis.

It should be noted that the process of programme budgeting is bound up with those who provide the health care, i.e. doctors and other health professionals. However, their participation is hardly noticeable, since they are still excluded from the procedure for the preparation, implementation and presentation of the budget. The collaboration between the administrative managing officer and the health team has to be re-examined, since the providers of health care are not kept informed of the budgetary allocations and are not directly involved in the decisions regarding the advisability and the distribution of local expenditures.

1.3. Community involvement

The strategy adopted to ensure community participation is based on the setting up of local health councils in each health sub-district. This local council is chaired by the political and administrative authority and comprises locally elected representatives as well as the officers in charge

of health-related sectors. In 1982, 117 local health councils were being established (i.e. 65% of the total). At a higher level, there are the Regional Councils which sit in each governorate.

These two types of councils, albeit advisory ones, play an effective part in setting objectives in the field of health within the framework of the national development plans, in the drawing up, at the local and regional levels, of the health map, and in analyzing and assessing the health situation. The councils, their role and their composition have been specified in the draft decree on regionalization and sub-districts.

As regards direct community involvement, the strategy chosen makes provision for giving responsibilities to the community in preventive activities to protect the environment (sanitation - environment health - drinking water).

1.4. Mobilization of resources

The Sixth Five-year Plan puts more emphasis on prevention, hence the budget for preventive health services has been shifted from table II (investments) to table I (running costs) of the State budget. The investments for the basic health services were estimated to reach 37.3 million TD, of which 27.3 million TD will be obligated during the period of that plan to finance the extension of the basic health network in 12 governorates including the construction of 60 district health centres, 200 lodgings as incentives for key health personnel in the rural areas and 20 premises for health directorates.

In 1982 the functioning budget of the Ministry of Public Health was 90.8 million TD, equivalent to 10.7% of the State's functioning (regular) budget and was expected to be 111.7 million TD in 1983 (or 12% of the State's budget). The capital investments were 20.5 million TD (or 3.0%) and 23.1 million TD (or 2.9%) of the State's investment budget for 1982 and 1983, respectively.

In terms of health personnel the Sixth Plan aims at reaching a satisfactory distribution within and among the regions and adapting the quality of training to the needs of different levels. In 1982 there were 2060 physicians (or 3.1 per 10 000 population); the number is expected to reach 3550 at the end of 1986. The number of dentists will reach 650 and pharmacists 1267 in 1986. The number of paramedicals working in the public sector in 1982 was 14 622, and would reach 25 285 by the end of 1986. It is noted that the community health worker is not part of the terminology used. The outreach is provided by the itinerant nurses attached to the health sector or by mobile teams.

The integrated projects being implemented have not placed much importance on the planning of manpower requirements which are taken care of gradually as the projects are being implemented. As early as mid-1982, the Ministry of Public Health asked that regional plans of action be formulated for the regions. These regions must: plan the opening and the entry into operation of the centres that have been completed; draw up a list of the basic health centres and of the sub-district mid-level health centres which they expect to be built; plan their manpower requirements; programme the recruitment of trainees in accordance with the new structures being established.

The first phase in personnel reorientation was carried out as part of paramedical staff basic training through the inclusion in 1981 of a public health module in the curriculum of nurses. From then on, a major effort was also carried out by the National Centre for Research and Teacher Training. In addition, the Basic Health Care Directorate organized a series of regional and interregional seminars on the continuous training and the reorientation of medical and paramedical personnel.

In 1982 there were 128 MCH centres, 680 dispensaries and 120 health posts. In 1983-1984 about 100 new basic health centres were to be completed. There are 60 district hospitals. The overall ratio is 21.3 government hospital beds per 10 000 population.

1.5. Intersectoral cooperation

The PHC strategy acts in two ways to make intersectoral collaboration a dynamic going concern:

(a) by setting operational objectives within national projects and programmes; and

(b) by establishing health councils.

Local councils at the district level are responsible for the follow-up and assessment of operational and specific objectives. Regional councils, at the governorate level are to set regional objectives in an integrated framework, such as rural development projects and integrated rural development projects, housing and drinking water supply projects, quality control of drinking water and food products and sanitation projects. All departments, as well as all organizations and nationally elected representatives, are represented on the higher health councils. Evaluation of this collaboration can only be undertaken after studying the objectives programme-wise and after selecting indicators.

1.6. International cooperation

International cooperation in health is coordinated by the Ministry of Public Health which is the executing agency for all projects. Bilateral cooperation with European countries is mainly in areas of training, research or technical cooperation. With USAID cooperation at present is mainly in rural health development, with three principal components: extension of the basic health facilities network and of the first level of referral including maternity beds in four rural governorates, orientation of paramedicals to broaden their scope of work, and upgrading of the management system. A similar project supported by the World Bank is being implemented in eight governorates. A USAID grant finances technical cooperation and fellowships abroad, particularly in the areas of administration and health management. The national family planning programme is supported by UNFPA and USAID. USAID is also supporting the development of a unit for visual aids in the National Institute for Health. Cooperation with Japan in the areas of food and drug control has permitted a real transfer of modern technology. Cooperation with UNICEF, UNDP and other agencies covers different PHC activities: MCH, water, sanitation, etc.

2. HEALTH STATUS

Data on mortality and morbidity are not yet complete. Hence the Ministry of Public Health is paying great attention to mechanisms and resources to build up a national health information system which should provide complete and accurate information support to the development and management of the health system.

Mortality figures indicate a rate that fluctuated between 16 and 19 per 1000 till 1968, then regularly declined and is estimated at present at 11 per 1000. The infant mortality rate now is about 80 per 1000, from a level around 135 in 1968. The expectation of life at birth increased from about 55 years in 1968 to 58 years in 1981. However, the nutritional status of children and mothers of child-bearing age, particularly in rural areas, still needs improvement, as shown by dietary surveys and by morbidity data from MCH centres.

Communicable diseases continue to play an important role in the country's morbidity and mortality, particularly among certain population groups such as infants and young children. That they still exist shows that social conditions could be improved by a more equitable distribution of resources and by increased self-reliance in the community.

Cholera is characterized by the occurrence of rare and sporadic cases in certain areas where the sanitation and health education effort could be intensified. Typhoid, viral hepatitis, helminthiases and other water-borne diseases still remain a major problem, the magnitude of which has not decreased during the past decade. The control of infant acute diarrhoea is a priority, for diarrhoea represents a serious hazard for the young child, and particularly the infant, and ranks first among the causes of mortality and second among those of morbidity for that age group. The evaluation of this programme, which has been extended to cover all regions, has shown a marked decrease in morbidity and mortality in the areas where an objective assessment has been possible.

Studies on the distribution and prevalence of schistosomiasis have shown that it is limited geographically to some foci in the south and to one focus in the centre of the country. It has been observed that transmission has completely stopped for the past three years. The identification of endemic areas has shown that 200 000 inhabitants were at risk and that transmission was made possible by the presence of the intermediary host in 41% of the watersheds (natural and man-made storage facilities) identified in the endemic area. Malaria, which in the past was endemic, particularly in the northern part of the country, decreased rapidly before being totally eradicated in 1979.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy, progress

Commitment to HFA/2000 exists at the highest decision-making level. Since 1979, new approaches have been sought to increase the coverage of the rural population through task-oriented training of paramedical personnel

and delegation to the latter of wider responsibility, particularly in family planning, pre- and postnatal care and child care.

Among the primary activities of basic health centres, priority was given to the integration of national programme activities to combat social ills. The results of the integration of these activities in the centres have been assessed as follows: national immunization programme 64%; malaria eradication 80%; control of tuberculosis 80%; bilharzia eradication 20%; control of diarrhoeal diseases 59%; school health 30-100%; occupational health 0%; family planning 70%; prenatal care 40%.

For the preparation of the Sixth Five-year Plan, several study groups have been formed to assess the population coverage; figures are given in the tables (see Annex to Part I). The regional urban/rural discrepancies in terms of health care facilities, equipment, transport, quantity and quality of manpower and quality of services have been also analysed to orient the distribution of resources. As the health strategy calls for more efficient use of the infrastructure and for expanding the health network, the new investments were concentrated in the areas of basic infrastructure, maintenance and upgrading the equipment of existing facilities.

The budgets of the directorates of health services in the governorates were increased to strengthen their administrative and technical capabilities. Focal points have been created in the regions to coordinate inputs from central and regional levels. Special efforts are being made to develop regional or local capabilities for training. Regional committees for continuous education have been created with the support of the medical schools.

3.2. Efficiency

During the past few years training has been further decentralized; discrepancies within and between the regions have been reduced. All peripheral facilities have been staffed by qualified nurses, and trained midwives are available in all rural districts. This has facilitated the improvement in the quality of services offered to the communities and the development of the services themselves. The availability of physicians from the local geographical areas has helped the development of multipurpose teams which, in turn, facilitated the establishment of continuous outreach programmes and the provision of preventive services on a continuous basis.

The expansion of the health network, the orientation courses in PHC and the training in specific tasks have brought about an improvement in contact with the communities and an increase in their involvement resulting in, e.g. offers of land to build health facilities, donations of lodgings by people from the communities and participation in discussions to find solutions to health problems.

According to the strategy the cost effectiveness ratio of basic health services must be improved. A survey of the cost of health care at the start of the strategy, and another survey, a few years later, 5 years at least, based on a few selected indicators must be carried out in order to see how the cost-effectiveness ratio is developing. Such a survey has

been planned in cooperation with the Directorate for Studies and Planning as part of a computerized management system.

3.3. Effectiveness

The expansion of the health network, the improvement in management and logistics in most of the country, the increased availability of trained personnel, the orientation courses in PHC and the training in specific activities have all been effective in reducing the major causes of mortality and morbidity, particularly in young children. Family planning is also being provided with increased effectiveness due to easier access to services and better follow-up. The demand for preventive services and the confidence of the people in health services are increasing.

UNITED ARAB EMIRATES

The United Arab Emirates lies along the Gulf with a coastline of about 650 km. It covers an area about 77 700 sq.km, nearly all of which is flat desert except for the eastern side of the peninsula which is mountainous. It has a hot humid summer; the annual rainfall is less than 10 cm and occurs in winter when the temperature is milder. Sand storms blow in spring from the north and northwest.

Known before independence in 1971 as the Trucial States, it is composed of a union of seven emirates, the largest in area being Abu Dhabi Emirate constituting about 87% of the total area while Ajman, the smallest, is barely 259 sq.km or 0.33% of the total area.

Before the discovery of oil in 1958 the economy of United Arab Emirates was limited primarily to oasis agriculture, fishing, pearling and trade with neighbouring countries. Oil represented 95% of total exports and 70% of GDP, and it comes mainly from Abu Dhabi Emirate. The development of some industries such as cement, gas processing, and power production is being considered.

The United Arab Emirates has undertaken three national population censuses, the most recent in 1980. The main shortcoming is that the results on the population composition by nationality have not been released; this limits meaningful interpretation of the results since the migrants constitute some 70% of the total population. Vital registration is virtually non-existent, and demographic and socio-economic surveys are lacking.

The total population estimate for 1983 is 1.225 million of which 32% are in Abu Dhabi and 27% in Dubai Emirates, while the population of Umm-Al-Quain is less than 15 000 inhabitants. Only 32% are below 15 years of age, due to the bulge in the population pyramid by expatriates, particularly males, in the age group 15-44 years.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. National health policies, strategy, system

The Constitution of the country stipulates that health care is the right of every individual, and the State is responsible for providing that health care and facilities for the prevention and treatment of diseases. Thus the Ministry of Health is responsible for (a) preventive services; (b) curative services; (c) control of drugs, supplies and equipment and the pharmacy profession; (d) regulation of the private health sector; (e) direct supervision of all health services within the country; and (f) health supervision for treatment of citizens abroad.

The Government has adopted PHC as the long-term strategy to achieve the goal of HFA/2000. A national strategy has not yet been formally laid down though health services are nearly integrated. Action has already been started for its formulation which, it is hoped, will be completed during 1985. Health registration and instating family and health records have been completed as the starting point for introducing PHC, for citizens as well as for expatriates. Nominal financial participation of individuals in the cost of treatment has been introduced as a way of rationalizing health care.

The health system has three levels. Out-patient departments are being remodelled to serve as health centres providing integrated health services as the first contact. Then follow the secondary level health care with specialized services and tertiary level care with high specialties. Special clinics for workers have been established to provide occupational health services. Work is in progress for job description for all categories of the health profession in the public sector outside the Health Ministry.

1.2. Managerial process for health development

A permanent committee for planning has been established in the Ministry of Health. Implementation, however, is decentralized. The country has been divided into eight "health regions", one in Abu Dhabi and another in Al-Ain, both in the Emirate of Abu Dhabi, and a region in each of the other six emirates. There is difficulty, however, in finding trained individuals for managerial posts.

The "Federal" Ministry of Health is the main provider of health services; the Government of Dubai, the armed forces, police, and the national oil company have also their health services. There is technical and administrative coordination within the health sector, though not complete. There is a good link between executive organs in the Health Ministry and the various "health regions". The coordination within the health sector is formalized by legislation to prevent duplication of health services. Periodical meetings between the responsible health officials strengthen such coordination.

1.3. Community involvement

Some local governments in the emirates participate in providing health services, thus reducing the burden on the "Federal Government". However, direct involvement of local communities in the health service has not yet been developed. They may be involved in suggesting locations for dispensaries and health centres. Measures have been taken to intensify informing the public on their health problems through the various media and group meetings on such topics as communicable diseases, road accidents, cancer, smoking, heart diseases. The women's associations and the Red Crescent do play a role.

1.4. Mobilization of resources

Manpower and financial resources are allocated to the services and to the emirates according to needs. Data for 1984 show the following: the budget of the Health Ministry amounts to US$244 per person. Recurrent expenditures constitute 89% of the total budget. When we compare the 1984

budget with that for 1982, the total health budget was reduced to 76% of its 1982 level (for recurrent expenditure 75%; for development expenditure 90%). Looking at the details of recurrent expenditures, part 1 (salaries) is 105% of the 1982 level, part 2 (consumable items) 51%, and part 3 (non-consumable items: furniture, equipment, vehicles) just 45%. The above information related to expenditure by the "Federal" Health Ministry alone, and excludes other public expenditures on health, e.g. by Dubai Government, the municipalities, army and police and the national oil company. The current Federal expenditures on health represent 5-7% of the total Federal budget, while development expenditures on health represent about 0.7%. Expenditures by the Health Ministry represent just 1.5% of GNP.

No health manpower development plan has been laid down. However, there are continuous efforts for the training of manpower. The School of Nursing in Abu Dhabi has become a College of Health Sciences; a Faculty of Medicine has been established in the United Arab Emirates University, and training courses for medical and paramedical personnel are a regular activity. There are (1983), as personnel of the "Federal" Ministry of Health: 1278 physicians (or 10.4 per 10 000 population), 97 dentists, 3328 nursing/midwifery personnel.

In terms of physical resources there are 26 hospitals (of which 22 belong to the Health Ministry) with a total of 3801 beds (or 30.0 beds per 1000 population). There are 82 out-patient clinics and 25 community health centres.

1.5. Intersectoral cooperation

A plan for socio-economic development had been formulated in 1981 but has not been formally approved. Hence the health strategy has not been incorporated in an overall socio-economic development plan.

There is cooperation between the Health Ministry and other governmental bodies involved in health-related activities, through direct contact, bilateral or intersectoral ad hoc committees. Some of these agencies are: Ministry of Planning, Ministry of Public Works (housing); Ministry of Water and Electricity (safe water supply); Ministry of Agriculture and Fisheries (zoonotic diseases); Municipalities (waste disposal, environmental hygiene, food hygiene); Ministry of State for Cabinet's Affairs (training of manpower through the Institute of Managerial Development).

There has been rapid socio-economic development in the country, which has brought in certain health problems, e.g. the health problems of migrant workers, some diseases like malaria which have become endemic, increased motor vehicle accidents, marine pollution; occupational diseases. The Health Ministry is dealing with these problems through inter-ministerial committees on legislation.

1.6. International cooperation

The Government cooperates with several countries, directly or through sub-regional bodies. Thus, there is cooperation with other Arab countries in the Gulf in the areas of malaria control, PHC, collective purchase of drugs and equipment, legislation, and protection of marine environment.

The Government also cooperates with the Council of Arab Ministers of Health in the Arab Board for Medical Specialties and the Higher Committee for Pharmaceutical Affairs.

Technical cooperation with other countries, but no financial aid, is needed. Common language, culture, religion, even health problems should foster such a cooperation. Some differences in health systems and lack of trained manpower are the main obstacles.

There is continuous technical cooperation with WHO. The main areas of cooperation are in the preparation of health policies and strategies, health manpower development planning, and guiding PHC activities towards HFA/2000.

2. HEALTH STATUS

As mentioned earlier, vital registration is virtually non-existent and socio-economic surveys are infrequent. However, there seems to be gradual improvement of registration coverage (thus the crude death rate based on registered events increased from 1.9 per 1000 in 1981 to 2.8 in 1983). The crude death rate for nationals is estimated at 10.3 per 1000. The United Nations estimate of the overall crude death rate for 1980-85 is 4.0 per 1000. The registered infant mortality rate is 15 per 1000 (for 1984); it was 26 per 1000 in Ajman, which is the closest to estimates based on selected studies carried out in 1983, in Abu Dhabi (giving 35 per 1000) and in Al-Ain (giving 24 per 1000). The life expectancy at birth is 61.5 years for males and 65 years for females. The leading causes of death (registered events, 1983) were: diseases of the circulatory system; injury and poisoning; diseases of the respiratory system; congenital anomalies; and, neoplasms (all coming in order after "symptoms, signs and ill-defined conditions" which accounted for 36% of all deaths).

No statistical data are available on the nutritional status of infants and children but it is believed to be good.

There is a high incidence of malaria, although the numbers of cases are showing a continuous decrease from its peak in 1978, the average during 1981-83 was more than 6000 cases annually. There is also a relatively high incidence of mumps and measles; diphtheria, polio and tetanus on the other hand, are very uncommon. The registration of the new cases of tuberculosis is still far from being adequate despite an ongoing national control programme, but more than 500 new cases are reported annually. Similarly, intestinal parasites, dysenteries and infectious hepatitis are frequent.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy, progress

The health strategy has not yet been formalized. However, the two major aspects in the development of health care delivery were the recent adoption of a rationalization policy and the recognition of PHC as a means for implementing health policies to ascertain equity of distribution and

improvement in the quality of services. Thus the health policies are characterized by the following new trends:

(a) the adoption of PHC as a long-term strategy;

(b) the endorsement of the new health registration system and the issuing of family and individual health records that would lead, among other benefits, to reduction in unnecessary visits to health institutions and in drugs consumption;

(c) the payment of fees for medical services to enhance the sense of responsibility and participation of the beneficiaries. The returns are expected to cover just 10-20% of the expenses, so their introduction is not a means for financial gain;

(d) pre-employment health examination of expatriate workers;

(e) subcontracting to companies of some auxiliary hospital services (like food, cleaning, maintenance, etc.) to firms to reduce the administrative and financial expenses;

(f) transforming the dispensaries into health centres offering integrated health services.

Good coverage by PHC has been achieved, thanks to adequate financial resources. Action has been initiated to put down a detailed health strategy and plan of action, hopefully during 1985.

3.2. Efficiency and effectiveness

In the absence of a written strategy, it would be difficult to assess with certainty the effectiveness and efficiency of implementing the programmes. However, there has been apparent improvement in various programmes, particularly in the areas of malaria control, MCH and immunization. It may also be recalled that, according to estimates by ECWA, life expectancy in 1975 was 60 years and the infant mortality rate 65 per 1000.

There is an average of 2.92 consultations per person per year to the dispensaries and general outpatient departments, and an additional 1.65 visits to the specialized clinics. Other utilization averages are 4.1 antenatal visits per mother, and 4.5 visits per child to the MCH centres; ten hospital admissions with a total bed-stay of 574 days per 1000 persons. The bed occupancy rate was 83%. The above statistics relate to institutions belonging to the Federal Ministry of Health.

YEMEN

A mountainous yet fertile country, Yemen is situated in the south-west corner of the Arabian Peninsula. Its eastern border with Saudi Arabia merges in the desert region, Rub'al-Khali. The total area is 195 000 sq.km, with a coastline about 450 km long. Its economy is heavily dependent upon agriculture, which absorbs about 90% of the labour force. Agriculture is predominantly of a subsistence nature, and depends on erratic rainfall, causing considerable fluctuations in production; about 85% of the cultivated land is directly rain-fed.

The first population and housing census was in 1975; the de facto population was estimated at 5.258 million, in addition to 1.234 million emigrants abroad. More than 75% of the population settlements were of a size below 100 persons. The second census by CYDA (Confederation of Yemeni Development Associations) in 1981 gave a de facto population of 7.145 million (of which 6.439 could actually be recorded within the country), other than 1.394 million emigrants abroad. The UN estimate for 1983 is just 6.232 million.

Administratively the country is divided into eleven governorates. About two thirds of the population live in Sana'a, Taiz, Hodeida and Ibb Governorates. In fact, one half of the urban population (the latter constituting 12% of the total population) live in the cities of Sana'a, the capital, Taiz and Hodeida. The average household size is 6.14 persons.

1. DEVELOPMENT OF HEALTH SYSTEMS

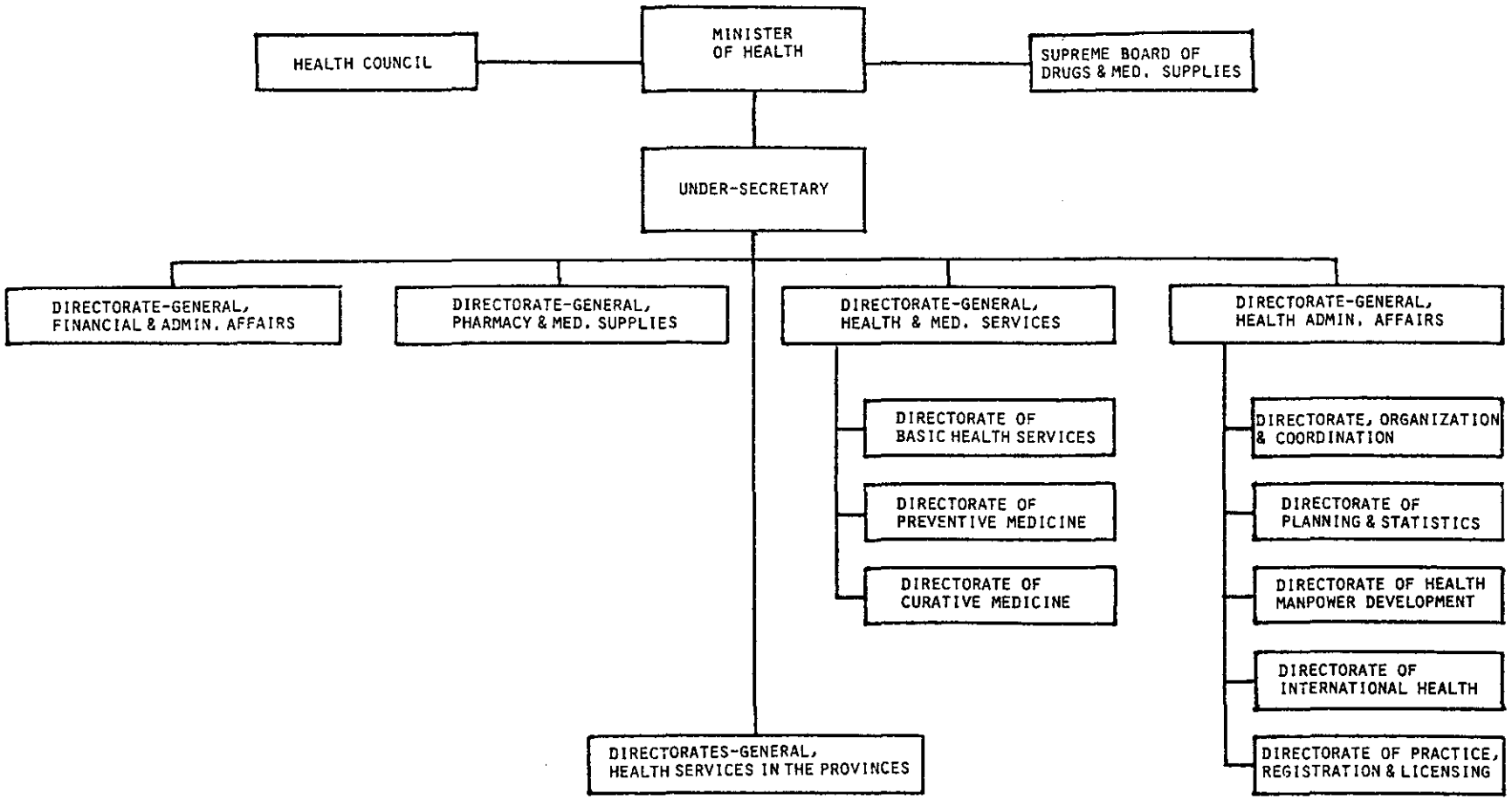
1.1. National health policies, strategy, system

The country's health policies take full cognizance of the social goal of HFA/2000, with PHC as the strategy to achieve that goal. The policies and strategies have been endorsed at the highest official levels. This is enshrined in the Constitution, Article 33 of which affirms that health is a fundamental right of every citizen, and that health services should be available free of charge to all Yemenis. The commitment for HFA/2000 is further reflected in the current Five-year Health Plan (1982-86).

The broad ideas contained in the strategies and plans of action still remain valid for HFA/2000 in their present form; hence it was not necessary to introduce basic changes into them. There is only a recognized need to further refine them by setting targets to be achieved, with specified physical, manpower and financial resources and within a time-frame. Because of the paucity of adequate and reliable information from sectors involved in health or health-related activities, not to mention the scarcity of health workers skilled enough to utilize the available information, it has not yet been possible to formulate the strategies in the desired form. PHC

YEMEN

ORGANIZATIONAL CHART, MINISTRY OF HEALTH



services are now mainly directed to that part of the society least served by the classical health services, in an attempt to remedy long-standing inequity in the provision of health care.

Presidential Decree 67/1977 directed the Ministry of Health to review its organizational structure with a view to establishing, inter alia, a Department for Basic Health Services and Primary Health Care (BHS/PHC). The latter became the Department (Directorate) of PHC in 1983, with all the elements of PHC brought under it. Conscious of the importance of having a strong central (ministry) level capable of developing sound and realistic health policies in line with HFA/2000, the Ministry has streamlined the activities of individual departments by grouping them, as appropriate, under one or another Directorate-General, while each department (directorate) is headed by a Director. Reorganization within the Ministry of Health (see Organization Chart) has somewhat improved coordination within the health sector, but there is still ample room for improvement.

Furthermore, the Health Ministry is pursuing a policy of decentralization of administration in the governorates. Here, the limiting factor is the lack of trained personnel who can shoulder such administrative responsibilities at sub-national levels. Other areas that require further strengthening include effective linkage within and between different levels of the health care delivery system, intersectoral coordination with other agencies executing health or health-related programmes, and convincing policy-makers that health care is an integral part of the overall socio-economic development and as such should receive its fair share of the national budget. The health plan has been fully incorporated into the national socio-economic plan.

1.2. Managerial process for health development

As mentioned above, activities of different departments and units within the Health Ministry have been streamlined and their responsibilities delineated. A technical unit for evaluation and research has been established. Basic elements of management have been introduced into the curricula of trainers/supervisors of community health workers and medical students.

The full impact of these measures has not yet been remarkable, but the situation is evolving. The will to train capable health managers is there, but relative shortage of staff to benefit from such training frustrates that will. Many nationals in the health professions perceive that they will be materially worse off in a management post without private clinical practice. This, in turn, has inevitably led to gross maldistribution of physicians, being concentrated in the few main towns.

1.3. Community involvement

The Government recognizes that acceptance of the goal of HFA/2000 entails unprecedented national effort to achieve it. In this context the Yemeni community, effectively organized around the Confederation of Yemeni Development Associations (CYDA) at the central level, its branches of Coordination Councils at the governorate level, and the Local Development Associations (LDAs) at the village level, all actively participate in the planning and implementation of PHC services.

Community involvement, however, is not uniform throughout the country, although the trend is encouraging. The LDAs mobilize the community to contribute in the form of free labour, construction material, payment for certain PHC workers, or contribution to other running costs of the services. The media are used to inform the population at large about their health.

Certain sociocultural factors may have an inhibitory effect on women's involvement in health activities; they do not come forward to be trained as local birth attendants. Such cultural barriers will yield in due course through the general education of women. On the other hand, ways are being explored to involve the newly established non-governmental organizations, e.g. Yemeni Women's Association, Yemeni Youth Association and Yemeni Red Crescent.

1.4. Mobilization of resources

The Government is engaged in activities to mobilize resources to enable it to carry through its health policies and plans. A systematic analysis of the needs for external support was carried out through a Country Resource Utilization (CRU) Review in August 1983. There is a sizeable input from outside sources.

Health expenditure in 1983 constituted 5% of the GNP. The Health Ministry has been allocated about 5% of the total government budget over the last five years (5.3% for the planned 1984 budget). It is interesting to note that the proportion is higher for capital expenditures than for recurrent expenditures; the proportions for 1982 were 7.1% and 4.3% respectively. It may also be noted that capital and investment expenditures constituted 57% of the total 1984 planned budget of the Health Ministry. The proportion of the Health Ministry's expenditures allocated to PHC was 32% for the regular budget, against 64% for the health development budget (referred to as project budget). Efforts are being made to improve the national health budget. The Ministry has initiated organized systematic operational research that will, eventually, find solutions for many health and health-related problems.

In addition, the health sector is an integral part of the national socio-economic plan. It is realized that improvement of the health status of the Yemeni community does not depend exclusively on the provision of medical care. It is such sectors as agriculture, housing, water, etc. that determine, in the long run and to a large extent, the health status of the community, and this has been taken care of in the health plan.

Qualified professionals, though very limited in number, are being assigned key posts where health management is their main responsibility. Some members of the health profession may not yet be fully oriented towards the PHC concept. The Government started an on-going exercise of educating and orienting professional and other staff in the PHC approach. New cadres of health workers are being trained, e.g. Community Health Workers (CHWs), Local Birth Attendants (LBAs) and Traditional Birth Attendants (TBAs). As the country is short of trained nationals in sufficient numbers, several doctors and other health workers are provided by friendly countries (particularly Arabic-speaking staff) through bilateral arrangements. A department for health manpower development is being finalized. The main

centres to implement that plan would be the Health Manpower Institute (HMI) and the Medical Faculty.

As of 1983, the ratios per 10 000 population were as follows: 1.3 physicians (44% of which were nationals), 0.05 dentists, 3.0 nursing/midwifery personnel (60% of which were nationals) and 0.3 PHC personnel.

PHC units are being established in increasing numbers in different rural areas. The attached tables (see Annex to Part I) give an indication of resources available. In 1983, for example, there were 34 hospitals and 50 dispensaries (with a total bed capacity of 5245 beds, or 6.8 beds per 10 000 population), 156 health centres and 206 rural health units and primary health units.

A health research unit has been established in 1982 in the University, and an evaluation and research unit in the Health Ministry. A workshop on research for health development was organized in March 1984. The two research units have since been combined into one unit.

1.5. Intersectoral cooperation

The national health strategy has been fully incorporated into the national socio-economic plan. Other sectors have their input to PHC, e.g. Ministry of Public Works (rural water development, construction of health facilities), Municipalities and Housing (environmental sanitation), Education (school health, health education) and Agriculture (rural development). Several multisectoral councils/committees exist but hardly function. There is no formal machinery for incorporating a health component into development schemes; if any, it is on ad hoc basis.

1.6. International cooperation

Through the Country Resource Utilization Review in August 1983 it was possible to make a systematic analysis of needs for external support, but the proposals were circulated to potential donors in the international community only in April 1984. Hence little has been received so far. In its efforts in general development, the Government cooperates with several developing countries where there are friendly working relationships. The Government receives considerable bilateral financial and technical support for its development programmes, particularly from Saudi Arabia, Kuwait, Netherlands, USAID, the World Bank and UNICEF. WHO has collaborated in the formulation of HFA policies and strategies, and provided sizeable support in many fields.

2. HEALTH STATUS

Reliable information that can give a comprehensive picture of the health status of the population is lacking, due to limited capabilities of the health information systems and services now existing in the Health Ministry. However, prevailing health problems conform more or less to those expected in a country designated as one of the least developed countries (see Annex to Part I). Salient features may be summarized here.

With high levels of fertility and mortality (crude birth rate estimated at 49, and the crude death rate at 22, both per 1000 population), infant mortality is high (about 159 per 1000 live births) and life expectancy is short (below 40 years). The country is at the beginning of the socio-economic development ladder. It is not surprising to find that poor sanitary conditions and widespread communicable diseases dominate the scene, contributing considerably to the high morbidity and mortality in the population. Reliable information on individual diseases is hard to come by. However, communicable diseases of importance include infectious childhood diseases, diarrhoeal diseases, respiratory infections including tuberculosis, malaria, schistosomiasis, intestinal parasites, dysenteries and malnutrition.

One particular socio-cultural phenomenon worthy of mention, widely prevalent in Yemen, is the chewing of khat (leaves of the Catha edulis shrub). Those dependent on this habit admit that socially, economically and health-wise, it is undesirable, yet it is difficult to give it up. The magnitude and significance of the khat-chewing habit as a health problem has never been adequately investigated in Yemen.

3. ASSESSMENT OF ACHIEVEMENTS

3.1. Relevance, adequacy and progress

Health policies in Yemen have been reviewed in the light of the social goal of HFA/2000. The health strategies, though not quantified, emanate from the declared health policies and are translated into the Five-year Health Plan (1982-86). The national health strategy has been fully incorporated into the national socio-economic plan. The Government has been exerting considerable efforts to remodel the health services according to the PHC approach.

About 25% of the rural population is covered by PHC services (PHC units and rural health centres) and this coverage is gradually building up. Financial resources allocated to the Health Ministry are reasonable as a percentage of the total budget but quite insufficient in absolute terms (US$12.3 per head per year actual expenditures in 1983). Considerable financial and technical support is received from a number of countries on bilateral arrangements. The proposals based on the Country Resource Utilization Review have been circulated to potential donors only recently; hence little has been received so far.

Appropriate health personnel are being trained to man health services based on the PHC approach. At the peripheral level community health workers and local and traditional birth attendants are delivering PHC services. Activities of different departments in the Health Ministry are being closely coordinated to improve health management. However, progress towards the HFA/2000 goal is being constrained by insufficient numbers of nationals trained in managerial posts in the health sectors.

Not all components of PHC are developed to the same extent. Treatment of minor ailments, EPI, MCH and health education are relatively more developed than other components. About 30% of the total population have access to presumably safe water, but the gap between urban (95%) and

rural (6%) populations is alarming. Furthermore, only an estimated 12% can avail themselves of adequate sanitary facilities. About 17% of children under 5 years in the operational areas have been covered by vaccination.

3.2. Efficiency

A substantial part of the effort spent was directed towards overcoming some negative influences and obstacles before producing positive results, so that seemingly much effort has been exerted to bring about few positive results. It is hoped that this will not continue for long in future. Several health centres have been upgraded to enable them to be used for training PHC workers, and this in turn has improved the services provided by them. Inadequate equipping and staffing of health services (occasioned by insufficient resources) have been the main constraint. It is felt that the quality of health care has marginally improved since adoption of PHC.

3.3. Effectiveness

The community as a whole has responded well to the PHC services whenever such services have been introduced. The overall impact of improved health services which can be taken to mean health problem reduction cannot be gauged at this stage. It can be safely assumed that some disease reduction, especially for childhood diseases whose prevention is amenable to vaccination, has taken place. The prospect is promising, but the country has no illusion about the tremendous work ahead before reaching the goal of HFA/2000.

THE PALESTINIAN POPULATION

(This chapter is included in the Report in accordance with resolution EM/RC31A/R.7 of the Regional Committee for the Eastern Mediterranean).

DEMOGRAPHY

The Palestinian population, a total of nearly 4.5 million, are scattered throughout the world, but are mostly concentrated in the Middle East and North Africa. Of these, about 2.5 million have been integrated into the host countries (one-third in Jordan and two-thirds in other countries). Obviously, the socio-economic and health situation of these Palestinians cannot be separated from the trends in the host countries.

Just over 2 million were registered refugees with UNRWA, as at end June 1984. They are distributed over five geographical areas called "fields of operation", as follows (in thousands): 256 in Lebanon; 325 in Syrian Arab Republic; 782 in Jordan; 351 in West Bank and 411 in Gaza Strip. The number of refugees eligible for health care services by UNRWA is about 1.8 million, or 88% of those registered.

With a high crude birth rate of about 46 per 1000, children under 5 years constitute 18%, and those under 15 years 47%, of the total population. The average Palestinian family consists of seven persons. About one-third of the registered refugees live in camps and two-thirds live in cities, towns and communities. As is usually the case with refugee populations, the unemployment rate is high, 81%.

Population displacements of sizeable magnitude have been taking place among Palestinians during the past two decades. This explains an overall average annual rate of increase of 3.5%, compared to 4-4.7% in the Gaza Strip and West Bank. More recently, forceful deportation of Palestinians by Israeli settlers in the occupied territories (who now constitute about 10% of the population in the West Bank and Gaza Strip) is now in progress.

1. DEVELOPMENT OF HEALTH SYSTEMS

1.1. Health policies, system

The Special Committee of Experts appointed by WHO to study the health conditions of the inhabitants of the occupied Arab territories noted in their report that the responsible Palestinian authorities in these territories are not aware of the written document defining health policy. In addition, the Committee's report pointed out that the definition of health policy and the political commitment essential for achieving health

for all are not in the hands of the local authorities. The determination of health policy in the occupied Arab territories is a prerogative of the occupying authorities.

The level of health services provided for the Palestinian population is very much dependent on the availability of these services in the host country and also reflects their place of residence. Thus camp residents use UNRWA facilities with ease of access. Other refugees living in towns or remote villages at a distance from the nearest Agency health centre tend to share local community facilities, whether private, voluntary or public. The multiplicity of methods and coverage provided by these facilities and the differences in their operational systems and goals make it all but impossible to identify a single system by which health services are provided, and certainly impossible to identify the system by which the attainment of the goal of HFA/2000 might be achieved.

Under the professional guidance of WHO, UNRWA provides medical services to about 1.8 million eligible Palestinian refugees, and to locally recruited UNRWA staff members (and their dependents) who are not participating in Agency-sponsored insurance schemes. The emphasis is on preventive care, through MCH clinics, school health and health education programmes, supplementary feeding to assure satisfactory levels of nutrition, and environmental sanitation in the refugee camps. Services are made available at various health establishments, either run by UNRWA or by governments, universities, private or voluntary organizations, subsidized by the Agency, or paid for on a fee-for-service basis and this is the case in each of its five fields of operation.

The Palestine Red Crescent Society is the only manifestation of an indigenous system to provide health facilities for the Palestinian population. In addition to field activities they run a hospital and school of nursing. However, its limited resources prevent expansion of coverage and limits its effectiveness. In many areas they are dependent on voluntary work by members of the community. Examples of this can be found in the blood banking system, in the emergency and ambulance services, and in medical and nursing work in the hospitals and clinics.

There are numerous charity and voluntary organizations that contribute, to a limited extent, to the total of health services available to the Palestinian population. Some of the refugee population have access to insurance schemes whilst others, who can afford payment for some of these services, receive them direct, through their own arrangements.

The Israeli authorities in the occupied Arab territories share in the provision of health services since service beyond a certain technical level necessitates referral to the Israeli hospitals. Such provision is generally linked to the payment of health insurance contributions, i.e. those who are not insured do not receive free health care. About 37% of the population in the West Bank and 80% in Gaza Strip are insured.

1.2. Managerial process for health development

The Director of Health, UNRWA is responsible to the Commissioner-General of UNRWA for the planning, implementation, supervision and evaluation of the health and supplementary feeding programmes within

the approved budgetary limits. Services are provided under the professional guidance of WHO. Thus UNRWA has accepted WHO guidelines on the managerial process for health development. Through the establishment framework it has undertaken the related activities with special emphasis on PHC and its components.

This approach is not universal for other providers of health services. As has been mentioned earlier, the determination of health policy in the occupied territories is a prerogative of the Israeli occupation authorities. Hence, planning is under their direct supervision without the participation of the populations concerned themselves. The Special Committee of Experts have noted that there is no medium- and long-term planning; health activities are based on a short-term planning concept. Similarly, management of the health budget is the responsibility of the occupation authorities. The local health staff make efforts to analyse the health situation, but this is not supported by a fully adequate system of statistical information or by epidemiological or social surveys concerning the utilization of services, attitudes, needs, etc.

In fact, the Special Committee of Experts reported that "the operation of a managerial process, the formulation of a policy and appropriate plans, collaboration with other sectors concerned, programme budgeting - in short the entire dynamics of development, can be achieved only to a limited extent within the present context; it is therefore not surprising that the principles laid down by WHO concerning the Global Strategy for Health for All cannot be applied in their entirety in the Occupied Territories".

The efforts of the numerous charity and voluntary organizations contributing to the health services of the Palestinians, though very much based on their goodwill, are far from being effectively coordinated and collectively oriented towards a common goal.

1.3. Community involvement

It is clear from the above that the community is not involved in the planning and management of health programmes. However, there is reasonably good involvement in the implementation of services.

Examples have been given above of the voluntary work of community members in the activities of the Palestine Red Crescent Society. Similarly, there is commendable community involvement in the work of UNRWA, particularly in the area of environmental health. Through the self-help efforts of the refugee communities, essential work has been carried out.

Refugee communities have paved pathways, constructed surface drains for the disposal of rain water, laid sewer lines, improved water supplies and reconstructed family latrines in camps which were hit by fighting. Refugees have also improved their family shelters, which are, typically, not only overcrowded but also poorly insulated against the sometimes extreme climate. The substantial community effort to restore wastewater disposal systems and reconstruct latrines in the South Lebanon and Beirut areas has done much to prevent epidemics.

1.4. Mobilization of resources

UNRWA's health services budget for 1984 was close to US$44 million (or US$24.5 per refugee). This represents 18.7% of UNRWA's total budget (up from 17.4% in 1981 and 14.4% in 1982). By activity, 46% of UNRWA's budget for health services goes to medical services, 21% to supplementary feeding, 17% to environmental sanitation and the balance (16%) as share of common costs.

The budget provided by the occupation authorities for health services is very small and is progressively decreasing in view of the constant devaluation of the local currency (Israeli Shekel). The budget for health services in the West Bank constitutes just 2% of that for Israeli health services. It was about $10 million in 1983; of this amount 70% is allocated to hospitals, 28% to public health and 2% to training. Again, 30% is taken from the budget and paid to the Israeli health institutions for treatment or examination of Arab citizens. It should be noted that the budget is concentrated entirely in the hands of the occupation authorities.

Health insurance was introduced by the occupation authorities in 1978, and applied to the following categories: government, village and municipal council employees including those who had retired, and on a voluntary basis for other categories. The cost of insurance has increased to $15 per person per month, which is a great deal in terms of the wages paid, particularly as additional fees have to be paid for services (reaching $150 per day for hospitalization). The money collected from health insurance is not spent on developing the health system for the insured population. It should be recalled that the unemployment rate is 81%.

UNRWA runs 98 health centres and posts for out-patient services (in addition to 25 run by governments and one by a voluntary agency. The Agency also operates 30 dental clinics, three central public health laboratories (in Gaza, Jerusalem and Amman) and 24 clinical laboratories at main health centres. MCH services are provided at 85 health centres. It runs a small hospital in Qalqilya (West Bank) with 65 beds, and operates, jointly with the Public Health Department in Gaza, the 70-bed Bureij Tuberculosis Hospital. Other hospital and specialist services are subsidized at 41 government, university and private health institutions with a total close to 1400 beds. There are nine maternity centres run by UNRWA (one in the Syrian Arab Republic field, two in the West Bank and six in Gaza). There are 65 nutrition/rehabilitation clinics and seven school health teams.

The health personnel in UNRWA include 157 physicians, 21 dentists, 126 nurses, 56 midwives, 311 auxiliary nurses and 49 traditional midwives. There are no health manpower development plants.

Limited research has been carried out by UNRWA. For example, with the changing demography of the refugee population, a three months' prospective study was conducted during 1983/84 based on data from two diabetes clinics in each of the five fields. In addition, a retrospective study of risk factors connected with infant deaths was carried out among the entire camp population in the West Bank.

1.5. Intersectoral cooperation

In the absence of defined policies and strategy, and of defined responsible sectors in the community, discussion of intersectoral cooperation seems irrelevant. Yet there is no doubt that the basic understanding for the necessity of this cooperation exists in the Palestinian community, particularly in health-related activities. In some areas outside the sphere of the camps there are good examples of cooperation between local authorities, municipalities, water and sewage authorities.

1.6. International cooperation

This has been the cornerstone of health services offered to the Palestinian population. It has continued as in past years, but due to financial difficulties prevailing in many of the donor countries, international help is diminishing.

It may be reiterated here that, with the exception of the cost of international staff (paid by the UN, WHO and UNESCO), UNRWA's budget is financed almost entirely by voluntary contributions in cash and in kind, mainly from governments, and the remainder from non-governmental and miscellaneous sources. The work of the international organizations in this respect cannot be overlooked. Thus, in addition to UNRWA, other UN agencies such as WHO, UNICEF and UNDP have cooperated in providing health and health-related services to the Palestinian population.

Very little, if anything, is done towards coordinating the activities of the various charity, and voluntary organizations operating in the occupied territories. The situation in Beit-Jallah Hospital is an example. Situated in the Bethlehem district, this hospital is owned by a Swedish philanthropic society which is responsible for its development. With 65 beds (said to have been reduced to 54 beds), it has 18 physicians, while there are insufficient physicians in PHC. Moreover, there is a lack of ambulances and of nursing staff. This reveals a certain disparity and illustrates the need to re-evaluate planning criteria with a view to striking a better balance between PHC and hospital services development.

2. HEALTH STATUS

Data on health status are not complete or sometimes contradictory, the reason being perhaps different methods of data collection. Estimates of vital rates depend upon the source (and, in turn, upon the population covered) as well as upon the locality. Estimates by UNRWA were 8-25 per 1000 for the crude death rate, 44-66 per 1000 for the infant mortality rate, and 5.0 per 1000 for childhood (1-4 years) mortality rates. On the other hand, the Palestine Red Crescent Society gave an overall crude death rate of 5.9; an infant mortality rate of 44 and a childhood mortality rate of 5.0, all per 1000. No data were available on life expectancy. With regard to the nutritional status of children, the percentage of those with low birth weight was 2.3-4.5%, and that of children aged under five years who are below weight for age standards was 2.3-9.4%. However, according to studies undertaken by the Palestinian Medical Relief Committee, 12% of children in the Ramallah District (West Bank) were malnourished and child

growth rate indices were "considered to be very low". A report by the Special Committee mentioned that 8% of refugee infants suffered from malnutrition, and that protein-calorie malnutrition affected 7% of children aged under three years.

Respiratory diseases are the leading cause of morbidity and death among children, particularly in Gaza; in fact upper respiratory tract diseases of children account for 45% of the causes of hospitalization. Diarrhoeal diseases account for 30-35% and are the major cause of infant mortality, probably owing to poor environmental hygiene. It was found in a study that 60% of school pupils suffer from intestinal parasites; ascaris, giardia lambia, entamoeba histolytica and taenia (mostly saginata) are the most common.

Considering the EPI-target diseases, an analysis of the epidemiological situation showed that some diseases have taken on epidemic dimensions. A diphtheria epidemic occurred in the West Bank during 1979 and 1980 (but only two cases during 1980-84). A poliomyelitis epidemic in the West Bank and Gaza lasted from 1974 to 1980 (with an average of 58 cases annually, and came down to 3.5 cases annually during 1981-84). A measles epidemic occurred recently in the West Bank and Gaza (about 4200 cases were reported in all UNRWA fields of operation during 1981 and 1982), though its increase between 1983 and 1984 was mainly in Jordan.

With respect to other communicable diseases, 25 cases of cholera were reported in Gaza in 1983 (none in 1984). Ten cases of cutaneous leishmaniasis were reported in 1984 (divided equally between the Jericho, West Bank and Aleppo (Syrian Arab Republic), areas. There were also the following reported numbers of cases during 1984: childhood diarrhoeas 48 298; dysentery 4840; enteric fever 386 (almost all in the Syrian Arab Republic); infectious hepatitis 861; influenza almost 30 000 (mainly in the West Bank and Gaza Strip); conjunctivitis 25 064; chickenpox 11 338 and mumps 6535.

Chronic diseases, chiefly cardiovascular conditions, kidney diseases, cancer and blood disorders are inreasing from year to year to become a leading cause of morbidity and death among adults. Psychiatric illnesses and mental disorders are increasing because of the violence stemming from the political and social situation.

3. ASSESSMENT OF ACHIEVEMENTS

Relevance of the programmes to the total needs cannot be judged, as no single programme has been identified to cover the entire population. Moreover, in the absence of a set plan of action, progress and efficiency cannot be verified. However, if effectiveness is judged by the results obtained, available data show that the programmes were individually effective.

An account has been given above on the health status of the Palestinian population which is an indirect indicator of effectiveness. Some data on utilization of services could be another indirect indicator. It should be stressed here that data on the twelve Global Indicators are only available for Global Indicators numbers 7 and 8.

Regarding outpatient medical care during 1984, some 45% of those eligible for UNRWA health services attended, with an average of 3.2 consultations per patient. Only one in 30 refugees is treated by an UNRWA dentist each year. Though 0.79 beds were available per 1000 population, the percentage used of total bed days made available (by UNRWA) was 92%, with an average of 174 bed days used per 1000 population.

Assuming a birth rate of around 40 per 1000 of the eligible refugee population, it may be said that the deliveries attended by UNRWA MCH services represented about 52% of the expected number of deliveries. Of these deliveries, 38% still took place at home, the majority being attended by Agency-supervised traditional birth attendants; the remaining 62% of the deliveries took place in hospitals. Even the figures for the Gaza field, which is the only field that provides maternity services as part of the camp health services, show that 44% of the deliveries took place in the government hospitals, 32% in the camp maternity centres and 24% only at home. Only two maternal deaths were reported from the West Bank field; the stillbirth rate reported was 10 per 1000 total births registered.

About 59% of the newborns were registered in the MCH service, and 77-98% of children under five years. The percentage of infants under one year of age fully immunized ranged between 85-100% for the individual vaccinations, though it reached 70% for measles vaccination in Jordan. Immunization of pregnant women with tetanus toxoid is implemented in Gaza and Lebanon fields (coverage 75-80%) but will be extended to other fields.

Statistics on camp sanitation services show that the percentage of population served by private latrines was 98%, but the overall percentage for all eligible refugees wsa 50-85% in the different UNRWA fields. The corresponding overall percentage for access to safe drinking water was 70-100%. The annual average supply per capita per day was 18.4 litres (range 12.1-34.0 litres).

Regarding UNRWA's education and training programme, 22 trainees sponsored by UNRWA graduated in medicine and one in nursing, for the academic year 1983/84. The numbers of those still attending their studies were 108 in medicine, 5 in dentistry and 16 in pharmacy. In addition, 90 graduated from their vocational training (for different categories) while 206 were still following their vocational training.

CONCLUSION

In the view of the Special Committee of Experts, "The health and health-related problems examined by the Committee would, in a normal situation, be mainly the responsibility of the health services. In the particular context of the occupied territories, the solution to these problems no longer lies within the scope of doctors or health organizations alone. The problem of the population's health in the sense of WHO definition can be resolved only as a result of political action, for there can be no health without peace, liberty and justice."

INDEX

Page numbers preceded by I- refer to pages in Part I, by II- to pages in this part