Establishing Family Planning Services in Kenya

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K ENYA was the first country in Africa south of the Sahara to adopt family planning as a national policy. Voluntary efforts had established family planning clinics in Nairobi and Mombasa as early as 1952. In 1953, after the results of the 1948 census were reported, the East African Royal Commission was instructed to examine and form recommendations on the economic and social development of the country, with special reference to population (1). The commission advocated that persons wanting to adopt contraceptive methods should be permitted to do so. It also stated: "We are not of the opinion that the rate of natural increase is such in East Africa as to warrant any large scale attempt to introduce these methods with the object of reducing the birth rate for general economic reasons."

Both the Government and voluntary agencies informed the public about contraceptive equipment and practices. The Medical Department of the Ministry for Local Government, Health and Housing in Kenya issued instructions to all medical officers and nursing sisters on simple methods of tending to poor people's needs. In 1954–56 the Pathfinder Fund assisted in opening clinics at locations in the remaining five Provinces. In 1957 the Family Planning

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Another census in 1962 revealed that Kenya's population had increased more than 3 percent annually—from 5.4 million in 1948 to 8.7 million. An intensive demographic survey covering 10 percent of the population at the time of the 1962 census resulted in an estimated rate of 50 births per 1,000 population, a death rate of 20 per 1,000 population, an average of seven children born to women reaching 50 years of age, and an average life expectancy of 40 to 45 years. The latest census, in August 1969, showed a population of 10,890,000, or twice that of 1948.

These survey results had a profound effect in the formulation of the Government's 1964-70 development plan, which describes the significant effect that rates of population growth have on future planning and economic growth potential (2). For example, the report notes that past expenditures did not even adequately maintain health services in the face of the population growth—a matter that the Government planned to correct during the 1964-70 period.

Population Council Advisory Mission

In April 1965 the Ministry of Economic Planning and Development invited the Population Council of New York City to undertake a survey to study the population program of Kenya, recommend the ideal rate of growth with a suitable program to effect this rate, recommend on administration of the program, and advise on potential external funds and assistance (3).

The Population Council's advisory mission, in submitting its findings to the Government of Kenya, noted that a population program must be viewed as an integral part of the total social and economic development of the country, that a program designed to decrease the birth rate should have an especially close link with the national health program, and that any such program must be voluntary and take cognizance of the wishes and religious beliefs of individual parents.

The report noted that if the present trend of growth in Kenya continued, the rate would reach 4 percent by the end of the century and the population would double in 18 years. The study suggested that a reasonable objective would be to reduce fertility by 50 percent over a 10- to 15-year span. Even so, Kenya's population would double in 35 years and would be increasing by 1.8 percent per year at the turn of the century. To reach 50 percent reduction in fertility, the mission recommended insertion of 150,000 intrauterine devices (IUD's) per year by the end of a 5-year period and provision for other contraceptive measures to an additional 50,000 couples. Eventually, operations would level off at 60,000 to 80,000 insertions per year.

The advisory mission recommended flexibility in approach, a national Government program with a multiministry participation but particularly of Kenya's Ministry of Health, geographic phasing with priority to high density and developed areas, demonstration pilot projects, and heavy reliance on the IUD. Knowledge, attitudes, and practices (KAP) studies, personnel training, logistics, and collection of statistical information were emphasized, as was the desirability of securing the cooperation of voluntary agencies and political organizations. A program of public information and education, use of the post partum approach in family planning, and integrating the activities with maternal and child health services were suggested. Costs were estimated at £110,000 (US\$280,000) initially, rising to £180,000 (US \$504.000) annually.

The report was accepted by the Government

of Kenya, and authority to establish a National Family Planning Council was conveyed from the Cabinet to the Ministry of Health. Family planning was incorporated by the Government, for both health and economic reasons, as an integral part of 1966–70 development. The targets were not specified.

Organization Plans

In October 1965 a sociologist of the Population Council helped the University College of Nairobi develop a teaching program in sociology and demography. He later undertook a countrywide KAP study. In November 1966 the Government requested the assistance of another Council expert, a physician, to develop a family planning action program. In July 1967 this team of advisers was strengthened by a public health nurse to reinforce the training of nurses and auxiliary health personnel.

In December 1966 the Ministry of Health sent an official circular (4) to medical officers of the central and local governments explaining the implications of population growth. The circular stated that family planning services would be integrated into health services and that the training of medical officers in family planning techniques would commence.

In February 1967 a National Family Planning Council of interministerial composition and a working committee, also of interministerial composition but including the FPA of Kenya, were formed. Differences were encountered immediately on the relative roles of Government and the voluntary organizations. The council was dissolved in October 1967 and executive authority was given to the Ministry of Health to develop a countrywide program. The Ministry thereupon convened an advisory committee, chaired by the director of medical services but incorporating representation from voluntary organizations, and issued a second circular to all Government medical officers, local authorities, and mission hospitals stating that information and clinic services in family planning should be offered to the public, that such services should be free, and that both the mother and child should be helped. Seminars also, it stated, would be held throughout the country for further intensive training of personnel.

One stumbling block was the difference exist-

ing between Government and voluntary organizations over the question of free clinics or payment for services. The Government agreed to subsidize the purchase of contraceptives for all clinics, both voluntary and Government. The pattern of organization and the specific roles of the various interested organizations were being clarified. The following list briefly outlines the functions to be assumed by various agencies.

Ministry of Health and local government health authorities

Hold primary clinics at Provincial and district hospitals.

Provide equipment and supplies.

Train its own personnel.

- Offer secondary clinics at health centers run by auxiliary staffs, where followup services are given to primary acceptors.
- Offer public information and audiovisual aids through the Ministry's health education unit.

IPPF (as regional organization serving East

- and Central Africa) through the FPA of Kenya Give intensive training at the Nairobi Training Clinic.
 - Supply fully staffed mobile units in each Province under the aegis of the Ministry of Health.
- FPA of Kenya
 - Operate clinics in areas where the Government is not active.
 - Continue to operate established clinics in urban areas.
 - Offer public information.
- Royal Dutch Institute of Tropical Hygiene

Organize service statistics and evaluate them. Train field staffs in mobile units.

University College of Nairobi

Develop teaching programs for demography and sociology; also KAP surveys.

Medical schools

Train medical students in family planning. Mission and church medical agencies

Offer clinic services.

Training of Personnel

An extensive four-stage training program was carried out in 1967-68 in each Province of Kenya through the family planning unit of the Ministry of Health. In the first stages, Government physicians, nurses, and health inspectors at Provincial and district hospitals were trained; then auxiliary health personnel; and finally related workers in agriculture, home economics, social welfare, community development, education, and so on. About 500 health professionals and 1,500 auxiliary health workers have attended these courses.

Intensive 6-week training courses in contraceptive techniques were offered in 1967 through the IPPF at the central training clinic in Nairobi, which operated as a regional center for Africa south of the Sahara.

More than 300 nurses have been trained in seminars and workshops. The undergraduate instruction of nurses in family planning has vet to be accepted by the Nursing Council of Kenya as an official part of the curriculum. However, nursing students at Kenyatta National Hospital are receiving regular instruction in family planning. Some instruction also is incorporated in the training of auxiliaries at the medical training center of the Ministry of Health. A workshop in family planning has been held for postgraduate registered nurses and registered midwives. Programed learning also has been introduced on an experimental basis to student nurses at professional and auxiliary levels.

The training of medical students in family planning commences during their second year, with demography and sociology being taught through the department of community medicine. In the third year students are introduced to obstetrics and gynecology; and in the fourth year, when obstetrics and gynecology, pediatrics, and community development are taught in the block system, students learn about family planning in clinics and in the field.

KAP Studies

Dow (5), in the first KAP study, analyzed knowledge, attitudes, and practices among 352 low-income Nairobi residents, representative mainly of the Kikuyu, Luo, and Luhya tribes. This survey revealed that the wanted family size was six or seven children and that knowledge and practice of family planning was almost nonexistent. Despite specific fears and objections, most respondents approved of the family planning idea. Molnos' study of East Africa (δ) revealed a still entrenched social attitude against childlessness. A woman's position was related to the number of children she had: five was the quoted minimum to secure social status. Although the benefits of a small family were recognized for reasons of health, schooling, clothing, nutrition, and economy, there was specific resistance to the deliberate planning of births. Deliberate family planning appeared to be an act of self-destruction, an outrage against living and dead relatives. These attitudes stemmed from traditional tribal social structures and religious beliefs.

Men were more resistant to family planning than women, and differences between tribal groups were noted. The most favorably disposed toward planning were the Kikuyu, Ganda, Luo, Jita, Kara, Kerewe, and Sukuma tribes of East Africa. Factors correlating with family planning attitudes were educational levels, ethnic origins, actual living conditions, and exposure to information. Kenya and Uganda respondents were more frequently in favor of family planning than respondents from Tanzania.

Heisel's survey (7) covered six of the largest tribes (Kikuyu, Luo, Luhya, Kamba, Gusii, and Mijikenda), representing about 70 percent of the African population of Kenya. The geographic spread of the sample was wide and rural; however, nomadic and Nilo-Hamitic tribes were excluded. The sample included 744 previously or presently married women in the reproductive years. About 48 percent were illiterate; the remainder were literate in the vernacular language or in Kiswahili, English, or a combination of languages.

Sterility and subfecundity of the respondents resulted in reluctance or refusal to complete interviews. Thirty-eight percent both acknowledged and rejected economic arguments regarding the value of many children. Seventy-five percent acknowledged the greater economic strain in food, clothing, school fees, and so forth induced by many children.

The average ideal family, according to the women, was six children, with 37 percent stating four children or less—half of these women were under 30 years old—and 50 percent stating six or more children. The ideal family size was only slightly less than the achieved family size of 6.8, as estimated in the 1962 census. Thus fertility aspirations were very high, and there was scant indication of a trend toward the smaller family or acceptance of the values of a small family. Traditionally, children are the gift of God. Younger women showed a moderation of this attitude and a trend toward less children.

The women were for the most part uninformed or ill-informed concerning contraceptives. Some 47 percent knew no contraceptive methods; in the age group 14 to 19 lack of knowledge rose to 70 percent. Methods most frequently reported were female sterilization (21.6 percent), oral contraception (19.9 percent), abortion (12 percent), and the IUD (11.5 percent).

Information on modern methods of contraception was poor, and the nature of much information did not encourage favorable attitudes. The traditional practices of controlling fertility reportedly were dying out and were less a matter of family planning than social morality. Heisel's survey (7) showed that only 6.3 percent of the sample were actively practicing contraception and that 85.5 percent had never attempted to practice it. Apparently the traditional values had been minimally affected by Western culture.

Family Planning and Rural Africans

Three-fifths of Kenya is desert or semidesert, and 5,000 square miles is water. A wide variety of climates prevails from torrid tropic coastline to alpine climate and snowline—a natural consequence of a country astride the equator with altitudes ranging up to 17,000 feet on Mt. Kenya. Much of the fertile country lies in the highlands between 5,000 and 8,000 feet, where ranching, cereals, coffee, tea, pyrethrum, and wattle form its basic agricultural wealth.

Kenya today remains predominantly (93 percent) rural. The peasant population has its roots in the soil, and its cultural mores still are vested in tribal tradition and animistic beliefs. The agricultural revolution—from hunting, fishing, and shifting agricultural methods to settled agricultural practices—has only recently been completed. Industrialization of the country is just commencing. Most of the people remain on a nonmonetary economy, though with "cash cropping" and cooperatives being introduced, this basis is fast changing.

This transitional state and a high level of ignorance that family planning through modern contraception is possible, adequately explain the expressed desire of the people for more knowledge. Where ignorance has survived for so long, there will be an interval before new knowledge displaces old beliefs and leads to actual practices based on new understanding.

Family limitation is not inherently African, though family spacing through tribal taboos and polygamy are traditional. Restricted cohabitation during pregnancy and prolonged suckling were offset by polygamy. High birth rates were offset by high death rates, and large families resulted because each wife had several surviving children. The change to monogamy, some breakdown in tribal behavioral patterns, and lowered childhood mortality rates naturally led to large families with one wife.

Prospects for change in the mores of the people are optimistic, judging by the growing rate of acceptance of modern contraception. Perhaps the change will be most influenced by identifying sections of the population that are in a transitional state.

Status of Family Planning Program

Static and mobile family planning clinics totaling 160 have been opened throughout Kenya. The Government operates 48 clinics, of which 33 are in Provincial and district hospitals—following the original plan of setting up such clinics where professional workers are available. The secondary health center clinics are in the central and western areas of Kenya, where Dutch mobile training and demonstration teams have been extending the program. Distribution of the 160 clinics according to agencies and Provinces follows:

Clinics

Agency:	
Central government	4 8
Local government	4
Family Planning Association	17
Church hospitals	19
Mobile teams	42

Rural coverage throughout Kenya was extended by clinics of 19 church hospitals and those of the FPA. Large urban areas are serviced by 22 clinics of the City Council of Nairobi, 12 clinics of the municipal governments, and clinics of the FPA. (The FPA operates a total of 17 clinics in both urban and rural areas.) All the clinics in Kenya function mostly on a once-aweek basis.

Seven mobile units, complete with staffs (physicians, nurse midwives, and fieldworkers) are being supplied to the Ministry of Health by the IPPF. Of these units, six already are functioning at Kericho, Mombasa, Nairobi, Meru, Kisumu, and Nyeri. Other units are planned for 1970. The staffs of these units operate from a hospital base and visit rural family planning clinics on a weekly schedule. Two other units, supplied to the Ministry of Health by the Dutch Government, are operated essentially for program organization, demonstration, and field training. Each is staffed by a physician and a nurse midwife. One inaugurates Province services and the other operates out of the Nairobi Medical School and Kenyatta National Hospital servicing the peri-urban area of Nairobi.

Central Province, with a population of 2 million, was selected in 1968 as the site for a feasibility demonstration project. One Dutch mobile training and demonstration team, during a 6-month period, organized family planning clinics at the Provincial hospital in Nyeri and at the five main district hospitals in Fort Hall, Thika, Kiambu, Embu, and Kerugoya. At the end of this period an African physician was placed in charge, and the mobile team transferred its activities to western Kenya. The professional and auxiliary staffs at the hospitals were trained in clinic activities.

In January 1969, a total of 416 persons accepted contraception for the first time at Provincial hospital clinics; half chose the IUD and half, oral contraceptives. In addition, 404 persons who previously had accepted contraception reattended the clinics for consultation and further supplies; this response showed some continuity of effort and practice. The clinics do not as yet have a simple method of identifying or tracing defaulters.

The population scatter of the 10 million people in Kenya over its 224,000-square-mile area was the reason for choosing the western part of the country for the next operation in field organization and training. After Central Province it is the most densely populated section, containing one-third of the total population living on about 4 percent of the land area land of the highest potential in Kenya, however. Densities range to 1,500 persons or more per square mile, with an average of 370. The population is a composite of Bantu (Luhya), Nilotic (Luo), and Nilo-Hamitic (Nandi) peoples.

During the first 3 months of operations in western Kenya, the mobile unit reorganized clinics at the Provincial hospitals of Kisumu and Kakamega, and at three district hospitals in Kisii, Kericho, and Homa Bay. Despite lack of information activities, 348 persons attended these clinics; 44 attending for the first time accepted IUD's and 92 accepted oral contraceptives.

Staffs of the IPPF mobile clinics based at Kisumu and Kericho hospitals visit rural health centers in surrounding districts. This system of phased geographic extension eventually will cover all of Kenya, with reorganization of existing clinics and reinforced training of personnel. Although recommended by the Population Council, Kenya does not yet have a post partum program of family planning.

Registration of Births and Deaths Act

This act, amended in 1967, grants permissive application to the entire country and compulsory application to specific areas. For example, registration was made compulsory in the Nyeri District of Central Province in 1964. In 1967, with an estimated population of 305,000, some 11,558 births were registered—75 percent of expected births—but only 2,619 deaths. The total 1967 population in eight areas where registration of births and deaths was compulsory was estimated to be 1,647,500, and the average completeness of registration in these areas was estimated at 62 percent. The total number of births registered in these areas was 51,047 in 1967, or approximately 10 percent of the expected births for the whole country (8). In 1968 the number of births registered increased by 45 percent as compared with 1967. New districts are gradually being designated for compulsory registration. Legal statutes also exist concerning legitimacy, adoption, marriage, and divorce.

Research and Evaluation

At the Nairobi Medical School, the department of community medicine is already resuming work at the Ministry of Health's Karuri National Reference Health Center on household census, migration, vital statistics, nutrition, and family planning. Organization of a field research laboratory at Machakos in relation to medical student training has been proposed. Two comparable areas are contemplated for study, and family planning activities will be introduced in one. The project will involve both the World Health Organization and the Dutch Medical Research Center.

Within the Ministry of Health, the Dutch Medical Research Center is reorganizing the epidemiologic and health statistics unit, with special emphasis on evaluation of family planning activities. A medical demographer and an applied medical statistician have been assigned to the Ministry. To date their activities have embraced a revision of the clinic card to include data on acceptability effectiveness and on complications of the various methods of family planning. Reorganization of the peripheral clinics' reporting system and central data processing are being undertaken. About 130 of the 160 clinics are reporting regularly. With clinics staffed by predominantly auxiliary personnel, reporting systems need to be kept simple and records, essentially minimal.

In 1965 the IPPF reported that clinics of the FPA of Kenya had 6,000 new clients and 11,000 who had attended before (9). Of the new clients, 70 percent were urban and 30 percent were rural. More than half of the new group accepted the IUD method of contraception.

During the first 8 months of 1969 there were 16,013 primary visits to family planning clinics and 25,588 revisits—according to the latest official reports. These figures represent reports from about 85 percent of the clinics. A sample analysis revealed that 94.6 percent of persons attending for the first time adopted contraception. Of this number, 52.5 percent adopted oral contraception, 40.1 percent accepted the IUD, 2.1 percent used other methods, 1.5 percent were subfertile, and 3.9 percent refused contraception. A total of 25,000 acceptors was projected by the end of 1969.

Analysis of Central Province clinic data showed variation in the proportion of acceptances of IUD's and the oral method of contraception. Patients generally preferred an IUD to the necessity of returning monthly, often a distance of miles on foot, to replenish their supply of oral pills. Some physicians felt inadequate to insert the IUD or found the pill easier to dispense. If complications occurred with the IUD, there was a preference for the pill. Personal preferences of the fieldworkers and the availability of the service also influenced the choice; for example, 83 percent on the coast and 76 percent in the western Provinces, where persons skilled in the IUD technique are still scarce, selected oral contraceptives.

Communication With Prospective Clients

The Ministry of Health has produced in both English and Kiswahili a guide to family planning, an instructional flip chart, a "what, why, how, where, and when" leaflet, and a booklet entitled "Tujenge Jamaa," or "Building a Family." In addition, a film on family planning has been produced in Kenya under the auspices of the Ministry and with the advice of the African Medical and Research Foundation. A mobile cinema van, equipment, supplies, and a health educator were requested from the U.S. Agency for International Development to strengthen this program by audiovisual aids. However, interpretation of visual aids can be difficult. (10). Difficulties occur in disseminating information to a largely illiterate and nonsophisticated audience whose traditional culture has been preserved through the spoken word.

With an illiteracy rate around 75 percent, the major effort in communications must be the spoken word: personal conversations, group talks, and the radio. This type of action probably means a considerable investment in field educators, tape recorders, and radios for effective outreach. The system of placing and servicing radios in rural health centers, women's clubs, and farmers' clubs could be extended. In an article on rural communications, no more than 1 percent of communication was in the form of radio listening, and none of the listeners owned a personal radio (11).

Experience in Kenya in the use of radios in health centers for general health education has not been encouraging; nevertheless, radio and television programs in family planning have been aired four or five times a year. Reportedly there is one radio receiver per 19 persons, but the scatter and use of the sets is open to doubt. Even the press, which has been uniformly favorable to family planning, has a limited circulation.

Investigators in Nigeria (11) reported that new information often is disseminated at marketplaces and water supply points. However, with poorly educated fieldworkers as the main source of communication, misinformation is a strong possibility. This problem can be overcome by sound training programs in information on family planning and by supplying the informants with carefully prepared tape records and portable playback machines.

A series of tapes could be devised, each covering a single aspect of family planning. In time, a series of question and answer tapes could be produced from field experiences. Such tapes would insure accurate information to the public and offer continuous inservice training to fieldworkers. Field informants should include men as well as women because there is a need in Kenya tribal cultures to reach the men, particularly the influential elders of the villages. In addition to the informants, a greater outreach and a broader ecological understanding could be achieved if agricultural extension workers, health inspectors, community development workers, and home economists were oriented to the impact of population growth and family planning.

Funding and Logistics

The Government of Kenya made minimal budgetary provision (US\$121,800) for its program during the 1967 through 1970 fiscal periods. The greater part of its contribution is hidden in the use of its premises and facilities and in committing health personnel at all levels to family planning activities. Three full-time appointments for a physician, a nurse, and a Provincial family planning officer were included in the budget. Only the Provincial officer has been obtained; the other two still are being recruited.

A number of outside agencies have contributed to family planning in Kenya since 1965 (see table).

Discussion

The development of an effective program, stemming from a national policy decision, depends on the following steps being taken in an orderly and logical sequence (12). First, an analytical unit must be set up and data gathered on which intelligent predictions can be based. Second, politicians need to make a firm, declared policy decision and the civil service instructed to implement the policy. Third, early development of training and retraining courses is needed to orient personnel to new policies and to insure adequate technological knowledge. Fourth, before the public is invited to partake of the services, an organization and management system with assured finances, personnel, and supplies should be created.

The fifth step, which is essential to a dynamic

program, is the feedback of data from the program into the analytical unit for continuous modification of policy, training, and program evaluation. Concurrently with these steps is the need to create awareness among the public from the inception of the program and to keep the public knowledgeably informed of progress.

Kenva has followed this sequence with predictable troubles, but the public has shown little opposition because adequate publicity has been given to the program. Some problems have stemmed from a situation that arises when a voluntary organization achieves its basic objective; that is, the assumption by Government of responsibility for a social commitment that had previously been part of a voluntary program. The voluntary organization then has to seek new avenues of service, which generally fill in the lacunae of the program; for example, services to those who live in remote areas, to those who do not wish to partake of the general free service but cannot afford the private sector, and to industry in both rural and urban areas. The voluntary organization can also undertake those aspects of the program that in the early stages may be politically too sensitive for government to undertake.

Difficulties stem from problems common to most newly independent countries. A disturbance in constitutional government affects re-

Approximate	agency	contributions	to	family	planning	in	Kenya	since	1965
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Agency	Contribution
Population Council: expenses of original survey; salaries of a sociologist, a physician, and a nurse educator; 2 KAP surveys; initial supplies of IUD and oral contraceptives; 2 long-term post graduate fellowships; 7 short-term travel grants	+\$267, 000
IPPF (with most funds from U.S. Agency for International Development): subsidies to Family Planning Association of Kenya for maintenance of clinics and 30 fieldworkers, 7 mobile units with equipment and personnel, costs of training physicians, nurse midwives, and auxiliary	1.050.000
personnel at Nairobi Training Clinic and in family planning seminars (With Pathfinder Fund, IPPF also is developing a request to USAID for audiovisual equipment.) United States Agency for International Development	+350, 000 150, 000
Oxford Committee for Famine Relief: training of midwives Ford Foundation: educational training	6, 000 48, 000
Pathfinder Fund: services of a nurse educator for 1 year and 100,000 oral contraceptive pills Norwegian Agency for International Development: Equipment for 100 clinics and 10,000 cycles	50, 000
of oral contraceptives	28, 000
the program Royal Dutch Institute of Tropical Hygiene: two mobile training units with personnel, a 2-man	50, 000
evaluation unit, and a cytotechnologist American Friends Service Committee: consultants and advisers	
Ministry of Overseas Development, United Kingdom: supply of statistical machines	90, 000
Total	+\$1, 319, 000

lations between central and local governments, with the redistribution of power and responsibilities. Less revenue and experienced manpower are available than before independence. Political promises need to be fulfilled: One promise was a free national health service—a laudatory objective but one resulting in an overwhelming demand for curative medical services from an already strained service. Another promise was a multiplicity of enthusiastic community self-help projects, the fulfillment of which resulted in the building of many new health centers. The feasibility of staffing and financing them, however, was not considered.

Thus considerable difficulty is encountered in maintaining even existing services without the added burden of creating new ones. Despite these factors, the National Family Planning Program of Kenya has shown steady progress.

The drafted development program of the Ministry of Health for 1969-70 through 1973-74 has reiterated Kenya's commitment to family planning as an integral part of health services in general and of maternal and child health services in particular. The plan recognizes the implications of population growth on the economic and social aspects of living.

REFERENCES

- East African Royal Commission: 1953-55 report. (HMSO Command Paper No. 9475). Her Majesty's Stationery Office, London, 1955.
- (2) Government of Kenya: Development plan for the period from 1st July, 1964, to 30th June, 1970. Government Printer, Nairobi, Kenya, 1965.

- (3) Population Council Advisory Mission: Family planning in Kenya. Ministry of Economic Planning and Development, Kenya, May 1967.
- (4) Ministry of Health: Circular to Government medical officers and local authorities; family planning. (Ministerial Circular No. 28). Nairobi, Kenya, Dec. 5, 1968. Mimeographed.
- (5) Dow, T. E., Jr.: Attitudes toward family size and family planning in Nairobi. Demography 4: 780-797 (1967).
- (6) Molnos, A.: Attitudes toward family planning in East Africa. Africa Studies No. 26. Weltforum Verlag, Munich, Germany, 1968, pp. 108– 177.
- (7) Heisel, D. F.: Attitudes and practice of contraception in Kenya. Demography 5: 632-641 (1968).
- (8) Republic of Kenya: Annual report of the registrar general, 1967. Government Printer, Nairobi, Kenya, 1968.
- (9) International Planned Parenthood Federation: Special report on Kenya. IPPF World Survey No. 2. London, 1967, pp. 9 and 18.
- (10) Holmes, A. C.: A study of understanding of visual symbols in Kenya. O.V.A.C. Publication No. 10. Overseas Visual Aids Center, London, 1966.
- (11) Axinn, G. H., and Axinn, N. W.: Rural communication: Preliminary findings of a Nigerian study. Rural Africana, spring 1968, pp. 19–23.
- (12) Fendall, N. R. E., and Southgate, B. A.: Principles, priorities, and public participation in planning a program for health. United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, Geneva, 1962. E/Conf. 39/F/5, agenda item F.1.2, United Kingdom, 1962. Mimeographed.

Tearsheet Requests

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