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REPORT OF THE WORKING GROUP ON FERTILITY STUDIES AND EVALUATION OF POPULATION PROGRAMMES

(Addis Ababa, 26-30 January 1970)

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INTRODUCTION

1. The Working Group on Fertility Studies and Evaluation of Population Programmes was organized by the Economic Commission for Africa at its Headquarters, Addis Ababa, from 26 to 30 January 1970 in co-operation with the United Nations Population Division and the Office of Technical Co-operation. It was attended by representatives of the following members and associate members of the Economic Commission for Africa: Algeria, Burundi, Cameroon, Democratic Republic of the Congo, Dahomey, Ethiopia, France, Ghana, Kenya, Nigeria, Senegal, Sudan, Tunisia, the United Arab Republic, the United Kingdom and Zambia. Representatives of the United Nations Population Division, the United Nations Development Programme, the Food and Agriculture Organization of the United Nations, the International Labour Organisation, the United Nations Children's Emergency Fund, the World Health Organization, the United Nations Educoation, Scientific and Cultural Organization, and the Cairo Demographic Centre and also Population Programme Officers of the United Nations,working for the African countries took part in the Working Group. There were observers from the Federal Republic of Germany, Kenya, Sweden, the United States of America, the International Planned Parenthood Federation, the Organization for Economic Co-operation Development and the Ford Foundation. The list of participants is given in Annex I.

2. The Working Group was opened by Mr. J. Jeffrey-Coker, Officer-in-Charge of the Economic Commission for Africa, on behalf of the Executive Secretary, who also read the Executive Secretary's address. In his opening address, the Executive Secretary drew attention to the generally high fertility levels obtaining in the African countries, their demographic and economic implications and the need for comprehensive studies on fertility trends as well as the inter-relations between fertility and economic and social variables. He also stressed the importance of ensuring that evaluation schemes are built from the start into population programmes sponsored by governments or by non-governmental organizations so that the effects of the programmes might be assessed on a scientific basis. The countries were invited to assist in the proposed co-operative project of pilot studies on fertility, infant mortality and the evaluation of population programmes.

3. On behalf of the United Nations Population Division, Miss G. Johnson outlined the present population programmes for the region sponsored by the United Nations and assured the delegates of its continued and strengthened support.

4. Mr. S.B. Jones (Ghana) was elected Chairman of the Working Group and Mr. T. Kilani (Tunisia) Vice-Chairman.

5. The Working Group adopted the provisional agenda (given below) and the time-table.

Agenda

1. Opening Addresses.
2. Election of Officers.
3. Adoption of the agenda.
4. Country statements.
5. Levels and trends of fertility rates and differentials in African countries.
6. Fertility surveys and studies.
   (a) Fertility surveys;
   (b) Fertility studies.
7. Population programmes in the African countries.
8. Evaluation of population programmes including family planning
   (a) In countries with official population policies;
   (b) In countries with voluntary family planning agencies.
9. General - guidelines for fertility studies and evaluation of population programmes - survey design, questionnaire, analysis, etc.
10. Pilot fertility and infant mortality studies.
11. Other business.
12. Adoption of the draft report.

COUNTRY STATEMENTS

6. Statements were presented by delegates from the participating African countries describing the position of fertility surveys conducted in their countries population programmes, official policies and their implementation and the activities of voluntary or private organizations; evaluation of population programmes. It is proposed to reproduce the country statements, suitably summarized, in a subsequent publication. Only a few of the more notable facts in the Country Statements are mentioned below.

7. Algeria

(a) Fertility: Prior to the 1966 population census various estimates of crude birth rates were obtained from the birth registers, without and with adjustment for under-registration. These estimates indicated a crude birth rate of 44 to 46 per 1,000 population, a gross reproduction rate of 3.2 and an infant mortality of 150 per 1,000 children born. The respective rates derived from the 1966 population census (distribution by sex and age) are: birth rate 47 to 48 per 1,000; death rate 16 to 17 per 1,000; G.R.R. 3.5 to 3.6. A special fertility enquiry is now being planned.

(b) Population programmes: There is no official population policy. It is recognized that rapid population growth is an impediment to development. However, family planning is considered a health and socio-economic problem of the individual and therefore it is up to the individual to decide in consultation with the physician. Induced abortions and sterilization are not permitted as methods of birth limitation.

There are no voluntary organizations specifically engaged in the field of family planning. There is a semi-private Algerian Association for Demographic, Economic and Social Research which deals with various socio-demographic problems (including those related to family planning) in co-operation with the National Commission for Population Censuses.

8. Cameroon

(a) Fertility: A population survey (with a varying sampling fraction) was carried out in 1964. It provided data on fertility, mortality, migration and other socio-economic characteristics of the population. From these data the estimated population for 1969 is approximately 6 million.

The rate of population growth for the whole of Cameroon was estimated at 2.3 per cent in 1964. For West Cameroon the crude birth rate was 50 per 1,000; general fertility 178; G.R.R. 3.1; N.R.R. 1.8; infant mortality 138.

(b) Population programmes: The government does not contemplate any measures to limit population growth until the population reaches 15 million. On the contrary, there exist economic and social incentives to encourage population growth, e.g.: paid maternity leave, children's allowances up to a maximum of 6 children.

Interruption of pregnancy or prevention of a birth is left to the decision of the physician.

9. Congo (Kinshasa)

(a) Fertility: From a retrospective fertility enquiry, carried out in 1955 (using a varying sampling fraction and covering 11 per cent of total population) a crude birth rate of 45 per 1,000 population and general fertility rate of 203 per 1,000 females aged 15-49 was obtained. Differential rates obtained show a large variation between regions: the C.G.R. ranges between 20 and 55 per 1,000. The regions are, moreover, heterogeneous with regard to fertility. Thus, within the high fertility province of Katanga (average C.B.R. 52 per 1,000) there are areas with a C.B.R. as low as 37 to 40 per 1,000. Even more striking are the differentials within the former Leopoldville province. Differential rates have been obtained also for urban/rural areas and by age of females.

(b) Population programmes: Due to the lack of the required information and particularly to the lack of demographers there is no official policy or programme relating to population growth and related problems.

10. Dahomey

(a) Fertility: A national demographic survey (with a varying sampling fraction in urban, rural administrative areas) was carried out in May - October 1961. The results obtained provide differential rates of fertility by age and administrative area. Rates obtained for the country as a whole are: birth rate 54 and death rate 26 per 1,000 population; general fertility 227 per 1,000 females aged 15-49.

Another national demographic survey is planned for 1970/71. This will also be a retrospective enquiry. It will be followed, if finances are available, by a more intensive special study of fertility extending over a whole year with 2 to 4 visits and revisits.

(b) Population programmes: No official population policy exists in the country.

11. Ethiopia

(a) Population Growth and Fertility: Estimates made by the Central Statistical Office show an acceleration in the rate of growth of population from 1.7 per cent in 1962-63 to 2.3 per cent in 1966-67. The need to initiate and to evaluate health and other development programmes necessitated the launching of various methods for the collection of information on health statistics and epidemiological data: these have started only recently, and although much has been accomplished in a short time, not all the needed data are yet available. Though registration is lacking, rough estimates based on Sample Survey and various studies place the average birth rate at 40.3 births /1,000 persons; the general fertility rate at 143 live births /1,000 women 15-44 years of age; infant mortality rate at 152 deaths

/1,000 live births (about 59 per cent of this loss takes place during the first two months of life); the average number of children per woman to be 4.4; and the average life expectancy at birth at 35 years.

(b) Population programmes: Infant mortality is relatively high and life expectancy low. The main problem at present is therefore, to improve and strengthen the basic health services. So far, family planning services have been provided by all government medical institutions to individual families according to their needs and wishes. Family planning activities on a wider scale are operated by a voluntary organization, the Family Guidance Association. This Association was established in March 1966 as a non-profit-making private organization under the Haile Selassie I Foundation. At present there are 21 institutions in and around Addis Ababa and 39 other institutions in the country that participate in the Family Training Programme Services.

12. Ghana

(a) Fertility: A comprehensive fertility enquiry was made part of the 1960 Post-Enumeration Survey (5 per cent sample) followed by the Ghana Population Survey 1966 (3 per cent sample). Apart from these official enquiries a few private studies were made by Ghana University academic staff. Rates obtained vary: birth rates - between 47 and 52 per 1,000 population; general fertility - between 202 and 206 per 1,000 women aged 15-49; gross reproduction rates between 2.6 and 3.1 per female and infant mortality - between 126 and 160 per 1,000 live births. The higher rates are mostly the adjusted ones.

(b) Population programmes: Ghana's official population policy is contained in the pamphlet "Population Planning for National Progress and Prosperity" (March 1969). The policy aims at: reducing fertility, morbidity and mortality; control of internal migration to avoid over-urbanization; control of foreign immigration according to the needs of the country. Implementation

of the policy for the reduction of fertility is proposed through financial "disincentives", enlightenment of the individual and family planning clinics. This latter activity is being carried out by the Planned Parenthood Association of Ghana working in close co-operation with the Government. Foreign immigration is being controlled and aliens not in possession of a residence permit have to leave the country.

13. Kenya

(a) Fertility: A fertility enquiry was part of the 1962 Post-enumeration Survey (10 per cent sample). A similar enquiry was also carried out in connexion with the 1969 Population Census but this time the enquiry was built in (as a 10 per cent sample) to the Census itself. The results of the 1962 census (age distribution) and of the P.E.S. were adjusted and the most "plausible" were accepted for projection purposes. The rates range: birth rates - between 48 and 58 (official - 50); total fertility - between recorded 5.9 and adjusted 7.0 (the latter accepted officially); G.R.R. - between 3.0 and 3.3.

(b) Population programmes: In 1967 the Government inaugurated a family planning service aimed at reducing the rate of population growth from its present level of 3 per cent per 1,000 population. Family planning activities are carried out by the Government and Nairobi City Council as well as by private voluntary agencies such as the Family Planning Association of Kenya which work in close co-operation with the Government.

(c) Evaluation of population programmes: An evaluation scheme has been established and data are already being collected.

14. Morocco

(a) Fertility: Before the 1960 Population Census, attention was concentrated on the growth of urban centres. Censuses since 1935 have shown a stable age distribution. The average growth rates for 1935-1952 was 1.6 per cent and for 1952-1960, 3.2 per cent. Taking account of an under-enumeration in 1952 an adjusted growth rate of 2.7 per cent was obtained for 1952-1960. A fertility enquiry was conducted as part of the national multi-purpose sample survey in 1962. The results obtained give differential rates by area and age. Rates for the whole of Morocco are: birth rate 46.1 per 1,000 population and general fertility 216 per 1,000 females aged 15-49. In 1966/67 a KAP type survey was undertaken in towns, urban centres and rural areas. Results relating to towns have already been published.

(b) Population programmes: The family planning programme is one of the priorities of the 5-year development plan for 1968-1972. Its demographic objective is the reduction of the crude birth rate by 10 per cent by 1972. The 3 social and health objectives are: enlightenment of the public on matters of family planning so as to enable the individual to choose the right number of children at the right time; solicit voluntary assistance in the field of family planning from the population for those requiring it; provide medical facilities. In practice, the medical service of the family planning programme works in co-operation with the public health and other services, providing contraceptive products and advice; one of its targets is the insertion of 500,000 IUD's during 1968-1972. Public enlightenment proceeds through all possible communication media. A specific project should provide 600 family planning campaigners. Other measures of a legal character propose raising the age of marriage, changes in family allowances, etc.

(c) Evaluation of population programmes: Three types of studies are under preparation: statistics on the activities of family planning centres; data on socio-demographic characteristics and the motives of attendants at the centres; post-census demographic enquiry. This latter should take place after the 1970 census and one of its objectives will be the evaluation of family planning achievements.

15. Nigeria

(a) Fertility: A rural demographic survey was conducted in 1965/66. By continuous observation over a 12 month period, data were collected on birth, death and migration, in addition to the basic census type data (sex, age, etc.). Some of the results, however, have had to be rejected because of serious under-recording biases. The adjusted rates obtained on the basis of the "accepted" areas were: birth rate 50.2 and death rate 26.9 per 1,000 population; infant mortality 187 per 1,000 live births; total fertility 5.6 and G.R.R. 2.7. In addition, there were quite a number of enquiries in certain specially selected parts of the country as well as of particular groups of population, mostly by private agencies (e.g., universities) or persons. The rates obtained were in general very low due either to the purposive selection or to a non-sampling bias or to both.

(b) Population programmes: A national population policy is in the process of formulation by an inter-ministerial committee. The committee is awaiting a background paper to be prepared by a technical committee appointed in June 1969. Two problems are being faced: high fertility and excessive growth of urban centres. It is expected that a policy will be adopted restricting both phenomena. Voluntary organizations such as the Family Planning Council of Nigeria (established in November, 1964) are not only allowed to freedom of action

but are officially recognized and morally supported by the Federal Government. Although these organizations do not receive, as yet, financial support from the Government, they use Government hospitals and other medical facilities for the running of family planning clinics.

(c) Evaluation of population programmes: No specifically designed studies are in progress. However, KAP studies have been carried out in various parts of Nigeria.

16. Senegal

(a) Fertility: Two fertility enquiries were conducted using the retrospective method: one in the Middle Valley in 1957 and the other in the whole country in 1960/61. This national sample used a varying fraction as between urban and certain rural zones. The results obtained indicate an identical birth rate of 47 per 1,000 population in all zones, but a varying death rate of 16 in urban, 29 in rural zones and 26 for the whole of Senegal. Consequently, the natural increase was 31, 18 and 21 per 1,000, respectively.

Other enquiries, conducted by P. Cantrelle and sponsored by ORSTOM, followed in 1962 to 1967 in various parts of the country. In these latter enquiries a different method was used: an initial enumeration of the population followed by repeated visits at certain intervals during which vital events were registered retrospectively; subsequently, these were brought up-to-date by repetitive independent enumerations. The fertility rates obtained in one of the regions by this latter enquiry differ considerably from those obtained in 1961/62 for the whole country. The general fertility (births per 1,000 females aged 15-49) obtained by the former was between 212 and 218, that in 1961/62 was 178.

(b) Population programmes: Population redistribution and settlement in "new lands" is one of the policies aimed at solving the problem of population growth. On the other hand, a demographic enquiry is planned for 1970/71 with a view to a more intensive study of fertility in order to obtain the basis for a more reasoned decision in the field of population growth.

17. Sudan

(a) Fertility: The first and main source of information on fertility is the first sample "census" of population in 1955/56 which contained questions on births during the previous 12 months and the total number of children born alive by women who were past the reproductive life. The data are affected by the known biases relating to age statements, number of children, etc. The results indicate a birth rate of 52 per 1,000 population and a child/woman ratio of 900 (children under 5) to 1,000 women of childbearing age; high differentials between provinces and particularly between nomadic (lower fertility) and settled populations (higher fertility). During 1961-1968 a number of demographic surveys were carried out in various parts of the country and on 4 types of population; nomadic; former nomadic settled on land watered only by rains; population living by modern agriculture (including irrigation); urban population. The birth rates per 1,000 population of the first 3 types are: 30 to 35; 40 and 55 respectively. (Urban rate not yet available). These differentials are suggestive of a likely increase of fertility for the country as a whole with the transition from nomadism to agricultural settlement and particularly the transition to a more modern type of agriculture. The country statement stressed the need for a population policy.

18. Tunisia

(a) Fertility: From a tabulation of births registered in 1960 two slightly different fertility rates were obtained: general fertility ranged between 191 and 195 (births per 1,000 females aged 15-49) and G.R.R. between 3.3 and 3.4. The rates obtained, subsequently, from a tabulation of births in 1965 are close to the first series of 1960. Other studies were made on specially selected groups of population during 1965-1966. A national survey made in 1968 gives, for 1967, a crude birth rate of 45.4 and a death rate of 16.6 per 1,000 population, a general fertility of 188, a G.R.R. of 3.5 and an infant mortality of 116. In addition, crude birth rates for the country were obtained from the birth registers since 1957 and infant mortality rates, for the city of Tunis only, since 1946.

(b) Population programmes: The beginning of a population policy dates back to 1962 with a pronouncement by the President on the control of population growth. This was followed in 1964 by special legislation: allowing freedom for publicity on contraception and the distribution of contraceptive products, limiting family allowances to 4 children, fixing the minimum age of marriage and other measures, such as the abolition of polygamy. Family planning thus became complimentary to the emancipation and liberation of women. For the implementation of family planning in practice a complete organization has been created with all the necessary services: health, communication and diffusion, training, research and evaluation. These activities carried out by government agencies are supported financially by foreign foundations (Ford and the Population Council) and in various ways by national organizations such as the Socialist Party (Destour) and by the Tunisian Association for Family Planning (supported financially by USAID and SIDA).

(c) Evaluation of population programmes: A special service has been created for the collection and evaluation of data and for information. Apart from the evaluation of current statistics on the activities of the family planning centres, special enquiries were conducted on the effectiveness of IUD; utilization of the pill, etc. The results are extremely valuable.

19. United Arab Republic

(a) Fertility: There are three sources from which the rates of population growth and fertility can be obtained: censuses since 1897 show intercensus increases of 1.5 per cent during 1897 and 1907, 1.3 per cent between 1907 and 1917 and similarly for almost every successive decade until 1960 to 1966 when a rate of 2.5 per cent was obtained. Registration of births and deaths, made compulsory in 1912, provides another source of data, which are more complete for those areas where public health bureaux operate. Consequently, two sets of data are given in the statement covering the period 1939 to 1960, one for the whole country and the other for areas where there is a public health bureau. The difference in the crude birth rate between the two series is approximately 4 to 8 per 1,000, e.g., in 1939, 42.0 against 46.4; in 1947, 43.8 against 52.4 and in 1960, 43.1 against 46.6. The differences in the crude death rates are smaller, particularly in the later period, e.g.: in 1947, 21.4 against 25.5, in 1957, 17.8 against 20.1 and in 1960, 16.9 against 19.3. Two national surveys of fertility were carried out: one in connexion with the 1960 Census and another one with the sample "census" of population in 1966. In addition, special fertility enquiries were carried out in certain areas of the country, e.g., in 1958 and in 1964. General fertility rates obtained in respect of the census years are, e.g.: in 1927 - 178.5; 1937 - 181.4; 1947 - 171.9; 1960 - 190.0. The G.R.R. was 2.7 in 1947 and 2.9 in 1960 and the N.R.R. 1.8 and 2.3, respectively. Differential fertility rates are given also by educational attainment and duration of married life.

(b) Population programmes: Concern about the rapid growth of population arose with the 1952 Revolution. In 1953, the National Commission for Population Problems was established. A two-dimensional programme evolved: one economic, aiming at the promotion of agriculture and industrial expansion; the other demographic, aimed first at enquiring into the factors of population growth. Since the debate in the National Assembly in 1962, a family planning programme is being pursued by Government. In 1965, the Supreme Council for Family Planning was created. The number of clinics rose from 1,991 in 1966 to 2,667 in 1968. A ministerial committee adopted a ten-year programme aiming at a reduction of the crude birth rate to 30 per 1,000 and consequently lowering the natural increase to 1.7 per cent by 1978. To achieve this, vigorous measures are being taken in various fields including the education and enlightenment of the public.

20. Zambia

(a) Fertility: Two efforts were made to obtain vital rates: one in 1950 (survey of Africans) when a rate of natural increase of 24.6 per 1,000 was obtained and the other in the population census in 1963. The rates obtained (by the stable population method) were: birth rate - 51, death rate - 19 and natural increase 32 per 1,000 population. A fertility sample enquiry was built into the 1969 Population and Housing Census and the results are expected by June 1970. In addition, vital rates should be obtained from household budget surveys to start in February 1970.

(b) Population programmes: The main preoccupation of the Government is the rapid rate of urbanization and it is trying to encourage a return to rural areas. A family planning policy has not yet been formulated, although it is anticipated that with increasing information, adequate attention will be given to the fertility question.

21. In reviewing these country statements the Working Group noted that important gaps remained in the knowledge of levels and trends of fertility and recommended that questions on fertility be treated as basic topics in the African recommendation for the 1970 round of population censuses and that appropriate steps be taken both by the countries and the United Nations in order to obtain, on a continuing basis, the required data and analyses of fertility levels and trends and the inter-relation of fertility with economic and social factors.

LEVELS AND TRENDS OF FERTILITY RATES AND DIFFERENTIALS IN AFRICAN COUNTRIES

22. Demographic research and analysis for the African countries is handicapped by the supply and the quality of the relevant data. For this reason it is difficult to know to what extent the available data truly reflect the levels of fertility prevailing among the peoples of the continent. The shortcomings of the fertility and basic population statistics are such that interpretation of measures of national fertility levels can be misleading and trends are only partly known. Data on differences in fertility between rural and urban inhabitants and socio-economic groups are of such quality generally as to merit little confidence.

23. The documentation before the Working Group provided for countries of the region in addition to the official birth and fertility rates, fertility measures that had been developed by various experts and institutions, including the United Nations Headquarters and the Economic Commission for Africa, the I.N.S.E.E., Princeton University, etc. While the level of measures for the individual countries tended to vary somewhat according to the source, it was noted that there was no conflict in so far as general levels were concerned. It was felt, however, that the figures could be taken only as indicators of the general order of magnitude. The Working Group was pleased to note that the Secretariat planned to supplement the information provided in the background document with the relevant data contained in the country statements.

24. Levels and variations of fertility: It was clear from all available statistical information that fertility is very high in the African countries. Present estimates placing the average crude birth rate at around 48 per 1,000 population and the gross reproduction rate at about 3.1 in 1965 suggest that fertility is higher in Africa than in any other major region.

25. Within the continent, levels are highest in West Africa, with averages in the gross reproduction rate and the crude birth rate ranging respectively, between 3.4 and 54 per 1,000 population during the 1960's. For Middle Africa, the average crude birth rate appeared to be about 44 per 1,000 population, while the GRR was around 2.7. Levels in Eastern Africa were intermediate between those in the Western and Middle regions of the area south of the Sahara desert, while rates for the southernmost region were the lowest for the continent. The gross reproduction rate there is estimated to have been around 2.6 in 1965. Estimated birth rates and gross reproduction rates also place the fertility of peoples in Northern Africa at a relatively high level. Around 1965 the range in gross reproduction rates varied from 3 to 3½, the relative uniformity being due possibly to the considerable cultural homogeneity and the relative similarity of levels of socio-economic development among countries of this region.

26. Factors affecting fertility and prospects for change: The question arose as to what may be ascribed the wide variations in fertility levels among African countries. They could not be attributed to levels of economic and social development, which are generally low throughout the continent. In the region south of the Sahara, fertility differences would seem to be due to differences in attitude and behaviour with regard to marriage, sexual relations and birth of children, or to factors in the cultural and natural environment affecting the incidence of sterility, sub-fecondity and pregnancy wastage. Too little is known of the ways in which fertility is influenced by various social and cultural conditions, and there is a need for research to fill in these gaps in knowledge.

27. Differences in fertility between rural and urban residents and between socio-economic groups have been found in census and survey data for a number of African countries. Also available data have indicated fertility differences between settled and nomadic populations and between inhabitants of different regions within certain countries. It was acknowledged that the factors affecting human fertility are highly complex in Africa, as elsewhere.

28. Future course of African fertility: It is even more difficult to measure fertility accurately than to assess the level at any given time. Data that are of insufficient quality to provide reliable indicators of fertility levels are even more inadequate for the measurement of trends. Some conjectures may however be made. Forces capable of initiating a fertility decline have been introduced in the communications component and other elements of national family planning programmes of several countries in Northern Africa. But in others it was observed, there are as yet few, if any, indications of the profound cultural changes that would bring about a decrease in fertility. The forces of modernization under way in the regions south of the Sahara, although working more slowly than the ones causing a rise in fertility, are likely to lower fertility, in the long run, but it was noted that other cultural changes, including a decline of polygamy, the settlement of nomads and improvements in health - including the control of venereal disease, malaria and other sterility - producing diseases - were likely to cause fertility to increase in some countries, at least temporarily.

29. Implications of fertility conditions for population policy and programmes: It was noted that although mortality may have already begun declining in some countries, it was impossible to forsee a beginning of the transition from high to low fertility, although in one country fertility has reportedly fallen to some extent following policy measures. Thus, in view of the importance of population growth and structure as factors affecting progress in economic development, some countries had adopted policies of encouraging the limitation of births, and had inaugurated a national family planning programme as an instrument for carrying out this

policy. In this connexion, the Group debated the question whether raising the age at marriage would affect the birth rate. It was agreed that age at marriage influences the average completed family size, but that it is not always possible to enforce legal measures in this field.

30. Some delegates pointed out that levels of fertility are related to the incidence of infant and early childhood mortality, and that parents are not easily persuaded of the value of spacing their children when conditions of mortality are such that the probability of a child reaching adulthood is not high. Such conditions, it was noted, prevailed throughout much of Africa.

31. A number of countries have not yet formulated a population policy, while some prohibit abortion and provide various allowances and aids to mothers, children and families as incentives to higher fertility.

32. Mention was made of the advantages of family planning programmes in addition to the limitation of family size leading to a reduction in the rate of population growth. These related to the spacing of children as an aid to maternal and child health; the reduction of illegally induced abortions; and alleviation of problems of secondary sterility due to disease and frequent pregnancies. It was observed that closely spaced pregnancies are a causative factor in poor maternal health, as well as in infant and early childhood mortality.

FERTILITY SURVEYS AND STUDIES

33. After reviewing the situation of fertility surveys in Africa, the participants noted that an increasingly large number of countries were resorting to multi-stage surveys to obtain the data required for evaluating basic demographic measurements.

34. It was observed that the registration of vital statistics and the collection of data through surveys were not mutually exclusive but rather complementary in so far as these surveys made it possible to complete the information provided by registration. Apart from the traditional questions, it was suggested that the surveys should record cases of pregnancy. On the other hand, it was noted that a question regarding the domicile of surviving children related to that of live births and still births could help reduce omissions.

35. It emerged from the discussions that certain countries were facing difficulties regarding the inclusion of nomads in the surveys; to remedy such a situation, the use of a sampling frame based on a list of heads of clans, was suggested. The Working Group was informed of the forthcoming publication, by the International Union for the Scientific Study on Population, of a report on the minimum content of a fertility survey.

36. The participants exchanged views on the type of sampling units and the optimum size for such a unit. The Working Group was apprised of the discussions by the Inter-regional Working Group on the Methodology of Demographic Sample Surveys. The reports of that Working Group and other related meetings would be made available to the delegates.

37. The Working Group called for continuous improvements in fertility surveys and intensified efforts in fertility study.

POPULATION PROGRAMMES IN THE AFRICAN COUNTRIES

38. In a review of the position in the region it was noted that comprehensive population programmes were not available for most countries of the region although a large number of governments had expressed their views on different aspects of population such as urbanization, labour force, education, and population growth. Family planning programmes, especially official ones, were of recent origin in Africa. To date six countries had official family planning programmes. These were the UAR, Tunisia, Kenya, Ghana, Botswana and Mauritius. In addition, privately sponsored programmes existed in at least twenty-four other countries. It was estimated that the population of all these countries in which there was some sort of programmes was about two-thirds of the total population of Africa. The meeting was informed that Nigeria was in the process of formulating an official population policy and that an inter-ministerial committee had already been appointed to examine the problem and make recommendations. The Group considered that the proposed ECA on-the-spot study of the extent and organization of all family planning programmes in Africa would be helpful.

Some measures aimed at encouraging smaller family sizes in Africa

39. The Working Group was informed of some of the measures, embodied in the population programmes of three countries, which aimed at encouraging smaller family sizes. In Tunisia these included: the limiting of children's allowances to a maximum of four children; the raising of the legal age of marriage to 17 and 20 for females and males respectively; and the permission for abortion on social and economic grounds during the first three months of pregnancy, for women who already had five or more children. In Ghana the Government's new policy on population included: paid maternity leave to be granted only to those who had served for not less than one year; paid maternity leave to be limited to three during the entire working life of those affected and no payment to be made in respect of any number of leave beyond this limit; children's allowance paid to government officers limited to three children only; and government responsibility for payment of training expenses of officers' children limited to three. In Kenya, children's allowances were limited to a maximum of four children, and only one paid maternity leave was granted.

Financing of population programmes in Africa

40. The Group was informed that many international governmental and non-governmental organizations provided financial and/or technical assistance t population programmes in Africa. Among these were IPPF, USAID, SIDA, Ford Foundation, Path Finder Fund, Population Council, Church World Service and OXFAM. Assistance included financial support for family planning programmes, distribution of contraceptive devices, the training of family planning personnel, the financing of training fellowships abroad for demographic studies and research in epidemiological and other medical problems, providing financial support and experts for censuses and demographic surveys, financing of demographic training in African universities as well as financing of meetings, workshops, working groups, seminars and study tours in the field of population both in and outside Africa for African participants, as well as contributions to the newly established United Nations Secretary General's Fund for Population Activities.

41. It was noted that the organization which had been involved longest in population programmes in Africa is the IPPF which provided financial and other assistance, such as staffing of clinics and providing medical teams to run mobile clinics, to all private family planning associations in Africa. It was therefore hoped that countries initiating official family planning programmes would make use of the experience already gained by this organization in various countries. In some of the countries, notably Kenya, where official programmes existed, the governments were co-operating with IPPF in the implementation of the programmes.

42. The Group hoped that in countries where more than one external organization provided assistance to population programmes (and this in fact was the case in many countries) there would be consultation and co-ordination of activities in order to make the best use of the resources available.

43. The representatives of United Nations agencies elaborated on the mandates, responsibilities and activities in the field of population already given in papers presented to the Working Group.

44. FAO's work in relation to population comprised (a) research and information activities concerned with the inter-relationships between population trends and agricultural development, rural employment, levels of food consumption and nutrition and rural levels of living; (b) projections of sectors of the population directly relevant to agriculture; and (c) the development of the new Planning for Better Family Living programme in which family planning was an integral part. The Programme was educational in nature and included research, fact finding, communication, education and training activities as well as action programmes in the countries. The overall purpose of the new programme was to assist member Nations, upon request, in the development of a process for providing opportunities for their people to acquire the knowledge, attitudes and skills needed to make sound plans and decisions about all aspects of family life, including marriage, parenthood and family size. FAO's programme of Planning for Better Family Living placed emphasis upon

planning for all aspects of family living and for the needs of all members throughout the family life cycle. Since needs vary with the family's changing structure, size and functions, planning was a continuous process and a vital part of making decisions and managing both human and natural resources.

45. UNICEF had been concerned with the effects which too rapid and unplanned a population growth could have on the welfare and health of children as well as on their preparation for subsequent productive participation in society, and with the implications of high fertility and a high proportion of children in a population. Aware of these different trends and factors, UNICEF had tried to relate its development assistance in recent years to assisting in the strengthening and extension of maternal and child health services, including family planning, when so requested by governments; and at the same time, encouraging a fuller consideration of the effect of population growth (structure, distribution, etc.) on planning and providing services for the development of the young. UNICEF's concern had been with the quality of the life of the child in the family. Therefore, it regarded its support of family planning and population limitation activities as one of the ways in which to improve the health and well-being of the child, the mother and the family. In 1967, the Executive Board of UNICEF first approved assistance to family planning as a part of maternal and child health services. This decision was based on the recommendations of the UNICEF/WHO Joint Committee on Health Policy. The Executive Board decided that, whereas it was not UNICEF's role to advocate any specific way of dealing with the problem of population control, where a government desired UNICEF assistance, UNICEF might extend its support. The types of family planning activities for which a country might receive assistance were those directed at training in maternal and child health care, including family planning, and at the expansion of the basic health services, including MCH and family planning activities. UNICEF assistance took such forms as vehicles, equipment supplies such as teaching aids for use both in classroom and field, assistance in the production of texts or manuals by experts in the

countries assisted, salaries for teaching staff and stipends for trainees. UNICEF was increasingly co-operating in the field of research related to human resources development studies with special emphasis on the problems of youth and children. In this connexion note was taken of the project supported by UNICEF in IDEP (Dakar) and statistical studies for planning sponsored by UNICEF in co-operation with the United Nations Economic Commissions in the Far East and Africa.

46. For the ILO it was noted that the Employment Policy Recommendation adopted by International Labour Conference in 1964 which stated among other things that "countries in which population is increasing rapidly and especially those in which it already presses heavily on the economy, should study the economic, social and demographic factors affecting population growth with a view to adopting economic and social policies that make for a better balance between the growth of employment opportunities and the growth of the labour force". The ILO's Governing Body had approved the following proposals aimed at supporting national and international effort to moderate population growth in developing countries by the promotion of informational and educational activities on population and family planning questions at various levels, principally through workers' education, labour welfare and co-operative and rural institutions programmes; policy-oriented research on the demographic aspects of measures of social policy in certain fields such as employment promotion and social security; and action to stimulate participation in social security and enterprise-level medical services in family planning.

47. For the WHO, it was noted that in 1965 the World Health Assembly passed a resolution giving WHO a mandate to take up work on the health aspects of population dynamics, family planning and human reproduction. Since that beginning, a number of relevant resolutions of the World Health Assembly had dealt with this field and broadened the mandate of the Organization. The mandate of WHO was based on the conviction that problems of reproductive behaviour concern the individual, the family and the community. The number as well as the timing of children were the

free choice of each individual family; all couples should have free access to information and advice on problems relating to family planning. WHO did not promote or endorse any particular population policy; however, WHO would provide assistance within any policy determined by individual governments for the integration of family planning activities into the health services without impairing their preventive and curative functions. Family planning activities, were, therefore to be viewed as a part of the functions of health services, particularly maternal and child health services. WHO was of the opinion "that family planning will be able to make its full contribution to any specified population policy only if it is accompanied by other measures designed to improve the economic and social situation of the family and the community". The activities of the organization included assistance to countries, on request, on the preparation, administration and organization of family planning within the context of health services as well as on their nursing and health education aspects; as well as advice on all medical aspects of fertility regulation including the effectiveness, safety and use of methods of birth control, the diagnosis and treatment of sterility, the problems of spontaneous and induced abortion; assistance in the training of health personnel to deal with all aspects of health services in co-operation with other United Nations bodies on a broad range of activities touching upon population dynamics; and research on health aspects of population dynamics, bio-medical aspects of human reproduction, family planning and health statistics. As a means of promoting research and assistance in the various fields referred to above WHO aso organized a number of seminars, expert committee meetings at global, regional and national levels.

48. In the discussion delegates suggested that family planning be viewed as one aspect of population programmes, which should be more comprehensive. It was also stressed that the term "family planning" had a broader meaning and implied the spacing of pregnancies as well as measures to control infertility. From the medical standpoint, family planning should be seen as a complex activity concerning the family as a whole, and particularly the health and welfare of the mother and her children. It was recommended that family planning activities should form part of maternal and child health activities.

49. Outlining the advantages of family planning, the WHO representative said that it was a factor which could contribute substantially to reducing infant mortality, mortality of children during the second year of life and maternal mortality, led to better care and nutrition of children, since spacing of pregnancies permitted continued breast-feeding without interruption by an ill-timed pregnancy, thus reducing the hazards of kwashiorkor and unduly high rates of infant mortality resulting from common infections during weaning; resulted in better nutrition and maternal welfare by preventing grave pelvic pathology caused by frequent pregnancies, and the reduction of the hazards of artificial abortion, particularly among young girls.

50. Other delegates also pointed out that the adoption of family planning would lead to a reduction of the induced or criminal abortions rate which was now high in some parts of Africa.

51. The attention of the group was drawn to the report of the Seminar on the Application of Demographic Data and Analysis to Development Planning (E/CN.14/POP/11) held in Addis Ababa in 1969, which recommended among other things that for economic development the rate of population growth was more important than density and warned Demographers of the dangers of overstressing population densities irrespective of potentialities for economic development. That seminar also recommended that African Governments should, wherever necessary, adopt family planning in addition to economic efforts to improve the living standards of their people.

52. On the ILO's recommendation that workers be educated on the relationship between population dynamics and labour force and employment, the group was informed that the Ghana Trade Union Congress would be holding a symposium on family planning in February 1970 as part of their workers' education programme.

53. There was considerable discussion on the merits and demerits of giving responsibility for official population programmes to either the planning or the health authority in a country. It was agreed that the decision should depend on the conditions existing in each country; it was

however, emphasized that there should be the closest co-ordination between different disciplines and that purely medical aspects of the programme should be operated by medical personnel.

EVALUATION OF POPULATION PROGRAMMES IN AFRICAN COUNTRIES

54. In the introduction to this topic, a review was made by the secretariat of the present situation concerning the evaluation of population programmes sponsored by governments or by non-governmental organizations in the African countries. It was noted that the objectives of evaluation programmes were to determine whether the current targets were appropriate under the existing conditions, whether progress was being made towards achieving these targets, and whether the techniques employed were the best.

55. In Algeria, a national demographic sample survey was being organized, which would provide information, among others, on fertility levels and trends. In Ghana, no evaluation programme had yet been undertaken for the national population programme; this would be done in the near future. In Mauritius, the Ministry of Health Population Programme published monthly summary reports on clinic attendance and dropouts, etc.; the effectiveness of the programme in reducing fertility had not yet been fully studied, but, despite the increasing proportion of women in the reproductive age-group, a decrease in the birth rate had been recorded since 1960. In Nigeria, it was anticipated that research would be encouraged on the implementation and evaluation of the effectiveness of population programmes in a national population policy; in Lagos the family planning project had undertaken three surveys to study births, deaths, migration and other social and medical data, the characteristics of the patients at the family planning clinic and surveys of the effectiveness of mass-media. In Morocco, information was available only on programmes sponsored by the Ministry of Public Health. In Réunion, it was estimated that by the end of 1968, about 8,800 out of a target of 20,000 women between 15-45 years in 1971 were using some method of contraception and that the birth rate had decreased since May 1968. In Uganda, the Medical School of Makerere had carried out

studies of patients at the family planning clinics to determine the motivation of factors affecting clinic attendance and of the characteristics of the retention of IUCD's and follow-up. In the UAR, family planning clinics had been in operation for many years, and with a view to formulating a more specific policy, the Government was studying the efficiency and acceptability of particular contraceptive methods as part of its development plan.

56. In Tunisia, the progress of family planning policy had been slower than had been anticipated, partly because women visiting clinics were mostly above 30 years of age, whereas the peak of fertility was reached at ages 20-29 years. It was, however, estimated that fertility had recently shown some decline. The present evaluation programmes of the Government included the evaluation of the efficiency of various methods of contraception (IUCD, pill, etc.), a "dépo-provera" study (to measure the acceptability of new methods by women), a study on whether the use of IUCD after an abortion leads to anemia, a study on the effects of post-partum IUCD insertions, etc., of the impact of propaganda and educational activities, etc.; estimates had also been made of the possible number of births averted as a result of contraception and sterilization. In the discussion, the effects of the possible significance of measures such as raising the age at marriage and the prohibition of polygamy were considered: it was noted that the abolition of polygamy was more significantly related to the raising of the status of women and other relevant socio-psychological factors than to any direct effect on fertility. The question was, however, raised that an abrupt prohibition of polygamy, without attendant social measures, could, in some situations lead to an increase in the illegitimacy ratio: it was recognized, that further studies were required on this point.

57. In Kenya, the method of evaluation consisted of an in- and output analysis combined with a certain amount of systems analysis; in this way it was hoped to obtain an adequate measure of the use-effectiveness of the various contraceptive methods. Several difficulties in the operation of the scheme had been encountered, particularly at the beginning.

No target for the programme had been fixed other than the very long-term "lowering of the national rate of population increase from 3 per cent to 2 per cent". One major difficulty was the time-lag between the start of the family planning programme and the start of the evaluation scheme; in addition there was an acute shortage of trained personnel and equipment and the problem of choosing the most useful technique of evaluation with the funds available. There was also the problem of co-ordination between the various voluntary organizations and private individuals who were engaged in particular aspects of evaluation. The government evaluation team, situated in the Ministry of Health, now concentrated on use-effectiveness analysis with the clinical record card forming the basis of the scheme. The cards were kept in the clinics and to lower the work load of the clinics, the data centrally transferred to punch cards monthly. Some difficulty had been encountered in linking initial visits with revisits and the design and contents of the card itself had been readopted several times so that the one currently in use, the fourth tried by the team, was felt to be the best possible considering the necessity of satisfying both clinical and statistical criteria. Part of the card was filled in by clerks in the clinics in order to relieve as far as possible the burden on the medical staff, and in the interests of coding and processing, underlining of answers had proved the most successful. Preliminary results of the programme were now becoming available for 1968 and 1969 and it had been shown that by June 1969, the monthly visits to the government clinics had risen to 2,500 first visits and 6,000 revisits, the greatest number being in Central Province and Nairobi itself. Of those visiting the clinics, 40 per cent adopted IUCD's 52 per cent pill, slightly more than 1 per cent injections and 2 to 3 per cent other methods. Only 4 to 5 per cent of the women in attendance had adopted no method; these were in most cases either infertility or sub-fertility patients who were referred to hospital for treatment, or women who were unsure of their stage in the menstrual cycle so they were not provided with IUCD's. The mean age of acceptors was 28, with IUCD users having a slightly higher average age than pill-users. The mean number of children of women visiting the clinics was 5 and their mean years of education slightly higher than 4. In conclusion,

it was stressed that an evaluation scheme should start at the beginning of a Family Planning Programme, the record cards should be kept as simple as possible, and no processing whatsoever should be done in the clinics. Some delegates emphasized that because of possible complications in IUCD insertions these should always be carried out by a doctor.

58. Several questions were raised, particularly in relation to the content of the record card, and the processing of the information. It was reported that in practice the question on the date of last menstrual period did not prove to be difficult to answer. It was observed that more questions could be added, such as religion and, more important, a question designed to discover whether the patient desired spacing or limitation of births. The question of evaluation of the improvement of maternal health consequent on the programme was also raised. With reference to processing, it was suggested that the insertion of a check digit number in the serial number of each card would eliminate most linking errors. In general, the Kenya evaluation scheme was highly commended and it was felt that the experience gained from the programme would prove extremely valuable to other African countries.

59. The Working Group also noted that methodological studies were being developed by the WHO to evaluate the relative merits of different approaches in the organization and administration of family planning programmes within the context of health services. In conclusion, the Group urged the African countries to avail themselves of the assistance of the United Nations family of organizations in all aspects of population programmes - including studies, and formulation, implementation, and evaluation of population policies.

GENERAL GUIDELINES FOR FERTILITY STUDIES AND EVALUATION OF POPULATION PROGRAMMES

Fertility surveys

60. Data on levels, differentials and trends in fertility were needed as a basis for understanding current and prospective trends in population growth and their implications for social and economic development. In view of the general deficiency of vital statistics in most African countries there was considerable uncertainty about the average number of children born to women during the course of their entire reproductive life or during specific age-spans within it.

61. Sample surveys were considered as the most rapid method of obtaining data on fertility. Two types of surveys were particularly useful, viz., Population Growth Survey and Survey on Fertility and Fertility Planning. The methodology of the Population Growth Survey was discussed in the light of the experience gained from such surveys in Liberia, Senegal and Algeria, and several non-African countries. Surveys on Fertility and Fertility Planning had been conducted in the United Arab Republic and a number of other countries. A publication of the United Nations, Variables and Questionnaire for Comparative Fertility Studies, (ST/SOA/Series A/No. 45), provided useful guidelines for surveys of the latter type.

62. The Liberian Population Growth Survey which began in May 1969 was fully committed to the use of the Chandra Sekar - Deming - (C-D) dual enumeration techniques[1/]. The first enumeration system was conducted monthly by a local Resident Registrar in each individual sample unit. The second enumeration system was conducted every six months by an independent enumeration team using the same questionnaire. By matching the data obtained from the two sources and by application of the C-D formula, the annual number of births and deaths could be estimated. Other information obtained from the Questionnaire provided the basis for the calculation of birth-rates, death-rates and specific fertility rates on an annual

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1/ Chandrasekar C. and Deming, W.E.: "On a method for estimating birth and death rates and the extent of registration." Journal of the American Statistical Association, Vol. 44, No. 245, pp. 101-115.

basis. In addition to these rates, the survey provided information on fertility in terms of the average number of children born by age of woman. Migration data was also collected routinely in this type of survey.

63. The Population Growth Survey could be looked upon as an ad hoc method of obtaining estimates of vital rates and providing a limited fertility measure through household interviews. For this purpose the field work would be extended to cover three years if possible and the entire operation of the survey including initial preparation and processing and analysis of the data collected would be planned as a five-year scheme. The cost of the whole survey could not be estimated because of the limited experience in African countries. However, according to Liberian experience the annual cost of enumeration in each household worked out to about US$1.00.

64. In some non-African countries, the Population Growth Survey was being used as an instrument to assess the completeness of registration of vital events in a system newly introduced in a few sample registration areas. If the system were found to be satisfactory, it could be extended to larger areas or over the entire country, thereby providing a routine machinery for obtaining current vital statistics.

65. Repeated visits to the same household permitted not only improved collection of data on specified events such as births and deaths but also the obtaining of fresh information during each visit. It was possible, for instance, to enrich the data on fertility obtained through the Population Growth Survey by having a detailed Fertility Questionnaire filled in on one of the repeated visits.

66. Useful guides to the sampling procedures to be followed in Population Growth Surveys or in Fertility Surveys could be found in the following reports of meetings and conferences of the United Nations and of the Economic Commission for Africa: Seminar on sampling methods, Addis Ababa, 1968[2/] and Inter-regional Workshop on the Methodology of Demographic Sample Surveys, Copenhagen, 1969.

2/ Report of the Seminar on Sampling Methods (Addis Ababa, 3-14 June 1968), E/CN.14/418.

67. The Fertility Survey should preferably include a Component on Fertility Planning. The United Nations publications referred to in para. 60 provided three lists of variables - the short list, the core list and the expanded list to help meet the various levels of need and resources; under each list the variables were classified into the following six major groups: I. Timing and Character of Basic Demographic Life Cycle Events, II. Attitudes toward Family Size, III. Attitudes towards Family Limitation, IV. Knowledge and Communication about Family Limitation, V. Past and Expected Future Practice of Family Limitation and VI. Social and Economic Background Characteristics of Couples and Households.

68. The additional information on the three variables - knowledge, Attitude and Practice of Family Planning, sometimes referred to as KAP survey variables, had several uses. Data on current or past practice of family planning helped in understanding fertility differentials by ethnic groups or by social or economic characteristics. Expected practice of family planning had relevance to future fertility trends which were important in making population projections. Information on attitudes towards and knowledge of family planning was likely to reveal the need for family planning programmes. In countries with national family planning programmes, successive surveys would provide useful data for evaluating changes in the extent of knowledge or in attitudes.

69. Among the variables which were considered of major interest in fertility studies in African countries the following were mentioned (1) age at marriage of women (2) the prevalence of polygamy (3) the rates of infant and child mortality (4) breast-feeding practices and their influence on post-partum amenorrhea (5) marriage instability. In view of existing cultural practices, it was felt that all women in the reproductive age group, irrespective of their marital status, should be included for interview if a complete picture of fertility was to be obtained.

Evaluation of family planning programmes

70. Evaluation is an essential tool for assessment and further improvement of existing programmes. Simple concepts and methods of evaluation were considered more important under existing circumstances than the sophisticated approaches underlying cost-benefit or systems analyses.

71. Compilation and analyses of statistics of the number of persons who accept different methods under the programme and of their characteristics are most essential for a quick reckoning of the response to the programme and how it compares with targets that might have been set by the programme. The use of the family planning clinic card such as the one developed by the Kenya Family Planning Programme is essential for this purpose.

72. The system for processing of data developed by the Kenya programme has several merits. These include: (1) eliminating compilation work in individual clinics and (2) a rapid transference of relevant basic records to the central evaluation office without disrupting the work of the clinic. The latter is ensured by having carbon copies of visit records despatched to the evaluation office.

73. Kenya's experience brings out the difficulties that have to be faced if evaluation work is not started when the programme is initiated. Considerable effort is required to deal with the records of persons who obtained service prior to the setting up of the evaluation routine and bring these in line with procedures for analysis that have been set up subsequently.

74. The processing and analyses of information obtained through a family planning programme are explained in A Handbook for Service Statistics in Family Planning Programmes by Ross, Stephen and Watson, published by the Population Council, New York. Some of the problems that arise are also discussed in the Reports of the Expert Group on Assessment of Acceptance and Use-effectiveness of Family Planning Methods[3/], and of the Seminar on the Evaluation of Family Planning Programmes[4/] held by ECAFE, in Bangkok in June 1968 and November 1969, respectively.

75. An important aspect of evaluation is the assessment of the duration for which methods accepted by the programme are used. These studies of "continuation rates" are best made by interviewing a sample of acceptors and obtaining from them relevant information. The workload of interviewing can be reduced if contact between the acceptors and the clinics providing the services are well maintained and information on continuity of use is recorded in the revisit proforma.

3/ Assessment of Acceptance and Effectiveness of Family Planning Methods, Asian Population Studies Series, No. 4, E/CN.11/882.

4/ Draft Report of ECAFE Seminar on Evaluation of Family Planning Programmes, 24 November - 12 December 1969 (POP/ESFP/20); to be published as Asian Population Studies Series, No. 5.

76. Acceptor follow-up surveys can yield not only information on "continuation rates" but also on use-effectiveness of the methods accepted from the clinic. Life-table techniques are necessary for such analyses and Potter and Tietze have outlined procedures which can be used for this purpose.

77. As the effectiveness of a programme is determined not only by the extent to which the first method accepted from the programme is used but also by what the acceptor does after giving up the first method, a new concept of extended use-effectiveness has recently been developed to take into consideration use of other methods by the acceptor. Where-ever possible, it is recommended that extended use-effectiveness be also calculated.

78. The ultimate effect of a programme is often looked at from the standpoint of the number of births averted. Several procedures for estimating the number of births averted have been proposed, notably by Messrs. Wishik, Potter, Wolfes and Stolnitz. The procedures differ in the extent of information they demand. A comparison of the concepts underlying the different procedures and of the differences in the estimates given by them were considered of importance in examining their practical utility. A weakness of all these procedures is their inability to estimate changes in births effected by the programme chronologically by time sequence after the initiation of the programme. Improvement of techniques is obviously necessary. Such improvements should take into account that in many instances the only readily available data are those found in the clinic records, especially those relating to the first visit.

79. In view of the poor state of techniques for assessing separately the direct and indirect effects of the programme as well as non-programme effects, it is urged that overall assessments of changes in fertility are important. These can be undertaken through the Fertility Surveys discussed earlier.

80. One important task of evaluation is to help the programme administrator build the programme through assessment of its strengths and weaknesses. Such a task goes well beyond assessment of changes in fertility and were not discussed. It was also felt by the Group that the evaluation programmes should be extended to cover the training and publicity parts of the programme, which are both very important.

81. The Working Group recommended that the ECA secretariat prepare an African variant of the United Nations Manual on Evaluation of Family Planning Programmes. Studies on the suitability and sensitivity of different analytical techniques (including adaptations required) in measuring fertility changes in African conditions may also be undertaken at the secretariat.

PILOT STUDIES ON FERTILITY, INFANT MORTALITY AND EVALUATION OF POPULATION PROGRAMMES

82. The plans for pilot studies on fertility, infant mortality and evaluation of population programmes were outlined: the first emphasis would be on methodology of research with a view to providing practical guidelines for studies on fertility and infant mortality and also, where appropriate, evaluation of population programmes. In addition the studies could provide live material for laboratory work and research for the staff and trainees of the regional demographic centres. The United Nations component of the programme would consist of studies under the supervision of the ECA Population Programme Centre and the regional Demographic Centres. The countries were invited to participate in this co-operative project, with a standard core in regard to concepts, definitions, schedule framing, sample design, tabulation and analysis: they could expand the methodological study to enquire about various aspects of population and its relation to economic and social development by increasing the sample, adding supplementary questions, extending the scope of the analysis, etc., to meet their own requirements.

83. In regard to the content of the pilot studies, it was suggested that information on early childhood mortality be also collected that could be utilized for the currently available models and also for developing further models. It was agreed that the studies should cover all aspects of fertility and not merely family planning. For the latter studies, information could be obtained also on the attitude of patients as affected by the quality of the attending staff: for such and other aspects, scientific

investigations were necessary. The inter-disciplinary nature of demography was also recognized and the need to represent different interests stressed. The co-operation of the WHO and other agencies were welcomed in the project formulation and implementation.

84. It was reported that the Cairo Demographic Centre could co-operate in the project of fertility survey with evaluation of population programmes: although field work is not envisaged in the current projects of that Centre, it may be extended depending on the availability of resources.

85. The Working Group welcomed the idea of the project and considered that countries, willing to join it, could provide support concerning staff and other matters. However, the general lack of demographic expertize could be a difficulty, which the United Nations could obviate. It was suggested that preparatory work could be started around July 1970 when the project is formulated in greater details on the basis of the guidelines evolved in the previous session and that a technical meeting consisting of experts from countries wishing to join in the project might be convened.

86. It was noted that available funds were inadequate both for the United Nations component as also for assistance to the countries. The Working Group, therefore, recommended that appropriate steps be taken to provide increased support to this project from the United Nations Fund for Population Activities. It was agreed that the technical aspects of the project of the countries would be co-ordinated with the secretariat of the ECA while requests for assistance from the United Nations Fund for Population Activities would be made through the United Nations Development Programme in the respective countries. For the latter, the United Nations Population Programme Officers and the Regional Demographic Advisers and other staff of the ECA Population Programme Centre could assist the countries in formulating their requests to the Fund.

AFRICAN POPULATION PROGRAMME

87. The regional activities sponsored by the ECA secretariat in all fields of population - studies and technical work, assistance to governments, information services and clearing house, training activities, technical meetings, and field studies - was outlined, as had been endorsed by the Conference of African Statisticians and the ninth session of the Economic Commission for Africa. The Working Group noted with considerable satisfaction that, following the recommendation of the Sixth Conference of African Statisticians, the Population Programme Centre has been established at the secretariat, which is the direct responsibility of the Executive Secretary, in order to implement the African Population Programme and that funds have been obtained from the United Nations Fund for Population Activities for financing a large part of this Centre.

88. The Group recommended the preparation of technical manuals which would collate different analytical techniques for the estimation of fertility, mortality, etc., as applied under African conditions with suitable guidelines. In this connexion, the Group was informed of the proposal to hold early in 1971 an Inter-regional Seminar on Methods of Analysis of Fertility Data. The Group also suggested that the study of groups of African countries in different stages of availability and analysis of demographic data with a view to formulating different models of application for use by the countries that was recommended by the Seminar on Application of Demographic Data and Analysis to Development Planning be taken up as soon as the required staff become available to the ECA secretariat.

UNITED NATIONS FUND FOR POPULATION ACTIVITIES

89. A representative of the United Nations informed the Working Group of the setting up by the Secretary General of the United Nations Fund for Population Activities through voluntary contribution from member Governments, international and non-governmental organizations and from individual sources. The Fund is being managed by the Administrator of the United Nations Development Programme. The Fund would be capable of financing projects executed by the United Nations and interested Specialized Agencies

such as the WHO, UNESCO, ILO and FAO and co-operative inter-agency projects involving more than one agency within the mandates of these agencies for working in the population fields. The Fund is primarily intended to expand the scope of population work by the developing countries upon their request. It would also be available for strengthening the activities of the United Nations system at the region level.

90. As a first step in its development of African activities, the Fund has provided support to the secretariat of the Economic Commission for Africa and its regional activities which have been outlined in the ECA programme above. The Fund has also stationed three Population Programme Officers in Africa, each to cover a group of countries, to assist the governments in identifying and developing projects in the fields of population for financial and substantive support from the Fund and other sources. Two inter-agency consultative missions sponsored by the Fund have visited Algeria and the UAR upon the requests of the governments. The recommendations of the UAR mission are now being implemented through the provision of an inter-agency advisory team to draw up a long-term programme in the field of family planning for that country. The Algerian Mission report which surveys the population problem in the country is now in its final stage of preparation. Discussions are also under way in respect of assistance to a number of projects in which several West African countries are interested. The present dialogue between the Fund and these countries are expected to develop meaningful projects of immediate concern to the governments of the countries.

91. It was also stated that the procedure for presentation of these requests would be to the Resident Representative of the United Nations Development Programme through the co-ordinating agency of the government concerned. Considerable flexibility has been introduced in the procedures for evaluation by the Fund and it is hoped to reduce considerably the time-lag between the submission of the request by the Government and its approval by the Administrator. The Fund also is in a position to provide assistance in such areas as local support and supply of equipment at a scale not normally envisaged under the normal technical co-operation programmes of the United Nations. It was also stated that the United Nations would act in an advisory capacity to the Fund in respect of its future development.

RECOMMENDATIONS FOR FUTURE ACTION

92. The recommendations of the Working Group are summarized below:

Fertility data

(1) Questions on fertility be treated as basic topics in the African recommendation for the 1970 round of population censuses and that appropriate steps be taken both by the countries and the United Nations in order to obtain, on a continuing basis, the required data and analyses of fertility levels and trends and the inter-relation of fertility with economic and social factors.

Fertility surveys and studies

(2) Continuous improvements in fertility surveys and intensified efforts in fertility study was urged.

Population programmes in the African countries

(3) The decision as to whether the responsibility for official population programmes should be given to the planning or the health authority would depend on the conditions existing in each country; it was emphasized that there should be the closest co-ordination between different disciplines and that purely medical aspects of the programme should be the responsibility of medical personnel.

Evaluation of population programmes in African countries

(4) The African countries are urged to avail themselves of the assistance of the United Nations family of organizations in all aspects of population programmes - including studies, and formulation, implementation and evaluation of population policies.

Evaluation of family planning programmes

(5) The ECA secretariat should prepare an African variant of the United Nations Manual on Evaluation of Family Planning Programmes.

(6) The secretariat should also undertake studies on the suitability and sensitivity of different analytical techniques (including adaptions required) in measuring fertility changes in African conditions.

Pilot studies on fertility, infant mortality and evaluation of population programmes

(7) The idea of pilot studies on fertility, infant mortality and evaluation of population programmes was welcomed, and countries, willing to join it, could provide support concerning staff and other matters. Preparatory work could be started around July 1970 into the convening of a Technical Committee of representatives of countries wishing to join in the project and of the United Nations Demographic Centres.

(8) Appropriate steps be taken to provide increased support for this project from the United Nations Fund for Population Activities. The technical aspects of the project of the countries be co-ordinated with the secretariat of the ECA.

United Nations Fund for population activities

(9) Requests for assistance from the United Nations Fund for Population Activities be made through the United Nations Development Programme in the respective countries. In formulating these requests the countries could be assisted by the United Nations Population Programme Officers and the Regional Demographic Advisers and other staff of the ECA Population Programme Centre.

African population programme

(10) Technical manuals be prepared by the United Nations which would collate different analytical techniques for the estimation of fertility, mortality, etc., as applied under African conditions with suitable guidelines.

CLOSING SESSION

93. After the adoption of the report at the final session of the Working Group Mr. Ranjan K. Som, Director of the Population Programme Centre, made a brief closing statement thanking the participants, on behalf of the United Nations for their very useful contributions which had made the meeting a success. He paid tribute to the Chairman for the very able way he had guided the meeting and to the United Nations Population Division and Office of Technical Co-operation for their part in organizing the

meeting and in making funds available. He also said that the ECA secretariat would welcome requests from the African countries to the ECA secretariat for any information regarding the matters discussed and assistance required by them.

94. Mr. S.B. Jones, Chairman of the Working Group, thanked all the participants, the Interpreters and others for their valuable contributions and the representatives of the various agencies for their promises of help to African countries. He said the meeting was very grateful to the ECA for all the preparations that had been made, including papers of the meeting, which had greatly helped to make the Working Group fruitful.

ANNEX I

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ANNEX II

LIST OF DOCUMENTS

E/CN.14/POP/12	Some Demographic, Economic and Social Considerations in Population Policies for African Countries (with special reference to family planning)
E/CN.14/POP/13	Statistical Data Collection on Fertility in Africa through Demographic Surveys
E/CN.14/POP/14	Provisional Agenda
E/CN.14/POP/15	Draft Plans of Pilot Studies on Fertility, Infant Mortality and Evaluation of Population Programmes
E/CN.14/POP/16	General Information for Participants
E/CN.14/POP/17	Levels and Trends of Fertility in Africa
E/CN.14/473 E/CN.14/POP/18	Report of the Working Group on Fertility Studies and Evaluation of Population Programmes
POP/INF/19	Fécondité et Planification Familiale au Maroc
POP/INF/20	Planning for Better Family Living
POP/INF/21	Activities and Programmes of the Food and Agriculture Organization of the United Nations in the Field of Population and closely related Fields
POP/INF/22	KAP Surveys and Evaluation of Family Planning Programmes
POP/INF/23	Evaluation of Family Planning Programmes
POP/INF/24	Country Statement - Ghana
POP/INF/25	The Evaluation of the Kenya Government Family Planning Programme
POP/INF/26	Some Data on the Use of Contraceptives in ten African Countries
POP/INF/27	A Statement on Kenya
POP/INF/28	Provisional List of Participants
POP/INF/29	Influence of Changes in Fertility and Mortality on the Development and Age Structure of the Population

POP/INF/30	Some Practical Considerations in the Evaluation of Voluntary Family Planning Programmes
POP/INF/31	Provisional List of Documents
POP/INF/32	Statement by Nigeria's Participant
POP/INF/33	Population Programmes, Voluntary Activities and Their Evaluation in Africa (IPPF)
POP/INF/34	Fertility Studies and Population Programmes in the United Arab Republic (UAR)
POP/INF/35	Country Statement - Sudan
POP/INF/36	Evolution des enquêtes sur la fécondité au Sénégal
POP/INF/37	Exposé par pays - Algérie
POP/INF/38	Exposé par pays - Tunisie
POP/INF/39	WHO Activities in Health Aspects of Population Dynamics, Family Planning, and Human Reproduction (WHO)
POP/INF/40	Views on Family Planning Expressed by Participants in the Seminar in the Organization and Administration of Maternal and Child Health Services (WHO)
POP/INF/41	Zambia statement
POP/INF/42	A Draft Report on the Evaluation of the Demographic Impact of a Family Planning Programme (Smith - USA)
POP/INF/43	Exposé par le Représentant du Dahomey
POP/INF/44	Cameroon Government Statement
POP/INF/45	UNICEF and Population Questions
POP/INF/46	Etude de la Fécondité du Congo, présentée par le Congo Kinshasa
POP/INF/47	Some Effects of Field Implementation Procedures used in Fertility Surveys on the Chandrasekar-Deming Techniques (Rumford - USA)
POP/INF/48	Kenya Government Statement - Kenya's National Family Planning Programme

POP/INF/49	Exposé du Représentant du Sénégal
POP/INF/50	Variables for Comparative Fertility Studies (IUSSP)
POP/INF/51	International Labour Organisation's activities and programmes in the Population and Allied Fields
POP/INF/52	Statement by Ethiopia's Participants
POP/INF/53	Section of Epidemiology and Medical Statistics, Ministry of Health, Kenya: Family Planning