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KENYA POPULATION PROJECT (CREDIT 648-KE)
BACKGROUND DOCUMENTS



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Population Project (01) - Kenya - Credit 0468 - P001241 - Background
Documents - Project Completion Report - July 1974 - December 1979

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KENYA POPULATION PROJECT

(Credit 468-KE)

Evaluation of Project Impact on Rural Populations

(DRAFT)

Dr. S. E. Migot-Adholla

KENYA POPULATION PROJECT

(Credit 468-KE)

SOCIOLOGICAL SETTING

Just over 12 per cent of the population of Kenya is classified as urban which places it among the least urbanised countries in the world. About 70 per cent of Kenyas total land area is arid and semi arid land which supports extensive forms of land use such as nomadic pastoralism. The rest of the country, enjoys tropical and sub-tropical climates with adequate rainfall and fertile soils. As a result of these variations in environmental conditions about 80 per cent of Kenya's population and almost all major economic activities are confined to only 20 percent of the country which contains land suitable for sustained agriculture.

Variations in population distribution and natural resource endowment tend to coincide with ethnic and linguistic groupings and is compounded in part by the relatively low incidence of rural to rural migration. Since rural settlement is primarily determined by cultural and linguistic affiliations, most of Kenya's rural folk, and the majority of Kenyans in general, identify more with their ethnic group than with the national political entity.

The average population density estimated at 26 persons per square kilometre masks dramatic regional variations. In Central, Nyanza and Western Provinces densities are estimated at 178, 211 and 233 persons per square kilometres. But even these figures fail to reveal extreme land pressures in parts of these regions which could be as high as 984 in Kiambaa, 764 in Central Kitutu and 715 in East Bunyore locations in the respective provinces.

In these and similar areas agricultural production has for some time been stagnating as population pressure has led to fragmentation of family farms into small sub-economic units. In addition land pressure has led to the extension of farming into marginal lands where arable agriculture is at best a precarious undertaking.

But given the ethnic exclusiveness in rights over access to land, the expansion of agriculture into the marginal land frontiers remains a very limited option. For, although several large tribes dominate the national economic and political scene, the smaller tribes which in some cases occupy some of the land frontiers, guard these resources very jealously against possible encroachment by powerful outsiders.

Given Kenya's predominantly rural population it is understandable that a number of social factors operate to create pronatalist pressures. For the majority of farmers, children have a high cultural value as a source of labour and security in old age. This is particularly true of women who normally live their old age as widows.

In addition, children are also a source of social status in that a woman's prestige in rural Kenya depends on her husband's occupational status or that of her children since there are very few other economic roles for women apart from fieldwork, housework and motherhood. Thus childbearing remains, for many women, perhaps the only way to demonstrate their social worth.

Another antinatalist pressure operating in Kenya is

related to ethnic loyalty. This is expressed, for instance, in the attitude of some leaders of the relatively smaller ethnic groups who see the rapid rate of Kenya's population growth as a problem of ~~the~~ the relatively larger groups. Fertility control programmes are thus seen as justified only if implemented among the larger tribes who are currently suffering extreme land pressure. Alternatively, the feeling is often expressed that the smaller tribes need to retain high fertility rates in order that the populations may rapidly increase to catch up with that of the major tribes. Supposedly, the smaller tribes would then enjoy political and economic power commensurate with their numbers. At the root of such attitudes is the very skewed pattern of allocation of public services and other privileges which has tended to favour the larger tribes.

The above factors have helped to create an environment that has conditioned Kenya's somewhat schizophrenic official approach to fertility control. For although government policy is ostensibly anti-natalist, the practical implementation of official programmes is constrained by an acute appreciation of the prevailing political attitudes and social behaviour, which renders such programmes at best neutral, if not pro-natalist. In addition, there has so far been very little coordination among the various government agencies with objective of integrating their numerous programmes in order to maximise their impact on fertility reduction.

Although Kenya was the first sub-Saharan African country to integrate population in its development planning, no specific targets were set until nearly ten years after the declaration

of intention. Specific targets for the reduction of population growth were set in the 1974-78 Development Plan. The same plan listed Family Planning as one of the five strategies for the reduction of unemployment. The government rightly viewed the high rate of rural-urban migration and the rate of urban unemployment to be directly related to the rate of population increase and rural poverty. Ultimately a lasting solution would also depend on the rate of rural development, thus a consistent government policy has been to promote rural development.

THE MCH/FP Project

An important objective of the project under review was to facilitate the long term reduction of Kenya's population growth rate through the improvement of the rural health system and the inclusion of family planning as an integral part of the maternal and child health services. This was in keeping with the government's view that there is an association between declining fertility and decreasing child morbidity and mortality. The emphasis on family planning was thus on the need for child spacing to secure the health of the mother and child. But any suggestion of reduction in family size has been cautiously avoided.

Impact of MCH/FP Programme

Rural Health Centres

In order to realize its long range objectives the programme had intermediate goals, aimed, for instance at increasing the number

of trained personnel to provide information and education within rural communities (Family Health Field Educators) and to deliver services (Community Nurses) and to improve the distribution and coverage of Service Delivery Points through Rural Health Centres and their satellite clinics, including mobile clinics.

Practically all the personnel of the Ministry of Health welcomed the conceptual soundness of the project pointing particularly at its emphasis on the integration of preventive and curative medicine by adding health and environmental education to the services performed by the Health Centres. But it would appear that officials at the Provincial and District level were hardly involved in the details of project implementation such as site selection and design for the Health Centres. Consequently the siting of many of Rural Health Centres cannot be justified in terms of their ability to reach the widest clientele. In most cases the location of Health Centres was primarily determined by their close proximity to the Nurses Training Centre and accessibility through a good all weather road. But occasionally this requirement has resulted in some clinics, for instance at Mariakani, being underutilized, because of the easy accessibility to the health services at the district or provincial centre. In a few cases, poor site selection has resulted in shifting foundation and cracking walls (Muhoroni and Mariakani) although this could also have been compounded by poor construction.

In other cases where the location of the Health Centres was more rational the services are very heavily utilized. Indeed in several cases there is reluctance by patients to accept referral to the district hospital partly for economic (cost of transport) and

sociological (unfamiliarity of the urban environment) reasons. There is a tendency by most rural folk to see the Rural Health Centres as all purpose neighbourhood "hospitals"; a fact which may overstretch their capability; particularly in the provision of curative services. The distinction between a Health Centre and hospital is not appreciated by many of the rural folk.

In certain remote parts of the country, government health centres tend to act as facilities of last resort for curative services. Thus many patients will report to these facilities mainly cases in which local traditional herbalists have failed. Thus in addition to poor siting and inaccessibility of some health centres under-utilization of their services may be due to competition of traditional herbalists. This was the case, for instance, at Vipingo where one such herbalist had his premises almost next door to the Rural Health Centre. This underlines the crucial significance of the role of information and education in changing attitudes in certain remote areas of Kenya toward modern medicine. For it is in such remote areas, particularly in Nyanza, Western and Coast Provinces in which child mortality and morbidity tend to be high.

Despite their welcome acceptance by the rural communities in the catchment area of most of the Rural Health Centres, their smooth operation is sometimes hindered by problems which have arisen in their design. The clinical officers and nursing staff in all the Rural Health Centres we visited expressed dissatisfaction with the allocation of kitchen space and its location next to the laundry. Kitchen space allocation both in the Health Centre and in the Nurses Hostel was too small to cater for patients and the trainee nurses,

respectively. In addition, many Health Centres have not been supplied with the requisite furniture and equipment. In cases where the Health Centre has been built near the site of an old smaller clinic or dispensary, furniture from the old clinics is being utilized, although in almost all of them there has been some partial provision of new furniture, some of which is of very poor quality. Because of incomplete facilities, particularly lack of portable water, some Health Centres are not being fully utilized as they can only provide out-patient service, and cannot provide accommodation for trainee nurses. But perhaps more critical is the almost uniform lack of an adequate system for the disposal of placenta in all the Health Centres. In future it would be desirable that local level personnel, especially those who would eventually use the facilities, should be involved in the design and implementation of Rural Health Centres.

Child Health

Perhaps the greatest impact of the MCH/FP programme has been in preventive services for children. Judged by the number of reported cases, communicable diseases of childhood have dramatically gone down within the catchment area of the Rural Health Centres. But because of the inadequate coverage of the centres, this may not represent the general situation. However, it is generally believed that immunization of children at the Health Centres and other centres visited by Mobile Clinics, augmented by the Schools Health Programme which concentrates on age group 5 to 9 in Primary Schools, gives Kenya one of the widest coverage of preventive services for children in sub-Saharan Africa. But there is need for more efficient storage and transport of vaccines, particularly to areas further away from the Health Centre so that vaccines reach these destinations

and are used while still potent. It was repeatedly reported that a major constraint in the efficient provision of services was inadequate transport facilities. Some Health Centres, for instance Vipingo, did not have any vehicles at all, although it would appear from the records that they had been allocated one which was directed to other uses by the provincial or district authorities.

Immunizations of children are usually accompanied by nutritional education and general advice on environmental sanitation. In addition the health team in some Rural Health Centres provide food demonstrations that stress adequate weaning diet and the use of effect of high levels of immunization, the utilization of curative services and the accompanying health education would appear to explain, at least partly, recent reductions in child mortality and morbidity, especially in areas well served with health facilities.

Ante-Natal and Post-Natal Services

It appears that the utilization of ante-natal services has not increased as dramatically as the child health services. This may partly be explained by the tendency among rural women to seek ante-natal services only when their pregnancies develop problems. The Health Centre staff, however, report a slow but steady increase in the number of women seeking ante-natal services. But a significant number of women attending ante-natal clinics still deliver at home and do not attend post-natal clinics. Especially when there are no complications. Clearly, more educational effort should be made to make women aware of the need to monitor their pregnancies and their own health after delivery even though they may feel very healthy.

Family Planning

The principal aims of the National Family Planning Programme are (i) to educate the public on the regulation of births; (ii) to provide family planning information to the public; and (iii) to provide services on request. Emphasis has so far been made on child spacing to ensure the health of the mother and child. This would appear to have led to a situation in which contraception is used by a significant number of women to regulate births in order to achieve desired fertility. It is not surprising, therefore, that although the programme has been in operation for about six years, it has had very little or no impact on fertility. The unimpressive performance of Kenya's family planning programme may be explained by a number of interrelated factors, including lack of commitment to fertility reduction by the national leadership, a desire for high fertility by Kenyan families, and shortcomings in the programme itself.

It is generally asserted that the climate for a bold population programme in Kenya has improved over the last few years. The President and several cabinet ministers have increasingly shown concern at the fast rate of Kenya's population increase in the context of limited resources. However, these leaders have remained very circumspect in their pronouncements and have so far not made any stronger statements suggesting the need for the reduction of family sizes. And this is to be expected, for given a strongly pro-natalist socio-cultural climate among the majority of Kenya's people, any attitudes deemed hostile to the prevailing practice would entail political liability. Also compounding the significance of cultural

preference for large families is the critical political relevance of demographic factors in a situation of ethnic competition. Since the numerically larger tribes in Kenya have a big share of power and control considerable public services and resources, it is also the wish of the smaller tribes to expand in order to increase their share of national resources. Any suggestion of limiting the rate of expansion therefore tends to be viewed with intense suspicion, particularly by the smaller tribes. Indeed, a Maasai member of parliament once suggested that the distribution of contraceptive pills should be limited to the Kikuyu, Luo, Kamba and Luhya areas, but certainly not among the Maasai.

The political sensitivity surrounding the discussion of fertility limitation makes for climate in which more aggressive alternatives to Kenyas present approach to population issues cannot be fruitfully debated. For although government planners may be sympathetic to the need for some population control, there are important explosive issues underlying such policy alternatives, many of them directly connected with the power base on which the government rests. The resulting lack of a clear commitment to fertility reduction at the level of national leadership further translates into luke warm commitment or indifference among the middle level bureaucrats and operatives. It is instructive that while the World Bank perceived of Kenya's MCH/FP project primarily as a population project, the Kenyan officials perceived of it primarily as a rural health service project. Thus judging from the perspective of the Kenyan officials the project is an unqualified success, to the extent that it has improved health service delivery system to rural areas.

But perhaps the attitude of Kenyan officialdom at all levels also explains some of the shortcomings of the family planning component of the project. We have already referred to the poor location of Rural Health Centres in relation to the distribution of population and ease of access by potential clients. Data from the Kenya Fertility Survey indicate that less than half of the women interviewed knew where to go for family planning supplies. And in the Rural Health Centres we visited the number of family planning cases surprisingly low, even though slight regional variations were noticeable. While this may represent the very small demand for family planning services in rural Kenya, but it also underlines the ineffectiveness of the information and education system created under the project.

We have already referred to the negative or at least neutral attitude of Kenyan bureaucrats in their individual capacity toward fertility reduction. This attitude was also found among Ministry of Health personnel at the Provincial and District levels. In one case a Provincial Medical Officer even suggested that the Family Planning component should in future be scrapped from the project since, in his opinion, it was imposed on Kenya by the donors. The accuracy of this doctor's information is not in itself important except to the extent that it colours his attitude which is likely to influence the attitude and performance of his subordinates. It may be tempting to treat this as an isolated case, but it appears to permeate very widely throughout the country. Another manifestation of this schizophrenic approach to the population problem in Kenya is the appointment as Executive Director of the Family Planning Association of Kenya, of a lady who has achieved fertility higher than the national average.

But of more direct relevance to the performance of the family planning programme is the attitude of the staff at the service delivery points. At Kombewa and Chulaimbo Health Centres we found two nurses trained to give motivational education and to provide family planning services but who had eight and eleven children, respectively. Obviously we cannot generalise on the basis of these cases, but they do underline a potential negative predisposition toward family planning, which is likely to interact with the already low demand for family planning services in rural Kenya to produce an extremely hopeless environment for public intervention. It is not surprising therefore that the MOH personnel at the SDP tend to concentrate on curative work to the neglect of FP motivation.

The creation of a new cadre exclusively concerned with health education and motivation for FP does not appear to have improved matters significantly. Although practically every member of the public we spoke with and who knew about the Family Health Field Educators was keenly impressed by their positive role in providing health education, very few of them seemed aware of or cared about the FHFES motivational role for family planning. Indeed, the few FHFES we interviewed admitted that they tended to concentrate on general health, nutritional education and environmental sanitation than on family planning. While this may partly be explained by the generally negative attitude toward family planning in rural Kenya, several MOH officials, particularly at the district level felt that the apparent lack of effectiveness of FHFES on family planning was probably related to their inadequate

training and virtual lack of supervision.

FHFES training curriculum deals with the combination of community and cultural factors that affect family health; the health and welfare needs of the mother and children during pregnancy, infancy and early childhood; the services available to help families solve their health and welfare problems including family planning services; and motivation and communication techniques. But they don't receive any training on the side effects on contraception and are encouraged not to answer any questions relating to these but instead to refer them to the Health Centres where a nurse more sufficiently trained in family planning is available. A number of officials, including some at the National Family Welfare Centre felt that the inability of the FHFES to answer questions about side-effects of contraception, tended to undermine the confidence in their competence. Clearly there is need to expand the training of FHFES to include the side effects of different clinical methods of family planning.

In conjunction with the expanded curriculum for FHFES there may also be the need to raise the basic level of education for this cadre. At the moment the basic level of education which ranges from eight to ten years not only tends to limit their ability but it also creates frictions and jealousies among other members of the Health Team all of whom have a minimum of twelve years basic education in addition to professional training of up to three and a half years but are paid at the same

level as FHFES. It is feared the apparent incompatibility of salary scales with levels of training may lead to higher attrition rates, particularly among Community Nurses although there is yet little evidence of this happening.

Unless family planning is to become the focal emphasis of the FHFES work it may be argued that they work at the moment, to the extent that it concentrates on general health education, tends to replicate that other personnel at the Rural Health Centre, notably the Public Health Nurse, Nutrition Educator and Community Nurse all of whom also conduct education - motivation activities at the Health Centres to groups and to individual mothers, to ~~new~~womens groups and in a few cases to women's homes. A case may be made here for a more explicit communication strategy to make the maximum use of FHFE. For instance, the role of FHFES may be more significant if their work was geared particularly to person to person communication if family planning were to be the emphasis. In addition, a more effective system of supervision of FHFES is clearly necessary. At the moment the HEO is likely to visit a FHFE only once a month depending on the availability of transport. In one case in Coast Province and another in Nyanza the FHFE had not been seen in HEO since the beginning of the year (3 months).

CONCLUDING COMMENTS

Inevitably a showdown in Kenya's current very high rate of population growth is highly desirable. While fertility reduction is a very complex and slow process, the present inadvertently pro-natalist or at best neutralist approach of the present government to population issues does not promise any solutions in the foreseeable future. Currently only about 2 percent of the ever married women interviewed in the Kenya Fertility Survey had used a modern contraceptive and only 17.0 percent expressed the desire for no more children. Clearly Kenyan women do have a desire for fertility reduction. However, there is significant variations in contraceptive use which seem to be closely associated with levels of education among women, their participation in modern sector economic activity and the husband's socio-economic status. This would suggest that contraception and demographic change are likely only with general socio-economic development particularly among women.

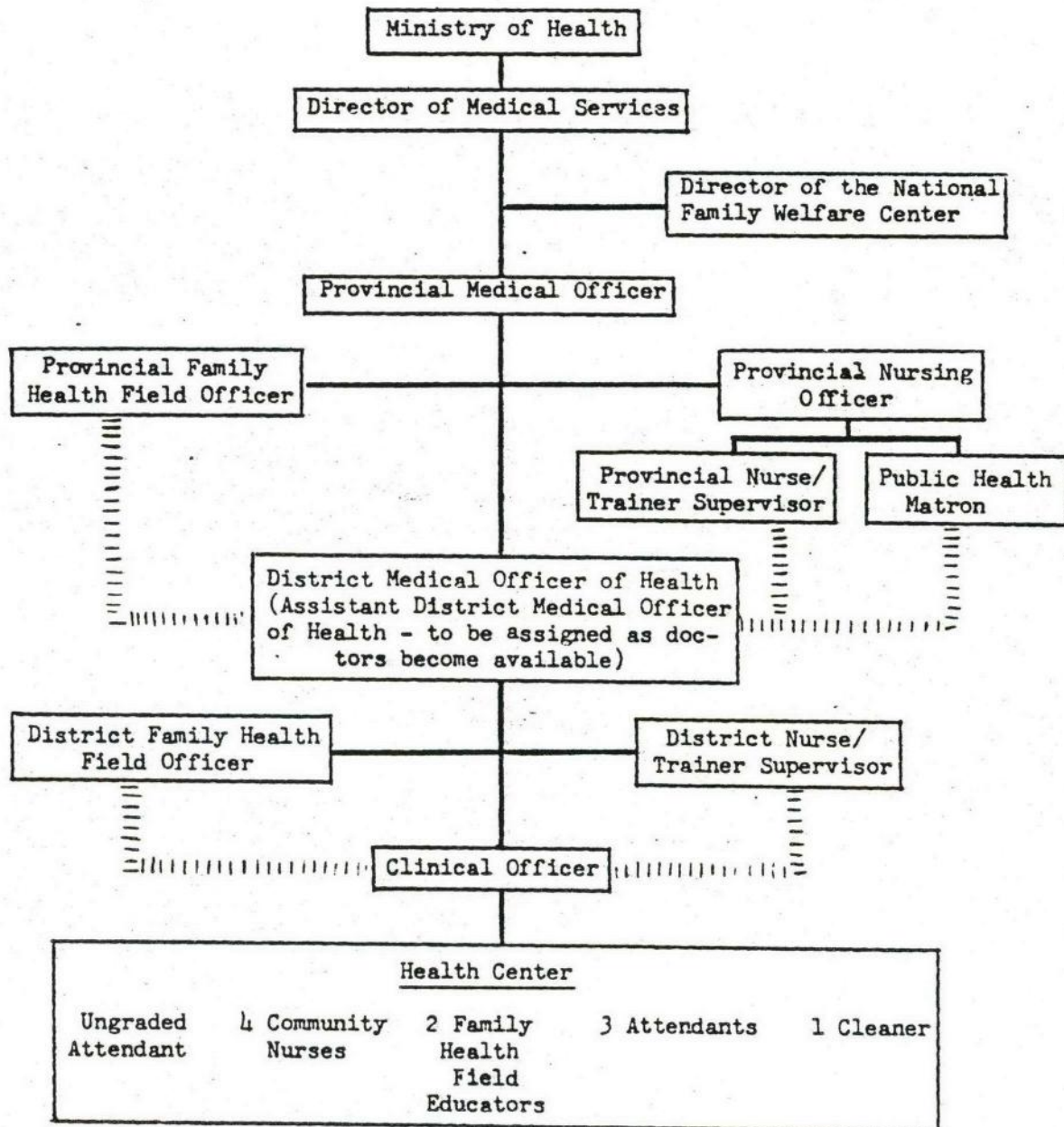
Having observed this it may be observed that family planning cannot be the main source of such demographic change, although it may accelerate it after a certain threshold is reached necessitating change in attitudes towards large families. This realization in turn raises the question of economic justification for investments of the magnitude made under this project for a gradualist and largely ineffectual family planning. Rather than argue for the down grading of the family planning programme, we must appeal for a more aggressive approach. In addition to trying to reach all the women who desire reduced fertility, and expanding

the cover and improving the efficiency of motivational efforts, more resources should be directed toward improving the status of women which is probably the surest way to secure higher levels of contraception and fertility reduction. Although there is no denying the fact that demographic change is a very slow and complex process, the population and natural resource crisis in Kenya today does not allow for the long range soft options. It should therefore be a condition of future population credits by the Bank that the Kenyan leadership must be prepared to face the population issue more boldly.

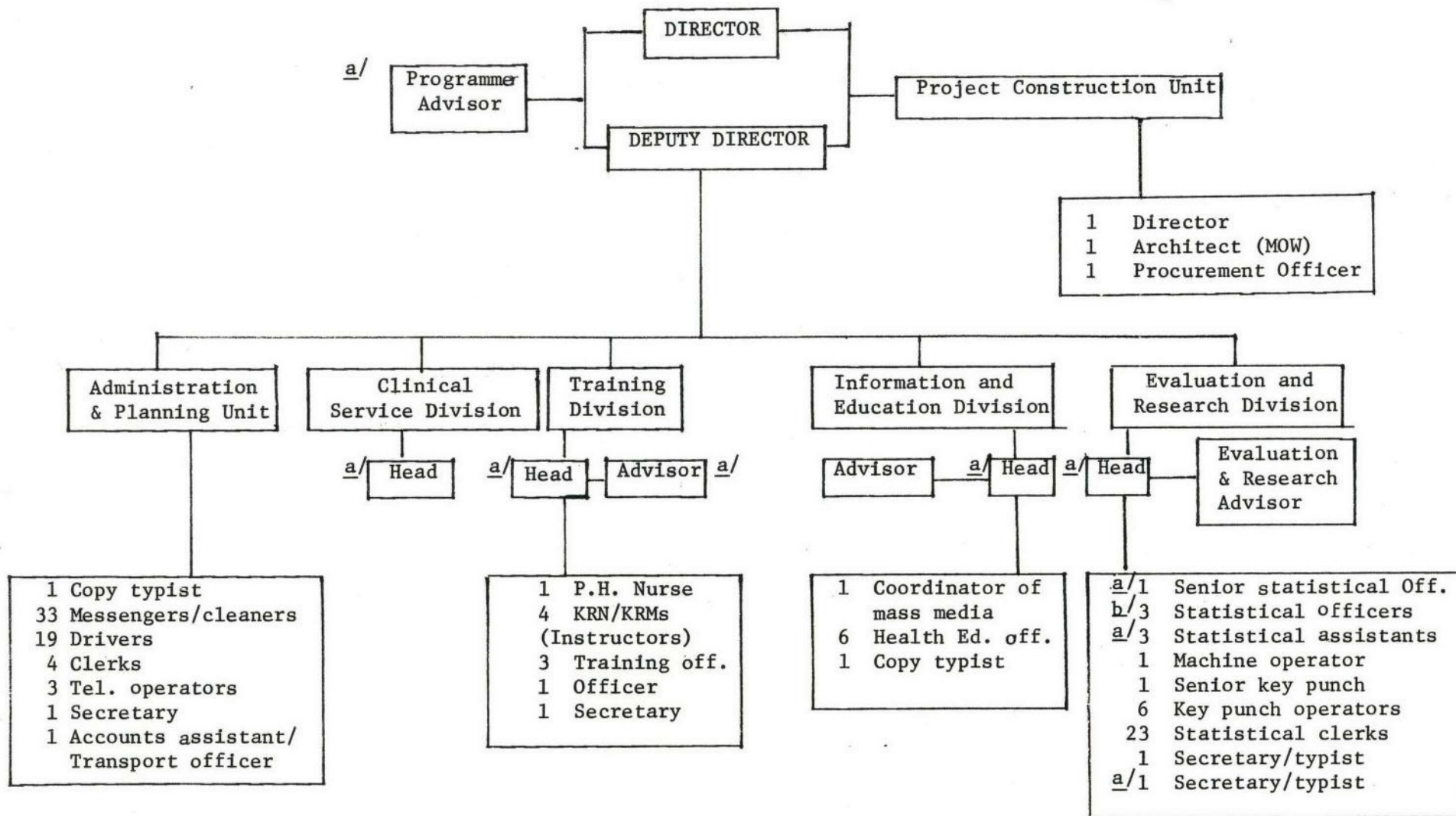
LIST OF PERSONS CONTACTED

Mr. N. Ng'ang'a	- Permanent Secretary, Ministry of Health
Dr. W. Koinange	- Director of Medical Services
Dr. S. Kanani	- Deputy Director of Medical Services
Dr. J. Maneno	- Assistant Director of Medical Services
Dr. I. Gathinji	- Deputy Director, NFWC
Mr. R.R. Peterson	- Evaluations & Research Officer, NFWC
Mr. D.N. Mbai	- Chief Public Health Officer, H.E.U.
Mrs. J. Kariuki	- NFWC
Dr. Quvechi	- Consultant NFWC
Dr. Kulumba Mwangala,	Provincial Medical Officer, Central
Sister Ithongo	- Provincial Matron, Central
Mrs. M. Odera	- Research and Evaluations Officer, FPAK
Mr. J.A.K. Rotich	- Provincial Hospital Secretary, Nyanza
Mr. Nyakado	- Clinical Officer/Tutor, Chulaimbo RHDC
Dr. M.R. Migue	- Provincial Medical Officer, Coast
Mr Lillo	- Provincial Hospital Secretary, Coast
Mr. G.A. Jowi	- Clinical Officer, Vipingo RHC
Mr. J. Mwanyika	- Clinical Officer, Rabai RHC
Dr. G.O. Rae	- Medical Officer of Health, Kiambu

B. Administrative Structure
at Provincial and District
Levels



Source: Ministry of Health.



a/ Vacant

b/ 1 vacant

wp# 213
New

PROJECT COMPLETION REPORT BASIC DATA SHEET
KENYA FIRST POPULATION PROJECT (CREDIT 468-KE)

KEY PROJECT DATA

<u>Item</u>	<u>Appraisal Estimate</u>	<u>Actual or Current Estimate</u>
Total Project Cost (US\$ million)	15.4	17.9
Overrun (%)		16.0%
Credit Amount (US\$ million)		12.0
Disbursed		100.0%
Dates for Completion of Physical Componentents		
National Family Welfare Center	3/77	3/78
Community Nurse Training Schools	12/77	9/79
Rural Health Demonstration Centers	3/77	3/80

OTHER PROJECT DATA

<u>Item</u>	<u>Original Plan</u>	<u>Revision</u>	<u>Actual or Current Estimate</u>
First Mention in Files		-	-
Government's Application		-	-
Negotiations		-	-
Board Approval	3/19/74	-	-
Loan Agreement Date	4/ 1/74	-	-
Effectiveness Date	7/31/74	-	-
Closing Date	6/30/78	6/30/79	12/31/79
Borrower	Government of Kenya		
Executing Agency	Ministry of Health		
Fiscal Year of Borrower	July 1 - June 30		
Follow on Project	2nd Population/ Health Project		Appraisal October 1980

MISSION DATA

<u>Item</u>	<u>Month/Year</u>	<u>No. of Days</u>	<u>No. of Persons</u>	<u>Staff Days</u>	<u>Interval Between Missions (Months)</u>
Reconnaissance	May 1971				
Identification					
Preparation					
Preappraisal					
Appraisal	11-12/72	30	8		
Total					
Supervision I	6/74	7	2		
Supervision II	10/74	5	2		4
Supervision III	3/75	10	3		5
Supervision IV	6/75	7	2		3
Supervision V	11/75	12	3		5
Supervision VI	3/76	6	3		4
Supervision VII	9/76	11	4		6
Supervision VIII	4/77	20	4		7
Supervision IX	10/77	7	1		6
Supervision X	4/78	14	5		6
Supervision XI	7/78	17	3		3
Supervision XII	12/78	10	3		5
Supervision XIII	3/79	10	1	10	3
Supervision XIV	8/79	19	5	95	5
Supervision XV	12/79	12	1	12	4

COUNTRY EXCHANGE RATES

Name Currency

Kenyan Shilling (K.Sh.)

Appraisal Year Average

Exchange Rate: US\$1 = 6.9 K.Sh

Completion Year Average (November 1979)*

US\$1 = 7.4 K.Sh

* In October 1975, the Kenya Shilling was devalued and pegged to the SDR 1 = K.Sh. 9.66, and the rate vis-a-vis the US dollar has fluctuated since that time.

PROJECT COMPLETION REPORT

KENYA: First Population Project

July 1974 - December 1979

GLOSSARY

Crude Birth Rate:	Number of live births per year per 1,000 population.
Crude Death Rate:	Number of deaths per year per 1,000 population.
Rate of Natural Increase:	Difference between crude birth and crude death rates; usually expressed as a percentage.
Rate of Population Growth:	Rate of natural increase adjusted for (net) migration, and expressed as a percentage of the total population in a given year.
Infant Mortality Rate:	Annual number of deaths of infants under 1 year per 1,000 live births during the same year.
Total Fertility Rate:	The average number of children that would be born per woman if she were to live to the end of her child-bearing years, and bear children according to a given set of age-specific fertility rates. The Total Fertility Rate often serves as an estimate of the average number of children per family.
Life Expectancy:	Average number of years expected to be lived by children born in the same year if mortality rates for each age/sex group remain the same in the future.
Contraceptive Prevalence Rate:	Percentage of married women of reproductive age group (15-49 years) using some method of contraception at a given point in time.

ABBREVIATIONS

CN	=	Community Nurse
CNTS	=	Community Nurse Training School
CO	=	Clinical Officer
EN/CN	=	Enrolled Nurse/Community Nurse
FHFE	=	Family Health Field Educator
FHFO	=	Family Health Field Officer
FP	=	Family Planning
FPAK	=	Family Planning Association of Kenya
GOK	=	Government of Kenya
HEO	=	Health Education Officer
HEU	=	Health Education Unit
I&E	=	Information and Education
MCH	=	Maternal and Child Health
MOEPD	=	Ministry of Economic Planning and Development
MOH	=	Ministry of Health
MOW	=	Ministry of Works
NFWC	=	National Family Welfare Center
NT/S	=	Nurse Tutor/Supervisor
PSRI	=	Population Studies and Research Institute
RHC	=	Rural Health Center
RHDC	=	Rural Health Development Center
RHF	=	Rural Health Facility

PROJECT COMPLETION REPORT BASIC DATA SHEET
KENYA FIRST POPULATION PROJECT (CREDIT 468-KE)

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Fiscal Year of Borrower	July 1 - June 30		
Follow on Project	2nd Population/ Health Project		Appraisal October 1980

COUNTRY EXCHANGE RATES

Name Currency	Kenyan Shilling (K.Sh.)
Appraisal Year Average	Exchange Rate: US\$1 = 6.9 K.Sh
Completion Year Average (November 1979)*	US\$1 = 7.4 K.Sh

* In October 1975, the Kenya Shilling was devalued and pegged to the SDR 1 = K.Sh. 9.66, and the rate vis-a-vis the US dollar has fluctuated since that time.

MISSION DATA

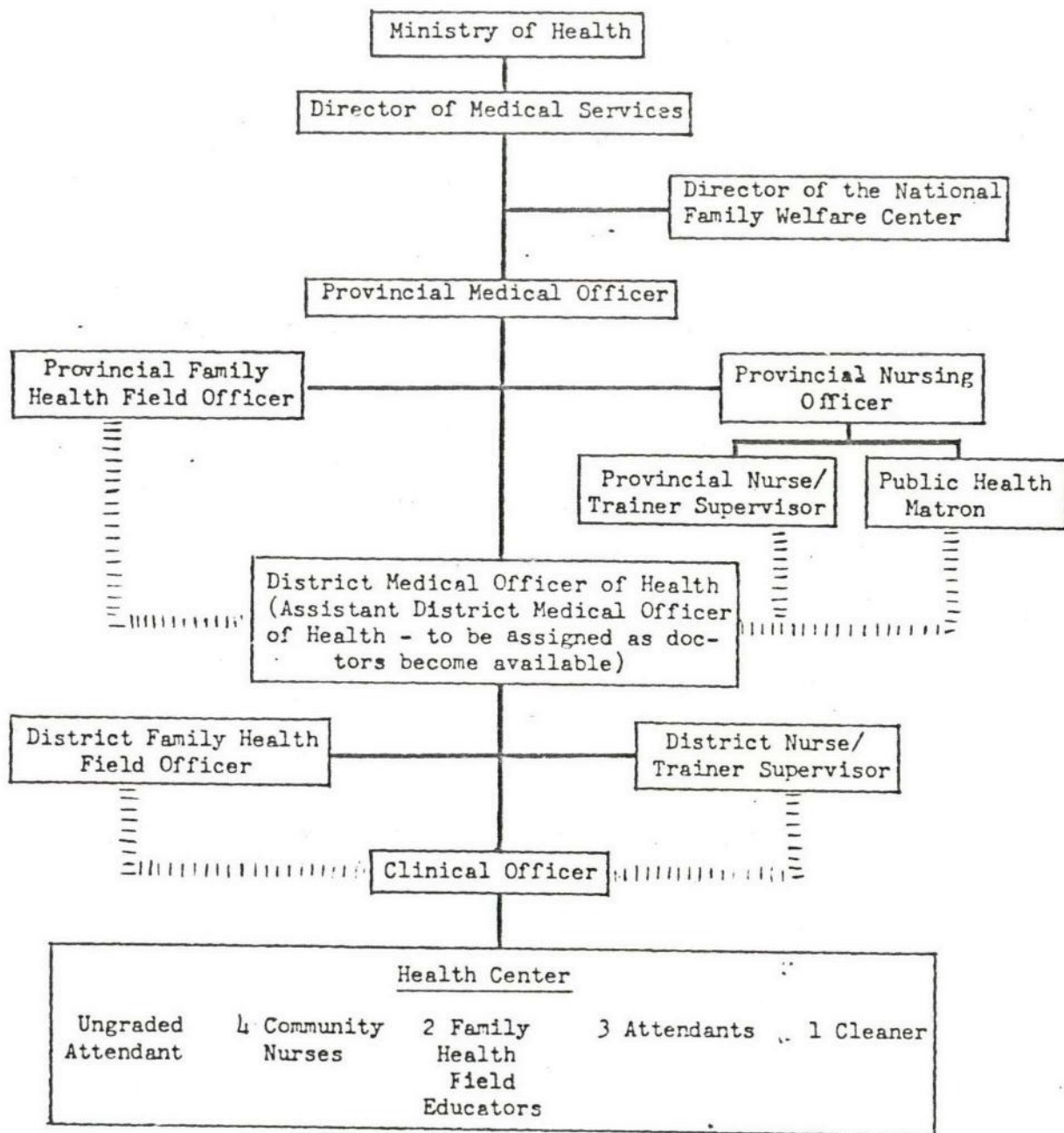
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COMPOSITION OF MISSIONS

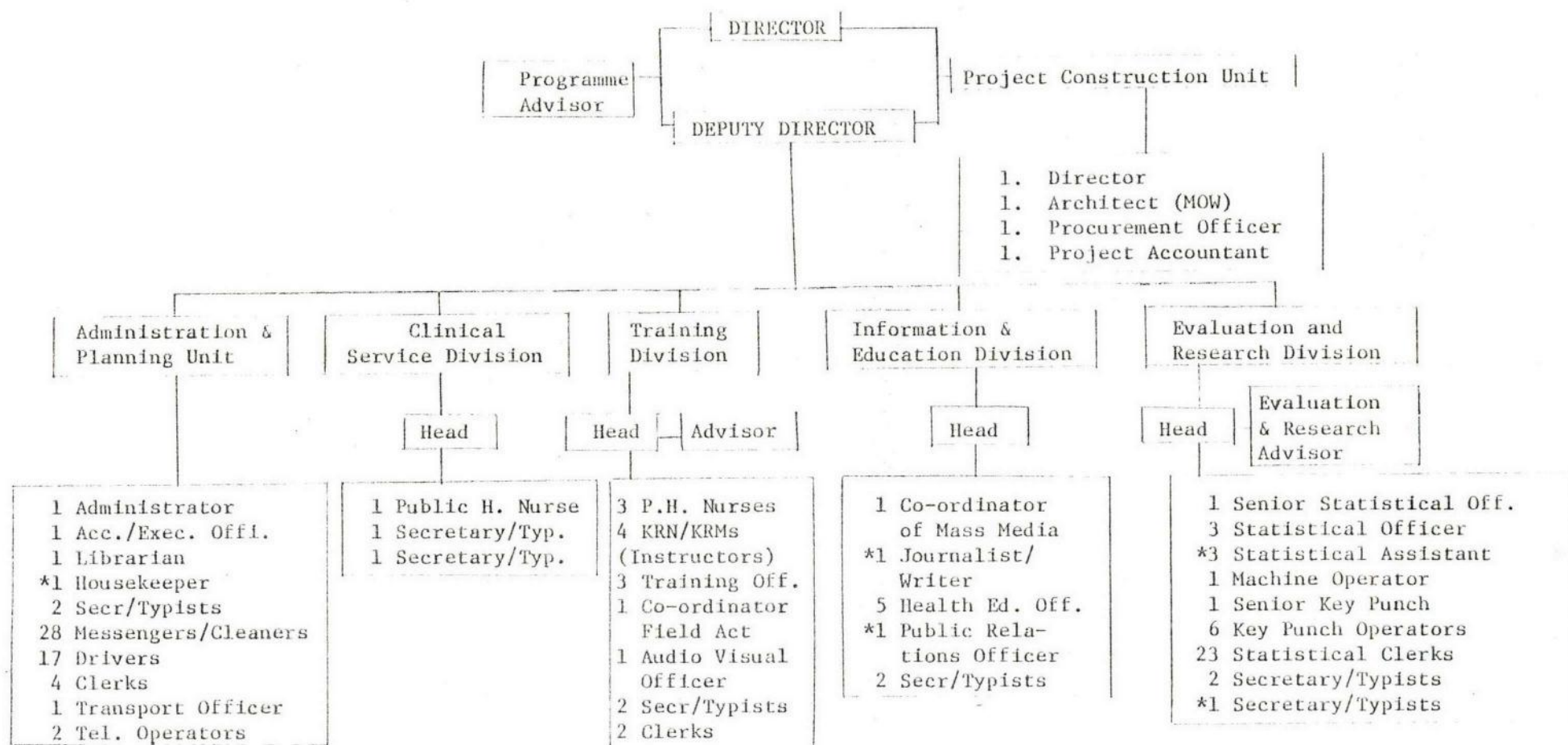
	Pop. Specialist	Architect	Medical Specialist	Division Chief	Eval. & Res. Specialist	Department Director	IEC Specialist	Public Health Specialist
Supervision I	1	1						
Supervision II	1		1					
Supervision III*								
Supervision IV	1	1						
Supervision V	1	1		1				
Supervision VI	1	1	1					
Supervision VII	1	1			1	1		
Supervision VIII*								
Supervision IX		1						
Supervision X*								
Supervision XI*								
Supervision XII*								
Supervision XIII							1	
Supervision XIV	1	1	1				1	1
Supervision XV							1	

(*) Not available

B. Administrative Structure
at Provincial and District
Levels



Source: Ministry of Health.

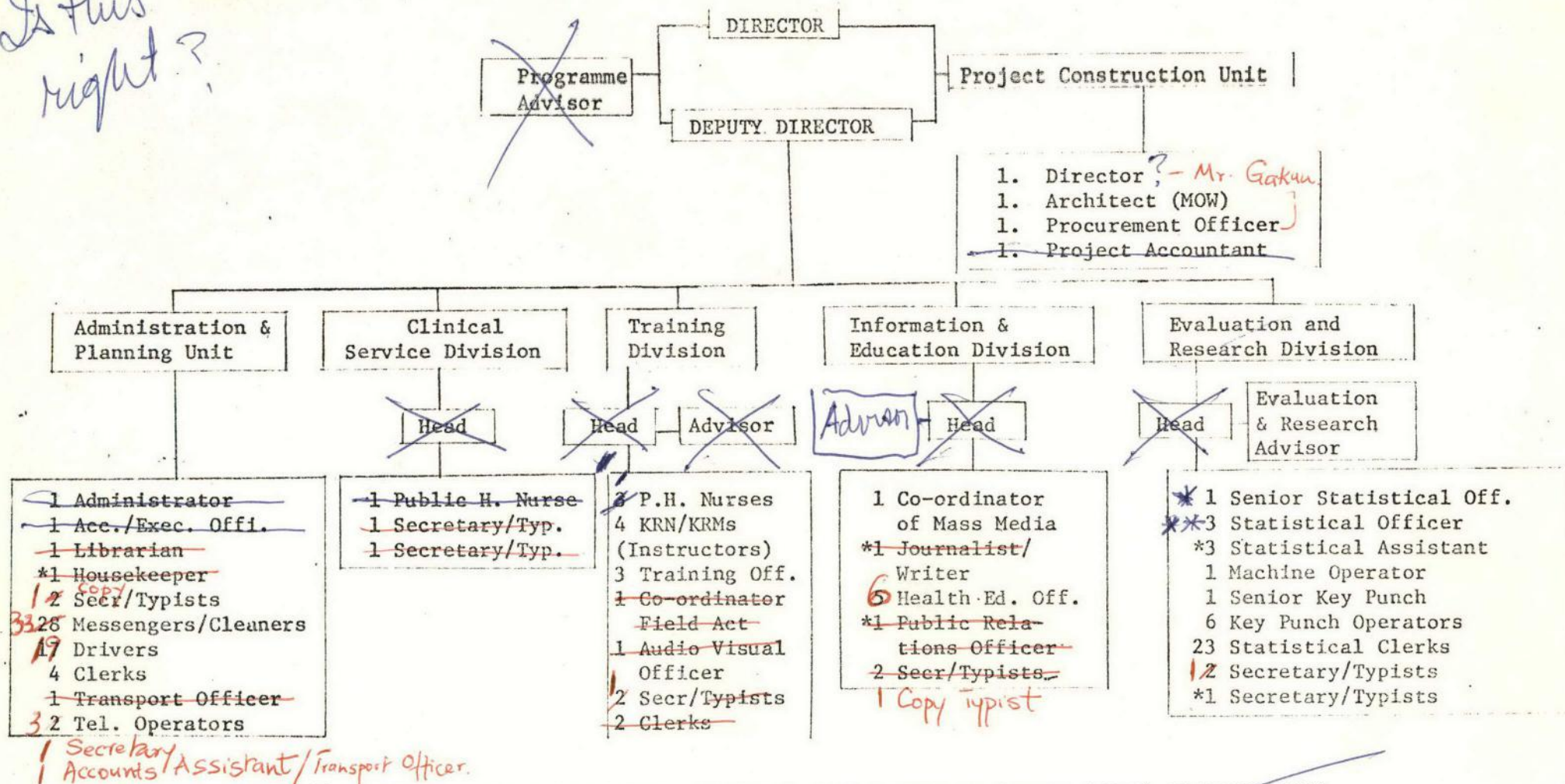


ANNEX 10: ORGANIZATIONAL STRUCTURE: NATIONAL FAMILY WELFARE CENTRE (NFWC) JANUARY, 1979

*Vacant

Dr. G. -
Is this
right?

CFIDMT II



ANNEX 10: ORGANIZATIONAL STRUCTURE: NATIONAL FAMILY WELFARE CENTRE (NFWC) JANUARY, 1979

*Vacant
** = 1 Vacant

Feb. 1981

Show [X] figures in different type or small letters
and actual staff in large

OFFICE MEMORANDUM

TO: Mr. Shiv S. Kapur, Director OED

DATE: January 9, 1981

FROM: *HW* Harold W. Messenger, Division Chief, PHND1SUBJECT: KENYA: First Project Completion Report

Please find attached the original and five copies of the Project Completion Report for Kenya I Population Project (Cr.468-KE). The report was prepared by Mr. Jay Satia, Management Consultant, with the assistance of several PHN staff members.

Distribution: Mr. B. Sandberg, EAL
Mr. P. Hall, EAL
Mr. J. Kraske, EAL
Mr. D. Greene, EAL
✓ Mr. J. Malone, OED
Mr. H. Adler, EAP
Mr. R. Faruquee, DED
Mr. J. Hendry, EAP
Mrs. N. Pishock, PHN
Ms. S. Boskey, IRD
Mr. J. Lee, PAS
Mr. K. Miller, CTR
Mr. P. Nichols, PAB
Mr. C. Poncia, LEG
Mr. J. Ducker, EANVP
Mr. V. Rajagopalan, CPSVP
Ms. H. Goris, RMEA
Mr. G. Tidrick, RMEA
Mr. P. Patel, URB
Mr. J. Satia, (consultant)
Dr. J. Evans, PHN
Mr. J. North, PHN
Dr. K. Kanagaratnam, PHN
Mr. I. Kang, PHN
Mr. A. Berg, PHN
Mr. D. Radel, PHND2
Mr. H. W. Franckson, PHND1
Mr. E. M. Schebeck, PHND1
Dr. E. Pratt, PHND1
Dr. G. Clarkson, PHND1

KENYA I/PHND1
HDiaz:mmh

Rec'd. 1/15/81

REPUBLIC OF KENYA
COMPLETION REPORT OF THE FIRST POPULATION
PROJECT CREDIT 468-KE

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PROJECT COMPLETION REPORT BASIC DATA SHEET
KENYA FIRST POPULATION PROJECT (CREDIT 468-KE)

KEY PROJECT DATA

<u>Item</u>	<u>Appraisal Estimate</u>	<u>Actual or Current Estimate</u>
Total Project Cost (US\$ million)	15.4	17.9
Overrun (%)		16.0%
Credit Amount (US\$ million)		12.0
Disbursed		100.0%
Dates for Completion of Physical Components		
National Family Welfare Center	3/77	3/78
Community Nurse Training Schools	12/77	9/79
Rural Health Demonstration Centers	3/77	3/80

OTHER PROJECT DATA

<u>Item</u>	<u>Original Plan</u>	<u>Revision</u>	<u>Actual or Current Estimate</u>
First Mention in Files		-	-
Government's Application		-	-
Negotiations		-	-
Board Approval	3/19/74	-	-
Loan Agreement Date	4/ 1/74	-	-
Effectiveness Date	7/31/74	-	-
Closing Date	6/30/78	6/30/79	12/31/79
Borrower	Government of Kenya		
Executing Agency	Ministry of Health		
Fiscal Year of Borrower	July 1 - June 30		
Follow on Project	2nd Population/ Health Project		Appraisal October 1980

COUNTRY EXCHANGE RATES

Name Currency	Kenyan Shilling (K.Sh.)
Appraisal Year Average	Exchange Rate: US\$1 = 6.9 K.Sh
Completion Year Average (November 1979)*	US\$1 = 7.4 K.Sh

* In October 1975, the Kenya Shilling was devalued and pegged to the SDR 1 = K.Sh. 9.66, and the rate vis-a-vis the US dollar has fluctuated since that time.

MISSION DATA

<u>Item</u>	<u>Month/Year</u>	<u>No. of Days</u>	<u>No. of Persons</u>	<u>Staff Days</u>	<u>Interval Between Missions (Months)</u>
Reconnaissance	May 1971				
Identification					
Preparation					
Preappraisal					
Appraisal	11-12/72	30	8		
Total					
Supervision I	6/74	7	2		
Supervision II	10/74	5	2		4
Supervision III	3/75	10	3		5
Supervision IV	6/75	7	2		3
Supervision V	11/75	12	3		5
Supervision VI	3/76	6	3		4
Supervision VII	9/76	11	4		6
Supervision VIII	4/77	20	4		7
Supervision IX	10/77	7	1		6
Supervision X	4/78	14	5		6
Supervision XI	7/78	17	3		3
Supervision XII	12/78	10	3		5
Supervision XIII	3/79	10	1	10	3
Supervision XIV	8/79	19	5	95	5
Supervision XV	12/79	12	1	12	4

COMPOSITION OF MISSIONS

	Pop. Specialist	Architect	Medical Specialist	Division Chief	Eval. & Res. Specialist	Department Director	IEC Specialist	Public Health Specialist
Supervision I	1	1						
Supervision II	1		1					
Supervision III*								
Supervision IV	1	1						
Supervision V	1	1		1				
Supervision VI	1	1	1					
Supervision VII	1	1			1	1		
Supervision VIII*								
Supervision IX		1						
Supervision X*								
Supervision XI*								
Supervision XII*								
Supervision XIII							1	
Supervision XIV	1	1	1				1	
Supervision XV							1	1

(*) Not available

GLOSSARY

Crude Birth Rate:	Number of live births per year per 1,000 population.
Crude Death Rate:	Number of deaths per year per 1,000 population.
Rate of Natural Increase:	Difference between crude birth and crude death rates; usually expressed as a percentage.
Rate of Population Growth:	Rate of natural increase adjusted for (net) migration, and expressed as a percentage of the total population in a given year.
Infant Mortality Rate:	Annual number of deaths of infants under 1 year per 1,000 live births during the same year.
Total Fertility Rate:	The average number of children that would be born per woman if she were to live to the end of her child-bearing years, and bear children according to a given set of age-specific fertility rates. The Total Fertility Rate often serves as an estimate of the average number of children per family.
Life Expectancy:	Average number of years expected to be lived by children born in the same year if mortality rates for each age/sex group remain the same in the future.
Contraceptive Prevalence Rate:	Percentage of married women of reproductive age group (15-49 years) using some method of contraception at a given point in time.

ABBREVIATIONS UTILISED:

CN	=	Community Nurse
CNTS	=	Community Nurse Training School
CO	=	Clinical Officer
EN/CN	=	Enrolled Nurse/Community Nurse
FHFE	=	Family Health Field Educator
FHFO	=	Family Health Field Officer
FP	=	Family Planning
FPAK	=	Family Planning Association of Kenya
GOK	=	Government of Kenya
HEO	=	Health Education Officer
HEU	=	Health Education Unit
I&E	=	Information and Education
MCH	=	Maternal and Child Health
MOEPD	=	Ministry of Economic Planning and Development
MOH	=	Ministry of Health
MOW	=	Ministry of Works
NFWC	=	National Family Welfare Center
NT/S	=	Nurse Tutor/Supervisor
PSRI	=	Population Studies and Research Institute
RHC	=	Rural Health Center
RHDC	=	Rural Health Development Center
RHF	=	Rural Health Facility

SUMMARY

The population growth rate in Kenya is high--about 3.3% in 1969 and 4.0% by latest estimates. In 1971 the Government of Kenya (GOK) requested Bank's assistance in preparation of a five-year Maternal and Child Health (MCH) and Family Planning (FP) program. The five-year program (1974-79) was directed towards strengthening rural health system infrastructure, establishing 400 fulltime MCH/FP service delivery point, training of paramedical staff, adding a new cadre of Family Health Field Educators for MCH/FP information and education activities, and establishing the National Family Welfare Center for administration of the program. The program objective was to reduce population growth rate from 3.3% to 3.0% in five years through increase in contraceptive usage. The total program cost of US\$38.8 million was financed through several independent but interrelated projects funded by several donors and GOK.

The IDA project (1974-77) was estimated to cost about US\$15.4 million (GOK US\$3.4 million and IDA Credit US\$12 million). The project included construction, equipping and furnishing of five community nurse training schools, 27 Rural Health Demonstration Centers, National Family Welfare Center, 87 vehicles and technical assistance for a program advisor, nursing activities study and family size motivation study. Overall the project implementation was satisfactory. The two-year delay in implementation occurred because it was the first project of MOH and IDA and it takes about four years to make health facilities operational. The total actual cost was US\$17.9 million, 16% higher than expected because of a higher than anticipated general price increase in all components. All the facilities are functioning although some health centers have water supply problems. By and large, the covenants in the credit agreement were fulfilled.

The project was an integral part of the five-year program. About 380 service delivery points were established but about 50% of all health facilities do not yet provide MCH/FP services. As the course duration for nurses is of three and one-half years, the impact of training is not yet felt. Family Health Field Educators were recruited and trained, but the efficiency and effectiveness was low due to unclear roles, inadequacy of supervision and lack of integration with other health staff. Information and education material was not produced. The National Family Welfare Center was established but its institutional capability needs to be further strengthened.

The program was aimed at recruiting 640,000 new acceptors (during 1974-79) but only 50% of this target was achieved. The original targets were too ambitious. Several factors--decline in program performance in 1978, limited demand due to desired large families, weak political support and limited availability of family planning services also contributed to the shortfall in performance relative to targets. The population growth rate actually increased because birth rate increased and death rates declined. The contraceptive prevalence rate (4.4% of married couples in the reproductive age group) remained low.

The donor coordination was informal, however a joint mid-term review was organized. The Bank's role has been productive and mutually rewarding. GOK requested the Bank to take a lead in the formulation of the second phase of the program.

The major issues relate to achievement of demographic objectives. The strategy used was location of program in MOH, integration of MCH and family planning, and appointment of a new field worker. The program is now being expanded by extending services to the community and incorporating multi-ministry multi-agency information and education activities. Instituting a new population program in the African region is a difficult task and there is a need to moderate expectations as well as to learn more.

PROJECT COMPLETION REPORT

KENYA: First Population Project

July 1974 - December 1979

In accordance with terms of reference dated March 21, 1980, a mission consisting of Messrs. H. Diaz (mission leader), E. Pratt, D. Radel and H. W. Franckson (staff members), and G. Clarkson, B. Jenny and J. Satia (consultants) visited Nairobi from March 31, 1980 to April 25, 1980 for preparation of the second integrated rural health services and family planning project and collection of data for the project completion report of the first population project.

The mission as a whole, but primarily J. Satia and H. Diaz, collected data on the first project and had discussions with MOH officials who were involved in the preparation and implementation of the project and officials of other organizations concerned with the Population Program.

This report is based on:

- (a) information obtained from records and data available in Washington including supervision reports;
- (b) reports of the National Family Welfare Center;
- (c) visits to two RHDCs and National Family Welfare Center facilities;
- (d) discussions with MOH officials and officials of other organizations concerned with the Population Program; and
- (e) discussion with some members of the preparation and appraisal missions.

I. BACKGROUND

A. Context of Project Formulation

Socio-Economic Conditions

1.01 The 1962 census, the first complete enumeration of Kenya's population, estimated the population to be about 8.6 million. The 1969 census placed the population at about 10.9 million, an increase of about 27% during the intercensal period 1962-1969, and preliminary results of the 1979 census indicate the population to be about 15.3 million. For the period immediately preceding the 1969 census, the crude birth and death rates were estimated to be 50 and 17 per thousand respectively, yielding a natural rate of population increase of 3.3% per annum. There is some evidence that fertility may have been actually increasing during this period. Total fertility rates were estimated to be 6.8 in 1962 and 7.6 in 1969 based upon census data. The total fertility rate and, therefore, the rate of population growth were among the highest in the world. Definitive data on trends in mortality are not available, but the crude death rates may have also been declining during this period. The crude death rate was estimated to be about 20 per thousand in 1962, 17 per thousand in 1969. In 1969, the life expectancy at birth was estimated to be about 47 years in males and 51 years for females and the infant mortality rate was estimated to be about 138 per thousand.

1.02 Kenya is inhabited by various social groups having different traditions and at different stages of socio-economic development. The fertility levels among these groups vary, but the differences are generally small. The Kenya Fertility Survey Report^{1/} mentions that the differences in fertility may be due to the modernizing factors of education and urbanity, rather than any cultural divergencies in behaviour stemming from social groups affiliation. Polygamous unions and the almost universal practice of long breast-feeding period, to some extent, restrain fertility.

1.03 Economic development in Kenya has been rapid. Per capita income in 1962 was estimated at US\$170, which was about the median for Africa as a whole. During the first decade after independence, the GNP grew at an average rate of 7% and per capita income at about 3.7% in constant prices. The primary school enrollment rate increased from 47% in 1960 to 64% in 1970, and near universal enrollments now prevail according to most recent estimates.^{2/}

1.04 Despite impressive economic growth during the 1960s, a high rate of population growth continued to influence the socio-economic structure adversely.^{3/} Although overall population density was low at 19 persons/sq.km. in 1969, nearly 80% of the population lived on 17% of the land (arable land). Therefore, the population density per sq.km of arable land was estimated to be about 190. Because of population growth, there were two streams of population movement--

^{1/} "Kenya Fertility Survey--Major Highlights", Central Bureau of Statistics, Ministry of Economic Planning and Community Affairs. Government of Kenya, 1979.

^{2/} Kenya Social Indicators Data Sheet. Kenya Population Sector Review, Report No. 267-KE.

^{3/} Appraisal Report--Population Project, Report No. 266a-KE.

from the rural countryside to urban centers and from the areas of high agricultural potential to medium potential and land settlement areas. About 7% of the population lived in urban centers of 2000 or more in size in 1962 as compared to 10.2% in 1970. The level of unemployment was high, and continues to remain so, estimated at about 20-24% of the total potential labour force. The dependency burden, defined as the percent of the total population under 15 years of age and 60 or over was 54%, one of the highest in the world. The cost of providing social services was on the rise; in percentage terms, the share of total recurrent expenditures for such services increased from under 24% of the government budget in 1964-1965 to about 43% in 1972/1973. These figures, in addition to improved quality of services, reflected in part a need to provide services to a larger population.

Previous Family Planning and Health Activities

1.05 Voluntary FP efforts in Kenya were begun by autonomous associations in Nairobi and Mombasa as early as 1955. In 1961, the Family Planning Association of Kenya (FPAK) was formed. The Government of Kenya (GOK), based upon the results of the 1962 census, realized that the high population growth rate would impose a major constraint on Kenya's ability to expand her economy and fully develop her capabilities. Through Ministry of Economic Planning and Development (MOEPD) in 1965, it invited the Population Council to advise on FP activities in Kenya. In its report, the Population Council^{1/} suggested that a population program:

- be viewed as an integral part of effort toward social and economic development;
- have an especially close link with the national health program; and
- be wholly voluntary.

It also suggested need for a population policy and outlined program details. In 1966, GOK announced the adoption of Family Planning as an integral part of maternal and child health services and formed a FP unit in the Ministry of Health. Thus Kenya became the first country in Sub-Saharan Africa to have a national family planning program.

1.06 By 1968, FP services were being provided through seven mobile teams and 40 static clinics, most of them in MOH facilities and the remaining established by the FPAK. Also, in that year the FPAK launched a program for FP educational activities through its field worker program and through mass media and seminars.

1.07 Prior to 1970, responsibility for rural health services was decentralized and these services were mainly operated by county councils. However, to establish a more viable framework of expansion of activities and to take over a growing financial burden, rural health services were taken over by MOH in that year. The

^{1/} "Family Planning in Kenya", MOEPD report submitted by an advisory mission of the Population Council to Ministry of Economic Planning and Development, GOK, 1965.

government health services were organized on a centralized basis and carried out at the central, provincial and district levels through a network of hospitals, health centers and dispensaries to provide both curative and preventive services. In 1970, there were about 600 government rural health facilities consisting of 185 health centers and sub-centers and 414 dispensaries. The rural health delivery system emphasized curative services and, in the absence of an adequate number of trained personnel, was overburdened. These services were organized in the same manner as hospital outpatient departments, offering different services on different days. In 1972, the GOK formulated with WHO's assistance a ten-year (1974-1984) rural health plan to expand provision of health services by training of paramedical staff, improving the coverage and distribution of rural health facilities, and a systematic attack on those diseases more responsive to the efforts of rural health services.

1.08 By 1972, the FP services were offered on a part-time basis in about 300 out of 900 government and non-government health facilities. The number of first visitors and revisitors for FP services grew steadily from 1,500 and 7,900 respectively in 1967 to 45,200 and 172,300 respectively in 1973. Mobile teams visited 72 clinics accounting for a little over one-third of the services in 1972. Some 20% of all FP acceptors were from Nairobi, the services being provided by the Nairobi City Council.

1.09 Many foreign agencies had provided assistance in FP activities. In particular, technical assistance was provided by SIDA, USAID, the Population Council and the Government of the Netherlands. The services were supported by IPPF, SIDA and NORAD. Funds for training and fellowships were provided by NORAD and the Ford Foundation. Funds for an information system and for the Program for Better Family Living (which provided family life education) were provided by UNFPA. In addition, support was provided for health education activities by USAID, for equipment by ODM (now ODA), for a contraceptive social marketing project by Population Services, Inc., and for pilot projects for post-partum FP activities by the African Medical and Research Foundation.

B. Process of Program Formulation

1.10 The results of the 1969 census confirmed the continuing trend towards increased fertility and population growth rates. The concern with such high growth rates led GOK to appoint a senior Kenyan administrator to be directly responsible for the program, set specific program targets and formulate a five-year MCH/FP program for FY75/79.

1.11 The GOK asked Bank's assistance in preparation of this five-year program. Following a reconnaissance mission in May 1971, an appraisal/program review mission visited Kenya from November 19 to December 18, 1972. It included specialists in evaluation, Information and Education, nursing, an architect and an economist. The UNFPA coordinator in Nairobi was also associated with the mission's work. Representatives of MOH, Ministry of Finance and MOEPD were actively involved in formulating the program. Based upon mission findings a sector review report and an appraisal report were prepared. These reports were based on the Five-year

FP Program developed by the Kenyan Government. Preliminary extracts of the Appraisal and Sector Review Reports were circulated to the Government and the participating donors, for comments. The reports provided the basis for the Government's mobilising external assistance. The Bank assisted the Government in this task. The Credit Agreement was signed in April 1974 and the project became effective in July 1974.

1.12 The review identified the following weaknesses and constraints in the operations of MCH/FP services: (a) lack of adequately trained paramedical personnel; (b) weak rural health system infrastructure; (c) weak I&E activities; and (d) lack of an appropriate institutional focus for planning, implementing and evaluating a national program. FP, however, continued to be a sensitive issue and, therefore, a cautious and gradual approach to program development was decided on by the Government. FP services were to be delivered as an integral part of MCH activities, and the Ministry of Health was given primary executing responsibility.

C. Program and Project Content

1.13 The five-year program was primarily directed towards strengthening of MCH/FP activities (in addition to providing support to the rural health development plan). Its goal was to increase contraceptive acceptance rates, to reduce population growth rates and to improve health status of mothers and children. To achieve these goals, the weaknesses and constraints mentioned earlier needed to be removed.

1.14 In functional terms the program was intended to help: (a) expand services; (b) create a strong broad-based organizational framework to enable the implementation of the Five-year Family Planning Plan; (c) improve administrative and management capabilities for its implementation; (d) achieve a reduction in the population growth rate from 3.3 to 3.0%; (e) develop a system for ongoing evaluation of efficiency and effectiveness of program inputs through operationally oriented research studies and for an assessment of the program's impact; and (f) expand family planning information and education activities to stimulate demand for services.

1.15 The specific components of the program included: (a) eight community nurse training schools, 30 rural health centers, a National Family Welfare Center, a family planning clinic, and a Health Education Unit; (b) general, special and clinical equipment and about 190 vehicles; (c) technical assistance (360 man-months for specialized advisory staff and 28 fellowships) and evaluation and research studies; and (d) operating costs of the program including contraceptive supplies, educational materials and staff salaries. The total cost of the program was estimated at US\$38.8 million.

1.16 In October 1973, under the GOK Chairmanship, a donor meeting was held in Nairobi. At this meeting the various donors pledged their support for the five-year program. Seven donors were involved and the financing of the program was arranged through several independent projects. Total donor contribution to the financing of the program was US\$24.5 million (Annex 1). The IDA supported project amounted to about US\$15 million of which IDA contribution was US\$12 million and the rest was financed by the Government.

1.17 Based on the preference of the other bilateral and multilateral donors providing grants, the Bank, as the lender of last resort, financed mostly infrastructure and some technical assistance (see Annex 2). These included:

- (a) Construction, equipping and furnishing of:
 - (i) Five Community Nurse Training Schools;
 - (ii) Twenty-seven Rural Health Demonstration Centers; and
 - (iii) A National Family Welfare Center and supporting facilities, including a Family Planning Clinic and a Health Education Unit.
- (b) Purchase of about 87 vehicles (including about 18 for Community Nurse Training Schools, 30 for Rural Health Centers, eight for the National Family Welfare Center, 28 for the Health Education Unit and three for the Population Studies and Research Center), and office equipment.
- (c) Provision of technical assistance including (i) employment of a Program Advisor (about 36 man-months); (ii) the carrying out of a Nursing Activities Study (about 12 man-months) to develop a standard staffing pattern of hospital services for the most efficient use of personnel, and (iii) a study of factors which influence decisions on family size.

The project was expected to be completed by June 30, 1977.

1.18 It was the Bank's first (and to date the only) population project in Sub-Saharan Africa. Although the Bank financed the necessary infrastructure, the Credit Agreement stipulated that the Bank would review the progress of the program as a whole and be consulted on any changes in its contents. Over 50% of the time spent on supervision by Bank staff was devoted to supervising the software aspects of the program.

II. PROJECT IMPLEMENTATION

A. Overview

2.01 Overall, project implementation was satisfactory, although implementation took five years instead of the three years estimated at appraisal. All the facilities--five Community Nurse Training Schools (CNTS), 27 Rural Health Demonstration Centers (RHDCs) and the NFWC buildings have been completed and are functioning. Five original sites for RHDCs had to be changed and four RHDCs have serious water supply problems. There were no significant deviations from original plans. The

total project cost was estimated to be US\$17.9 million as compared to the original estimate of US\$15.4 million. The cost overrun of 16% was due to general price increases in all components.

2.2 A delay of two years occurred in project completion due to a variety of factors. The first program director died in the first year, it was the first project of MOH with IDA and much learning had to take place on both sides, MOH itself had taken over the administration of rural health facilities only in 1970 and needed to strengthen its internal organization. Moreover, experience shows that under normal circumstances the process of establishing new health facilities--site selection and acquisition, design, tender procedures, construction, equipping and staffing--takes about five years in Kenya. In the case of the IDA project, this process took an average of about four years due to close follow-up. The original estimate of a three-year project duration was, therefore, too ambitious.

Credit Effectiveness

2.03 The appointments of a project construction director, establishment of an Interministerial Working Committee and satisfactory financing arrangements for the program as a whole were conditions of credit effectiveness and disbursements. These conditions were satisfactorily fulfilled and the credit was declared effective on July 31, 1974, as estimated at appraisal.

B. Physical Implementation

2.04 At appraisal, it was estimated that the five CNTSs would be in operation by June 1977. However, the completion was delayed by about 18 months. About nine months of delay was in starting construction and an additional nine months due to delay in construction. The facilities are being utilized as expected and data in Annex 3 shows their utilization. In 1979, the project-financed schools accounted for about 40% of the total intake of CNTSs operated by GOK.

2.05 Twenty-seven Rural Health Demonstration Centers (RHDCs) were constructed to add to an already existing stock of 185 RHCs.^{1/} The 27 RHDCs were grouped in three batches in accordance with the anticipated timing of site availability. Five locations had to be changed from appraisal plans for a variety of reasons such as subsequent decision to construct a rural health training center at the same location or a suitable site not being available at the planned location. Delay in completion of RHDCs occurred on two grounds--initial delay in bidding of about 12 months, primarily because of bid evaluation, and additional delay in equipping and staffing. The delay in bid evaluation occurred as it was done by an inexperienced quantity surveyor. All the RHDCs were expected to be completed in 1976 at appraisal. However, the actual completion was as follows--two in 1976, 14 in 1977, nine in 1978 and two in 1979. By August 1979, all RHDCs were functioning. However, not all of them were fully staffed or equipped. It was estimated then, that of the 27 RHDCs, 12 were fully staffed and equipped, eight were either not fully staffed or not fully equipped or both, five RHDCs did not have water

^{1/} A RHDC is a RHC with additional facilities for practical training of community nurses.

supply and two had other site or minor problems. These difficulties are gradually being corrected. The data on utilization of RHDCs is not available but visits to two RHDCs by missions suggests that their utilization is comparable to that of other rural health centers of MOH.

2.06 It was felt that with the expansion of the program field staff and activities, the facilities and staff for program administration at Nairobi also needed to be expanded. Therefore, it was decided that a National Family Welfare Center should be established to replace the existing FP unit within MOH. To house NFWC, a new facility was to be constructed in the Kenyatta Hospital Complex. Three facilities were planned to provide support to the NFWC--a dormitory accommodating about 100 trainees to support the training program, a FP clinic in the Kenyatta Hospital complex near NFWC to provide practical clinical training and inservice training of health staff to provide MCH/FP services, and a Health Education Unit to produce information and health education materials--containing accommodation for the production of various types of audio-visual materials and printed matter, a small cinema and exhibition hall for demonstrations and teaching, offices for staff, writers and artists, television and cine studios, workshop and printing press. As against an appraisal estimate of September 1976, the facilities were completed in September 1977 and fully equipped by June 1978. The delays occurred in all three phases--bid evaluation, construction and procurement of furniture and equipment. The dormitory space is shared with the medical faculty and is currently used as a dormitory for Medical Training Center trainees. The FP clinic building provides only FP services, as alternative facilities for MCH services are available. The building is functional except for two minor problems--it does not provide enough privacy for client counselling and does not have sufficient examination rooms. In a typical month, about 500 new clients (about 10% of the national total) and 2,000 old clients receive services at the clinic. About 70% of the clients accept IUD or injectable contraceptives as compared to only about 20% in the total program. The staff did not move into the HEU building for about a year after it was ready as the equipment supplied by USAID did not arrive until October 1979 (paragraph 3.27).

2.07 Purchase of 87 vehicles (including 18 for CNTS, 30 for RHDC, eight for NFWC, 28 for HEU, and three for the Population Studies and Research Institute of the University of Nairobi) were provided for in the project. The procurement of vehicles was delayed. Initial bids, received in October 1976, were rejected as they were considered too high. At appraisal, the vehicles were expected to be available in three groups, one each in 1975, 1976 and 1977. However, most vehicles arrived during October 1977 and June 1978. Two scooters included in the original plan were considered unnecessary. Three vehicles intended for three RHDCs originally planned with NORAD assistance were diverted to other RHDCs as NORAD assistance did not materialize (paragraph 6.05). It is difficult to assess the utilization of these vehicles, as district officials treat all vehicles as belonging to a pool irrespective of their original purpose. Inadequate maintenance procedures and facilities also result in an estimated 30-40% of all MOH vehicles lying idle at any given time waiting for repairs. Fourteen audio-visual vans for the HEU were idle as of December 1979, as the necessary equipment was not procured (paragraph 2.23).

2.08 A program advisor for a duration of 36 months was provided under the project. The GOK originally proposed three names to the Association. However, its first choice, a British national who was at that time the WHO representative in Nairobi, did not pass the necessary physical examination. The second choice was a Kenyan who was then the Director of Medical Services of the MOH. He was regarded as too senior and too involved with the local scene to function effectively as program advisor to his own Ministry. A Swedish national with extensive program experience and then working with the International Planned Parenthood Federation was the third choice and he was appointed. He joined in June 1976 but left in August 1978, for personal reasons, about ten months before completing his term. The program advisor was instrumental in initiating the program, helping in solving routine problems of program implementation, and coordination with donors.

2.09 Shortage of nurses was considered as one of the most significant constraints in expansion of the MCH/FP program. It was, therefore, necessary that this manpower be suitably utilized. Since a large number of nurses are working in hospitals, a nursing activities study (called Kenya Nursing Project 1976-78) to develop a standard staffing pattern for the most efficient use of nursing personnel in hospitals, and to determine if it would be possible to release additional nursing staff for the rural health services was included in the project. The study was conducted by an IDA supported expatriate consultant and a Kenyan counterpart staff from the office of the Chief Nursing Officer. The study consisted of four sub-projects: nursing manpower survey, utilization of nursing personnel, standards of direct nursing care hours required by setting up model wards, and distribution of patient population classified according to nursing needs. The results of the study were disseminated by holding seminars throughout the country for both medical and nursing personnel. However, the report has not yet been printed. The major findings of this study are summarized below:

- (a) As of 1976, there were a total of 3,486 qualified nurses working in the Government hospitals (excluding health centers, dispensaries and external units). About 26% belonged to the registered nurse (RN) cadre and 74% to the enrolled nurse (EN) cadre;
- (b) the institutional distribution of nurses was compared with the requirements. The Kenyatta National Hospital complex was found to have double the number of RNs required but was short of ENs. The provincial hospitals had just about the right share of nurses, while the district and subdistrict-hospitals needed more RNs;
- (c) for most skill levels of nursing personnel, more than 50% of all tasks performed were within their skill levels. Various categories of workers, however, performed a sizeable amount of tasks which were below or beyond their skill levels;

- (d) the number of nurses, as of 1976, fell short by 575 RNs and 1,817 ENs compared to requirements on the basis of staffing standards, and by 781 RNs and 2,136 ENs on the basis of nursing workloads estimated by the study.

No specific actions based on the conclusions of the study have been undertaken by MOH.

2.10 A Family Size Motivation Study was planned to be conducted by MOH, in conjunction with the Population Studies and Research Institute (PSRI) of the University of Nairobi to provide information and assistance to GOK in formulating future FP and population policies. Because of limited capability of University staff, the scope of the study was subsequently limited to a study on fertility determinants using already available data from a previous survey carried out with assistance from the International Labor Organization. Unfortunately, the PSRI and MOH had differences of opinion as to who should do the study and the relative roles of the researchers involved. Also, the study was delayed because of a two-year delay in setting up the PSRI. Finally, in March 1977 (the study was to be completed by December 1976, according to appraisal estimates), an agreement was signed between MOH and PSRI. The study was completed by June 1979. While the study emphasized cultural factors and attempted to investigate some of the attitudinal and motivational factors leading to high fertility, the results were not well presented and its technical content was questioned by several Kenyan researchers. Meanwhile, a Kenya Fertility Survey was conducted in 1977 in cooperation with World Fertility Surveys which examined the extent of and possible explanations for fertility differentials among various groups. The Population and Human Resources Division of the Bank also carried out a study of Population and Development in Kenya (Report No. 2775-KE, March 1980), which studied implications of population growth on development and association of developmental factors with fertility differentials. In spite of these efforts there is still a need for further study of the sociological and cultural bases for high fertility in order to design suitable policies and programs.

Project Management

2.11 The credit agreement stipulated that a project construction unit should be established in MOH to be headed by a Project Construction Director, appointed in consultation with IDA, and to include a suitably qualified procurement officer, an accountant, and an architect. Although persons for the positions of construction director, procurement officer, architect and accountant were appointed/designated for the project, they also were responsible for other MOH activities and worked in isolation from each other. The major disadvantages of this situation were that many delays were experienced during the initial stages of the project and work of the Bank supervision missions increased in complexity and quantity over the project period. During the period of project implementation more staff have been added, which resulted in increased capability within MOH and MOW to construct and equip rural health facilities.

2.12 Delays were experienced in coordinating various inputs to make health facilities functional--inspecting and taking over the facility after construction, and providing staff and equipment. Also, there were problems of coordination with the Ministry of Works. Several supervision missions since 1977 identified a need for a commissioning officer to coordinate various inputs and reduce such delays. This recommendation was never implemented, although the need for improving coordination between MOH and MOW continued to be felt.

Construction

2.13 CNTS and NFWC buildings were to be located in hospital compounds and these sites were available. The sites for 27 RHDCs--locations for which were specified at appraisal--were to be identified and acquired before negotiations but this could not be accomplished. The RHDCs were therefore grouped in three batches in accordance with the anticipated timing of site availability and a phased program of construction was drawn up. The nonavailability of sites did not result in appreciable delays. The sites for five RHDCs were changed due to a variety of reasons.

2.14 At the locations selected for RHDCs, there were either only dispensaries or no health facilities, whereas RHDCs were large facilities. Therefore, adequate water systems did not exist in many locations and had to be developed. In some cases, even the infrastructure for developing such systems was not available. Although consultants had examined the suitability of sites at appraisal, six of the 27 RHDCs did not have any sources of water. To avoid such problems in the future, availability of water and other infrastructural needs such as access roads should be carefully assessed for a prospective site and there is a need to better coordinate water development plans and selection of sites for health facilities at the district level.

2.15 Design of facilities--old CNTSs were of smaller capacity than those envisaged in the project, therefore new designs were prepared. Of the five CNTSs, two were for 200 student capacity and three were for 100 student capacity. Old designs were available and were used for the latter. The former were of higher capacity than old CNTSs and therefore new type designs were prepared. New designs also had to be prepared for NFWC buildings. Sketch designs were available for RHDC at appraisal and final designs were worked out during the first year of project implementation. The Ministry of Works (MOW) uses a computerized system to prepare drawings which the contractors found difficult to understand. This led to an increase in the time required to make even minor modifications in the design of facilities.

2.16 The final designs of buildings were appropriate for their intended functions. A comparison of RHDCs with such facilities in Ethiopia and Tanzania suggested that standards for space were too high, but these centers were also to be used for training and demonstration. Appropriate construction technology was utilized. Some delays in design and construction were experienced as MOW architects were usually on technical assistance contracts of about two-year durations and therefore different architects were involved during the project duration. Subsequently about five architects have been added to the unit in

MOW responsible for all MOH construction of rural health facilities and the capability of the unit has expanded greatly.

2.17 The schedules of accommodation at appraisal and actual are very close and are not specifically compared here.

2.18 International competitive bidding (ICB) was specified in the Credit Agreement for any contracts for civil works or vehicles estimated to cost the equivalent of US\$30,000 or more. ICB was considered justified at appraisal because it was anticipated that contracts would be packaged in packages large enough to attract a wide selection of local and foreign bidders. However, staff constraints in the MOW prevented adequate packaging and bidding proceeded in small batches. As a consequence, only local bids from small contractors were received.

2.18a The Credit Agreement required bidders to prequalify in the event that the Government decided to use the 7-1/2% preference margin for domestic construction bidders that was permitted by the Credit Agreement. The Government, however, waived this preference. In retrospect it seems that the prequalification requirement would have been superfluous in any case, since MOW routinely categorizes contractors in terms of their capability and these lists are maintained on a continuous basis. Depending upon the type of facility, the suitable category of contractors are asked to bid, and prequalification for specific jobs is not required. The project experience suggests that MOW procedure is suitable.

2.19 Small contractors in rural areas, some with rather limited experience, were used. This led to some delays, but also led to an increase in local capacity. No major difficulty was experienced in construction except in two instances--a CNTS at Machakos and a RHDC at Matku. In Machakos, a local contractor refused to accept a contract based on his own bid and it took about two years to clear the resulting procedural problems. Construction of the Matku RHDC was delayed for about two and one-half years as the contractor had unforeseen financial difficulties. In general, six to nine months of delay were experienced in completing construction (Annex 4) principally because of inspection requirements of GOK. Construction work is to be inspected at several stages by MOW before the contractor can proceed with the next stage. Since MOW did not have sufficient number of architects, the inspection could not be carried out in time.

Procurement of Equipment and Furniture

2.20 An acting procurement officer began some paperwork earlier, but the procurement for all facilities did not begin until an experienced procurement officer was appointed in 1977. Therefore, some facilities were not equipped until several months after they were constructed. The procurement officer was responsible for all MOH procurement, including all foreign assisted projects.

2.21 Available equipment and furniture lists were appropriate for the usual size of CNTSs and RHDCs but were not appropriate for the project facilities as the CNTSs were larger than usual size and RHDCs were smaller than usual size.

These lists, therefore, needed to be revised. As lists for furniture and equipment were not finalized at the time of appraisal, and the procurement officer did not have strong technical capability for drawing up specifications, some delays in procurement occurred.

2.22 The GOK procedures for local bidding were followed as per the Credit Agreement. GOK combined prequalification and bidding. When bids were received, some of the contractors were disqualified and contracts could not be awarded to lowest bidders. Sometimes the highest bid was accepted as all other contractors were disqualified. A lot of correspondence between the Bank and MOH took place before IDA approval could be given for disbursement. The GOK procedure requires approval from Ministerial Tender Board and Central Tender Board, and the minutes of Central Tender Board meetings are considered sufficient as an approval of tender. However, additional approval had to be sought from IDA which required documentation justifying the selection of the contractor and contract document. As MOH was not familiar with the information requirements of IDA, considerable correspondence was necessary and it added about four more weeks to the process of procurement. Supervision missions were helpful in clarifying issues and approval of contracts. A case can be made for developing specialized skills in a procurement officer in MOH who is familiar with procedures and requirements of different donors.

2.23 Only two categories of items--furniture and audio-visual equipment--posed special difficulties. Most furniture was contracted to the Prisons Department which was the lowest evaluated bidder. However, the quality of furniture from different prisons was not always uniform and the capacity of prisons to supply needed furniture is not adequate. Consequently, about 10% of the furniture is still not delivered and is gradually trickling in. For some items, the Prisons Department did not have an accurate idea of costs and requested a revision of contract prices later on. The new requested prices were still the lowest and were therefore approved. Fourteen vans were procured for health education activities but audio-visual equipment required for the vans was not ordered. The preparation of specifications was initially delayed. Specifications for all mass communication equipment need to be cleared by Voice of Kenya. As Voice of Kenya has not clearly located the responsibility for such clearance, this technical requirement has delayed procurement by at least two years. As of December 1979, the equipment was not ordered and the vans were idle.

2.24 The vehicles were procured using ICB. Procurement was delayed because of GOK's failure to prepare the necessary documentation on time. The first bids were also rejected as they were considered to be high and new tenders had to be invited, leading to further delays.

2.25 Because of a lack of full-time involvement of staff and several minor procedural delays, the project was completed two years later than its original planned completion date. An updated project implementation schedule is shown in Annex 4. However, no significant deviations in design occurred and no major difficulties were encountered in its implementation.

C. Project Costs and Disbursements

2.26 When appraised in February 1974, the project was estimated to cost K.Sh. 106.1 million or about US\$15.38 equivalent including contingency allowances. The final cost of the project was about US\$17.85 million. Then the actual costs were higher than the appraisal estimate by about 16% in terms of US dollars. GOK financed the cost overrun, thus the IDA share of the total project financing was 62% compared to 78% expected at appraisal. The GOK share increased correspondingly.

2.27 In the following summary comparison US dollar costs have been calculated at the exchange rates which prevailed when expenditure occurred. The actual costs were higher in all categories. The actual percentage of foreign costs was about the same as estimated at appraisal for all cost categories except for a minor cost item of office equipment.

2.28 Final status of disbursement is shown in Annex 5. The total credit of US\$12 million was disbursed. The disbursements for different categories in terms of percent of total were close to those set at appraisal.

2.29 However, considerable delay in disbursement occurred. The updated cumulative disbursement schedule is given in Annex 6. At appraisal the disbursements were expected to begin in June 1974 and to be completed by June 1977. Actually, disbursements did not begin until March 1976 and were only completed by April 1980. While most of the delay in disbursements was due to delayed physical implementation, some of the delay also occurred because of the weak MOH accounting system. The supervision missions followed up disbursement requests carefully and helped in expediting the disbursements. A full-time accountant was never appointed and clear responsibility for project accounts was specified only after the mid-term review in 1977. There is a severe shortage of accountants in Kenya and the GOK is not able to attract them in competition with the private sector. However, the accounting system in MOH needs to be strengthened.

III. PROGRAM IMPLEMENTATION

3.01 The project was an integral part of the five-year MCH/FP program (paragraph 1.16 and 1.17). Although the program was partitioned into several projects for purposes of financing, GOK and the donors viewed the activities under the various projects as an interrelated set, all of which together contributed towards achieving the program objectives.

468-KE KENYA POPULATION PROJECT

PROJECT COST BY EXPENDITURE CATEGORIES (IN US\$ '000)

<u>Category</u>	<u>As Appraised</u>			<u>Actual</u>			<u>As % of Appraisal Estimate</u>
	<u>Foreign</u>	<u>Local</u>	<u>Total</u>	<u>Foreign</u>	<u>Local</u>	<u>Total</u>	
1. Civil Works	4,040	8,700	12,740	4,398	10,262	14,660	115%
2. Professional Fees	-	1,000	1,000	-	965	965	97%
3. Furniture and Equipment	100	500	600	177	709	886	147%
4. Vehicles	550	-	550	930	-	930	169%
5. Technical Assistance	200	70	270	278	92	370	137%
6. Office Equipment	10	210	220	39	5	44	20%
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Total	4,900	10,480	15,380	5,822	12,033	17,855	116%
Cost Overruns	-	-	-	922	1,553	2,475	16%
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Sources: Appraisal Report
Supervision Report August 1979 Annex 6

A. Program Strategy and Componentents

3.02 The program was the first five-year MCH/FP program in Kenya. It, therefore, was directed towards alleviation of major constraints and was not designed to be an all embracing MCH/FP program. It was designed primarily to strengthen FP activities and only secondarily to strengthen MCH activities.

3.03 The major constraint on expansion of the FP program was the acute shortage of trained paramedical manpower at the field level to provide preventive health and FP services. This constraint affected the frequency and quality of MCH/FP services. The program, therefore, focussed on reducing the shortage of those personnel ordinarily involved in dispensing MCH/FP services--the EN/CN--and on FP training of motivational field worker--the Family Health Field Educator (FHFE)--and other paramedical personnel. The strategy behind the expanded FP program was to strengthen the rural health delivery system and increase the training capacity of nurse training schools while laying the foundation for the provision of FP services at all health delivery points throughout Kenya. It was also to help increase the demand for services and establish a system for constant monitoring of program progress.

3.04 More specifically, the program was aimed at: (a) establishing services full-time at 400 service delivery points (SDPs: 65 at hospitals, 185 at RHCs and 50 dispensaries in the first three years) and part-time services by 17 mobile teams; (b) training a new cadre of nursing tutors/supervisors (NT/S) to supervise provision of MCH/FP services and expanding physical facilities for basic training of community nurses; (c) providing specialized in-service FP training to 400 EN/CNs, 46 registered Public Health Nurses, 55 nursing tutors, clinical officers and staff of mobile teams; (d) providing training to a new cadre of 800 FHFES and 46 family health field officers; (e) carrying out I&E activities in MCH/FP and strengthening production capacity of HEU; (f) establishing NFWC to administer the program; (g) strengthening evaluation and research; and (h) providing transportation for MCH/FP activities.

B. Services

3.05 Services were to be improved by introducing the concept of Service Delivery Points (SDP). This involved a change of orientation from "hospital out-patient department" to "supermarket" concept of service. Thus MCH and FP services formerly available only on certain days part-time were to be made available every day full-time. Two hundred and ninety-one SDPs were opened by end of calendar year 1978 and 364 SDPs by end of 1979 as opposed to a target of 400 SDPs by 1979 (Annex 7). By end of 1979, about 90% of the target was achieved. Shortage of staff, staff housing and limitation of physical space have resulted in the shortfall. In all about 500 clinics offered either full-time or part-time FP services. Of these 416 were operated by MOH, 43 were operated by municipalities and the remaining by NGOs. The MOH operates about 825 health facilities. About 45 percent of them offer full-time, another about 10% offer part-time and the remaining 45% do not offer FP services.

3.06 For sparsely populated districts, 17 mobile teams were planned to be added to district hospitals and were to be staffed by two CN, one nutritionist (if available) and one attendant. These teams were to offer ante-natal, child welfare and FP services. In addition, the MOH took over eight mobile teams being operated by FPAK with IPPF assistance, which at that time accounted for over one-third of the total number of first visitors. All 17 teams were added by 1978. However, the current impact of mobile teams cannot be estimated as separate statistics on their performance are not maintained.

3.07 Although a substantial improvement in the availability of MCH/FP services has occurred, the quality of services needs to be further improved. A comprehensive review of SDPs in 1976 identified several needs, mainly for training, and it provided feedback to district and provincial supervisory staff. No other studies are available on quality of services offered. Health workers, however, mention the following weaknesses. The services at a SDP may not always be available because frequently only one EN/CN at a SDP is trained in FP. Low priority may be given to FP clients as compared to patients requiring curative services. A minor problem is that the selection of brand for oral pills may be dictated by availability and biases of health workers rather than by client needs.

3.08 In addition to constraints imposed by demand for services, the supply of MCH/FP services continues to be limited, both in quantity and quality by a shortage of staff adequately trained in FP. Non-availability of vaccines, at times, also limits immunization services.

C. Training

3.09 The program emphasized increase in the capacity for basic training of EN/CN. The impact of this increased capacity for training will be felt only gradually as the number of graduates has not yet increased. The course is of 3-1/2 years duration, and of the five CNTSs constructed under IDA project, one admitted students in 1977, one in 1978 and the remaining three only in 1979.

3.10 At the time of appraisal, shortage of tutors for basic training of nurses was perceived to be an important constraint. However, this has now been corrected. The teacher/student ratio averages about 1:25 as compared to appraisal estimate of 1:33.

3.11 The content of basic training for EN/CN now includes theoretical training for FP but continues to remain weak on motivational aspects of FP. In general, the training of nurses for public health needs to be strengthened.

3.12 On an average only one out of about 2.5 EN/CNs trained in FP is posted at an SDP. Therefore, about 1000 EN/CNs need to be trained in FP to staff 400 SDPs. The target for in-service training of EN/CN for FP was originally set at 633 but was later revised to 1000. By 1978, about 850 EN/CNs had received in-service training (Annex 8). The theoretical in-service training is carried out at NFWC and the clinical training in the field. The staff of the training division of NFWC, with some assistance from I&E division, conducted this training. The centralization of training in Nairobi has limited the numbers which could be trained.

3.13 Annex 8 shows the number of other staff who were trained in FP. By 1978, about 150 NT/Ss and registered nurses, 420 FHFES, 14 FHFOs, 14 nursing officers and nine matrons were trained in FP. The shortfall in the number of FHFES trained was due to the delay in receiving approval of the posts from the Department of Personnel. A separate cadre of FHFOs had been established as a part of the program to supervise the new cadre of FHFES. This separate cadre of FHFOs was discontinued in 1978 and merged with HEOs. Most serious shortcoming, however, is that clinical officers who are in charge of RHCs are not trained in FP. Although plans for training COs were not formulated at appraisal, this need was later identified, both by GOK and the Mid-term Review Mission in 1977.

3.14 It was agreed at appraisal that by June 30, 1975, in consultation with the association, a detailed rural health services manpower planning system and a personnel record-keeping system to provide a sound basis for the allocation of medical and paramedical personnel required for rural health services would be prepared. To this effect, a paper was drafted by a manpower consultant to MOH, but its recommendations were not translated into action. However, subsequently health manpower planning for rural health services has been strengthened and a computerized inventory of personnel has been set up, but information on posting is not available. It is now proposed that a personnel record-keeping system should be a part of a comprehensive health information system to be developed as a part of the second project.

3.15 Although substantive progress in developing infrastructure for basic training has been made and a large number of personnel have received in-service FP training, a significant expansion of in-service training activities is necessary if the program is to expand. For this purpose, it may be necessary to decentralize such training to provincial and district levels. The role of NFWC could be redefined to develop training strategies, plan programs, develop training materials, provide training of trainers and to ensure quality of training activities.

D. Information and Education

3.16 In stimulating demand for FP, priority emphasis was to be placed on person-to-person education, supported by an enlarged mass communication effort, to introduce a change in attitudes and behaviour so that people can readily accept FP methods. Over the program period, it was stipulated that some 800 FHFES would be employed to generate community acceptance and support, conduct follow-up and reassurance visits, hold group meetings and liaise with extension workers who have contact with the family unit. The production capacity of HEU was to be strengthened and it was expected to devote about 50% of its capacity for production of pretested FP I&E materials.

Field Workers

3.17 By June 1979, about 750 FHFES were employed, some 150 by FPAK and 600 by MOH. FPAK had employed field workers since 1965 whereas MOH began employing them in 1975. The FHFE is the only outreach worker employed by MOH in addition to a small number of nutrition field workers. In 1979, the number of married women

of reproductive age (MWRA) were estimated to be about 2,231,000 in Kenya. Thus on an average one FHFE needs to cover about 3,000 MWRAs. However, for some FHFEs the coverage may be as high as 9,000 MWRAs. Their job description includes educational activities, client referrals to health facilities, client follow-up, and recording and reporting. Sometimes FHFEs also act as health workers. Their training is for 13 weeks. Earlier, the training was conducted by the Institute of Adult Studies. Although the responsibility for training FHFEs was taken over in 1977 by the training division of NFWC, the Institute continues to provide the majority of trainers.

3.18 In general, three purposes of contact can be distinguished--education/communication, recruitment/motivation, and follow-up.^{1/} It is estimated that on an average, about 63 persons are reached per week by a field worker through home visits, group talks, clinic contacts and Barazas.^{2/} Of these about 16% are male and are largely reached by group talks and Barazas. About 11 home contacts are made on an average per week by a field worker. At this rate and at the existing level of personnel, only about 17% of all MWRAs are visited at home in a year.

3.19 In 1978, the FHFEs recruited about 18% of all FP clients (about 11,000 new acceptors, about 15 to 18 per year per FHFE) and about 5% of all MCH clients (about 26,000 antenatal and 27,000 child welfare clients, a total of about 70 per year per FHFE). An investigation into causes for drop out among the clients recruited by FHFEs suggests that about 25% had become pregnant, another about 10% wanted an additional child, and an additional 25% cited clinical reasons (such as desired method refused, asked to come during menstruation) for dropping out.

3.20 The above data suggests that the efficiency of FHFE is low. The 1979 evaluation of FHFEs, carried out jointly by NFWC and FPAK, suggests that of the 35 hours working time per week about 38% is spent in travelling. Of the 29% of time spent in health facilities, only nine percent is for MCH/FP contacts, the rest being used for other duties. Therefore, only 42% of FHFEs' time is spent on outreach and contacts. About half of this time or about nine hours per week is spent on home visits and about 11 home visits are made. It is estimated that on an average three contacts are required to recruit one client. Only 75% of those recruited visited the clinic and of those who visited the clinic, 22% accepted FP and 74% accepted MCH. Thus the loss in efficiency arises on several counts: high overhead cost of outreach activities due to travelling and other loss of time, non-selectivity of contacts and lower priority given to FP.

3.21 What types of clients are visited? About 75% were below 30 years of age, about 65% had between one and four children and 70% lived within a four mile radius of a RHF. Thus, by and large, the clients visited by FHFEs are those easily accessible and those who would like to space rather than limit their family. The clients visited, however, represented all educational levels.

^{1/} The material in paragraphs 3.19 to 3.25 is drawn from the following reports of NFWC: Report on the Activities of the Field Educators 1977, 1978; An Evaluation of Field Educators in Kenya, November 1979.

^{2/} A typical East African Mechanism for disseminating information to the community in the form of a mass meeting, addressed by leaders, government officials and other influential persons.

About 25% had no formal education, 10% had between standard one and four, 40% between standard four to seven, and remaining 25% had more than seventh standard education.

3.22 The data collected in the evaluation study has not yet been analysed to answer the question--what characteristics are desired in a FHFE? Educational standards for selection of FHFES were relaxed so that local mature persons could be recruited. However, this was not always possible and some relatively younger persons may have been recruited. About 11% of all FHFES are male and they recruited about 14% of all clients. Male FHFES on an average gave more group talks and attended more Barazas than female FHFES.

3.23 The evaluation study and discussions with administrators suggest need for several remedial actions:

- (a) The role of FHFE, both within the health facility and outside should be clearly communicated to health staff.
- (b) A suitable work program needs to be worked out for both male and female FHFES.
- (c) They should be able to distribute oral pills and condoms.
- (d) The specialized supervision needs to be strengthened. A new cadre of FHFOs was created for this purpose. However, as the training content was nearly similar to that of HEOs and career opportunities for FHFOs were limited, this cadre was merged with HEOs. In most districts only one HEO has been posted. A need to supervise a large number of FHFES dispersed over a large geographical area and lack of transport has resulted in weak supervision.
- (e) The FHFE should be an integral member of the health team. Often FHFES are not perceived as members of the health team, principally for two reasons. First, their tasks are educational/motivational in nature, rather than those of providing services. Secondly, their salaries are about the same as considerably better trained health staff.

3.24 In addition, several environmental factors also result in poor effectiveness of FHFES. Services are still not always available and easily accessible. Mass communication activities and development of educational and communication support material did not expand as envisaged and therefore, FHFES did not receive adequate support from such activities. Finally, spacing and fertility limitation are not widely accepted ideas in the community. Therefore, FP activities receive lower priority than MCH activities. Of the total clients recruited by FHFES, the percentage of FP clients declined from 33% in 1976 to 29% in 1977 and 22% in 1978.

3.25 FHFES have not yet made a substantive impact on MCH/FP activities, but the need for personal communication and outreach activities remains, and the efficiency of work and quality of communication needs to be improved. There is a serious question, however, as to whether a cadre of field workers that only

provides education (and no services) can be very effective even under more favourable operating conditions.

Mass Communication Activities

3.26 The production capacity of the then existing HEU in MOH was considered inadequate and had to be strengthened. At the time of program appraisal, USAID had provided two advisors to GOK for the Health Education Unit and a master plan for HEU building would be included in the IDA supported project and the equipment would be supplied by USAID. The building for HEU was ready by mid-1977 but was not occupied until October 1979. First, the equipment was not available and the building was being used as a store. After the equipment arrived, it took many months for the furniture stored in the building to be sorted out. The level of sophistication of hardware proposed by GOK was questioned by USAID. For a variety of reasons, including frequent changes in USAID population officer resident in Nairobi, it took about three years for resolution of this difficulty. A consultant, with financial support from USAID was appointed in September 1979 to set up the production workshop of HEU. This consultant has now been appointed for a period of two years and his responsibilities have been broadened to include both programming and production of materials. The unit was functional (except for the television studio) by December 1979 but production of material in the new facility has just begun.

3.27 Fourteen four-wheel drive vehicles to be used as audio-visual and cinema vans for mass communication activities were available in early 1977. However, the audio-visual equipment has not been procured yet. The approval of Voice of Kenya is required before such equipment can be procured and this approval could not be obtained (refer to paragraph 2.23). These vehicles are, therefore, being used for general transport. Thus the program inputs for expanding health education activities were not effective up to December 1979 and it would be some more time before they would be fully effective.

3.28 A separate I&E division of NFWC was planned to focus on FP educational activities. However, MOH saw its role only as a task force and perceived it as a part of the existing HEU. Thus the two groups were headed by one person and often acted as one organization. HEU had broad ministerial responsibilities and, therefore, emergency problems such as epidemics of communicable diseases and milk contamination received more attention than routine MCH/FP activities. The planned professional input for the I&E division was inadequate and the division was only involved in training activities until mid-1979, although such involvement was reduced after the mid-term review of 1977. Finally, authority to incur expenditure on I&E activities for MCH/FP was not delegated to the head of I&E unit leading to procedural delays.

3.29 A detailed program of I&E activities was not prepared initially. There was a general health education plan, but no specific yearly operational plans. Following the mid-term review in April 1977, a team consisting of a consultant financed by IDA, one staff member of HEU and one staff member of the I&E division developed a program for the remaining two years of the program. But the program could not be implemented in any substantive manner because of a lack of staff and hardware.

3.30 Nevertheless some I&E activities were carried out. In a typical year, about 30 minutes of radio programs are aired per week, about 20 seminars are held attended by about 900 persons, about ten exhibitions are held, and a large number of I&E materials are prepared (Annex 9). Much needs to be done however to improve the quality of material, particularly to prepare materials which are relevant to local cultural settings.

3.31 During the program period, efforts were made to develop infrastructure, train personnel capable of carrying out I&E, and transport was made available to ensure the movement of personnel. Thus an operational base has been created. But capability for programming, software development, and management needs to be strengthened and inter-agency cooperation needs to be sought.

E. Evaluation and Research

3.32 One of the important objectives of the program was to establish an E&R division at NFWC to monitor program progress through the establishment of a management information system and to recommend more effective approaches of service delivery and demand creation. The specific tasks assigned were to collect service statistics, carry out special studies and pretest I&E materials.

3.33 The division was established and staffed reasonably well. However, a division head was never appointed and the position of senior research officer was vacant up to 1977. The advisor (funded by UNFPA), therefore also served as head of the division. In spite of these limitations, the division succeeded in developing a service statistics system and conducted several studies.

3.34 A system for collecting information on FP acceptors has been developed. When a new acceptor visits a service delivery point, a reference number is assigned and a card is prepared. A duplicate on a thin sheet is sent to NFWC. For all subsequent visits, additional information on thin sheets is also sent to NFWC. At NFWC, the information is coded, punched and stored in a computer. Quarterly and annual reports are prepared which contain aggregate information on number of first visitors and revisitors, characteristics of acceptors and method composition of acceptance. Training programs for statistical clerks were conducted as a part of installation of the system. In addition, a coupon system was developed to assess the work of FHFes and a contraceptive logistics monitoring system was installed to ensure smooth flow of contraceptives.

3.35 E&R division also conducted several studies, including a review of SDPs and an evaluation of FHFes in collaboration with FPAK. The comprehensive review in 1976 of SDPs consisted of collecting information on staffing, transport, equipment, supplies and record keeping. The clinical officers and nurses were also interviewed. The findings were discussed with the provincial staff and necessary corrective actions were identified. A comprehensive evaluation of FHFes was carried out in 1979 to assess the workload, type of support needed, content of communication, desired characteristics of FHFes and community needs for MCH/FP services. The evaluation covered nine districts. About 480 clients, 110 FHFes and 180 other staff and community leaders were interviewed. Some of the findings of the study were summarized in Section III.D. The data is still being analysed.

3.36 Thus an adequate base for research and evaluation of program was established. The concerns voiced by administrators include need for timely feedback to SDPs and administrators, strengthened evaluation of the program and additional analysis of acceptor data now available on computer files. For this purpose, improvement of the analytical capability within MOH and improved interaction among various divisions of NFWC is needed.

3.37 Also part of the five-year MCH/FP program was the establishment of the Population Studies and Research Center at the University of Nairobi. This center was intended to provide support to the family planning program by conducting indepth research into determinants of fertility and other demographic matters, and by assisting the E&R division of NFWC to evaluate the impact and effectiveness of the family planning program. The Center which was also to train researchers in demography and population policy, was established with a delay of about two years. It has been successful in establishing a teaching capability for population matters and its researchers have carried out a number of population studies. However, linkages to the MOH have not been strongly established and hence the Center has not been very influential in shaping family planning policies.

F. Program Management

3.38 A highly visible and well supported institutional infrastructure for administering an expanded MCH/FP program was to be developed. The NFWC was set up under the program for this purpose. Initially housed in rented premises, it is now located in especially constructed new facilities in the Kenyatta Hospital complex. The Center is the focal point within MOH for all MCH/FP activities. As a basis for a strong well-managed organization to carry out the program the MOH has:

- (a) established an Interministerial Working Committee, chaired by the Permanent Secretary of the MOH, to oversee the National MCH/FP Program and advise on policy;
- (b) appointed three advisory committees to provide technical guidance in: Information, Education and Training; Evaluation and Research; and Medical Matters;
- (c) appointed a Program Director and Deputy Director; and
- (d) established four operating divisions within NFWC:
 - (i) clinical services, which plans, supervises and administers FP clinical services;
 - (ii) training, which plans and administers the FP training of paramedical personnel;
 - (iii) Information and Education, which designs and coordinates FP I&E activities; and

- (iv) Evaluation and Research, which collects and analyses FP service statistics and undertakes operational evaluation of the national MCH/FP program. In addition, an Administrative and Planning Unit was created for administrative support. Annex 10 shows the organization of NFWC as of January 1979.

3.39 A permanent staff of 57 was planned. While most of the other positions were filled, some shortfalls occurred in professional staff categories (see Annex 11). In particular, the E&R division did not have a division head, the I&E division head was also the head of HEU, and the Program Director had many other responsibilities. Only one of the planned two Public Health Nurses was assigned to the Clinical Services division and she also worked with the Chief Nursing Officer. Support from the Administrative and Planning Unit was weak as an executive officer and accountant were not appointed.

3.40 The Interministerial Working Committee was established but met only once. In spite of repeated discussions during supervision missions, this committee could not be activated. The reasons are not clear, but several factors may have contributed: the tasks for the committee were only vaguely defined, other ministries did not perceive FP as an important program, and MOH did not pursue the matter energetically. Similarly, the other three advisory committees also met only infrequently and did not contribute significantly to coordination of work. Suitable terms of reference need to be worked out if advisory committees are to function.

3.41 A specialized field supervision structure for MCH/FP was also planned but it gradually merged with the routine supervisory structure of rural health services. Thus, the separate cadre of NT/S set up to provide technical assistance and supervise MCH/FP activities was merged with the Public Health Nurse position at district level who is responsible for supervision of all nursing personnel. The position of FHFO set up to provide technical assistance and supervise I&E MCH/FP activities was merged with the position of HEO who is responsible for all health education activities. While the cadres were merged, a corresponding increase in the number of supervisory personnel did not occur.

3.42 A considerable amount of work has been done in developing NFWC and it has been instrumental in getting the program started. However, management and supervision of the program have not been able to keep pace with program expansion. In addition to staff shortages and changes in field level supervisory structure, several other factors have hampered the growth of NFWC:

- (a) Program leadership--the Director of NFWC has other responsibilities such as rural health and nutrition. Therefore, he has not been able to give full-time attention to NFWC. The multiple responsibilities of the director has been a mixed blessing. It has provided much needed linkages with other departments of MOH, particularly rural health. But the leadership role of NFWC has suffered. The Deputy Director should be able to provide day-to-day supervision. However, during the five-year program period, three persons held this position. The administration of the Center, therefore, has suffered resulting in lack of direction and lack of coordination among different divisions of NFWC. The mid-term review mission

strongly stressed, and agreement was reached with GOK, that before the end of the program a full-time director of NFWC would be appointed. However, this development has not yet materialized.

- (b) Relationship with other divisions of MOH--a two-way relationship between other divisions of MOH and NFWC is needed. On the one hand, other divisions of MOH should perceive the synergistic nature of interactions between curative, preventive and promotive health services and give suitable importance to MCH/FP activities. On the other hand, NFWC should receive information on postings, transfers, and resignation of health staff concerned with provision of FP services at the same time as the Chief Nursing Officer, and the deployment of supervisory staff, particularly those concerned with MCH/FP, should be done in consultation with NFWC. These linkages continue to remain weak. More generally, under the present organization NFWC staff can have an effect on actual field operations and practices only through the Program Director. Since the latter has been overloaded with a number of other responsibilities, this mechanism has not been satisfactory. There is thus a need to strengthen that portion of the MOH's organization at the center responsible for rural health services (of which MCH and FP constitute a major portion), so that the staff functions of NFWC are not exercised in a vacuum and its findings can be translated into effective operational guidelines for field staff in rural health facilities.
- (c) Reporting responsibilities--NFWC also had responsibility for meeting diverse reporting and administrative requirements of different donors and these increased as the program expanded. Some of the attention of NFWC was, therefore, diverted away from field level program operations.

3.43 In conclusion, an institutional capability for managing the MCH/FP program has been created. The mid-term review and supervision missions have identified many strengths and some areas that need further attention. Capability for training and service delivery has expanded greatly. The quality of services is being improved by improved supply of contraceptives and monitoring of the program. However, I&E activities need to be better planned and executed. Program evaluation needs to be strengthened, the planning and management capability needs to be expanded, coordination mechanisms with NGOs and other ministries need to be established, and internal administration of NFWC needs to be strengthened. Under difficult political and administrative conditions and the health care system's bias for curative services, the program has been implemented. However, a large-scale expansion of the program is necessary if desired demographic goals are to be achieved.

IV. PROGRAM IMPACT

A. Demographic Impact

4.1 The program was aimed at recruiting some 640,000 new acceptors over the five-year program period (July 1974 to June 1979), thereby helping avert some 150,000 births and reducing the rate of population increase from around 3.3% in 1974 to 3.0% in 1979. These targets were found to be ambitious and new targets were prepared in 1976 which set a goal of recruiting about 450,000 new acceptors (from July 1974 to June 1979) and thereby avert about 80,000 births. The program recruited about 310,000 new acceptors, about 50% of the original target and about 70% of the revised target (Annex 12). It is difficult to estimate the births averted as continuation rates are not known precisely and some of the contraceptive use of modern methods may be a substitute for traditional methods. The demographic impact of the Program was relatively negligible.

4.2 Three assumptions were made in predicting a decline in population growth rate from 3.3% in 1974 to 3.0% by 1979--contraceptive targets would be met, the birth rate would decline from 50 to 47 per thousand, and the death rate would remain at 17 per thousand during this period. None of these three assumptions were correct. First, contraceptive acceptance was only about 50% of the original targets. Second, reliable estimates from sample surveys have estimated the 1979 birth rate to be about 54 per thousand in 1978. The experience in many countries suggests that birth rates decrease, and certainly do not increase, as development occurs. But the birth rates continued to increase with development in Kenya. Several factors may have contributed to this increase--improved health, reduced lactational amenorrhea, and some reduction in incidence of polygamous unions. Finally, death rates were not expected to decline but improved health services and other socio-economic developments (improved education, nutrition, etc.) led to a reduction in the death rate from about 17 in 1974 to about 14 in 1978. Thus, instead of a decline in the population growth rate from 3.3% to 3.0%, actually the growth rate increased significantly, to about 4.0% in 1978.

4.3 By the end of 1978, there were about 108,000 active family planning clients. An active client is defined as one who is not more than three months late for her scheduled appointment at the clinic. If currently practising clients are assumed the same as "active clients", then the contraceptive prevalence rate was about 4.9%. According to the Kenya Fertility Survey (KFS), on the other hand, the contraceptive prevalence rate was estimated to be about 4.4%. (See Annex 13) Thus, the two estimates--that of NFWC and of KFS--are close.

4.4 Roughly 70% of all new acceptors are for pill, 16% for IUD, 6% for Depo Provera and 8% for other methods. The percentage of IUD acceptors increased from 10% in 1974 to 16% in 1978 and the percentage of pill acceptors decreased from 80% to 70% during the same period. (See Annex 14) KFS estimates that 50% of all contraceptive users are pill users, 16% IUD users, 16% Depo Provera users and 16% have accepted female sterilization. The differences in method-composition of new acceptors and current users are due to differential continuation rates.

Precise estimates of continuation rates are not available. The estimate^{1/} used at appraisal suggested average monthly termination rates of about 6.8% for pills, 4% for IUDs, 2% for Injectable Contraceptives and 1.4% for other methods. A second estimate^{2/} based upon the number of first- and repeat-visitors in 1978 suggests that about 7% drop out almost immediately. Only about 57% of the acceptors in 1977 revisited in 1978.

4.5 An analysis of the characteristics of women accepting FP services indicates that the younger lower-parity women are the users of services; about 70% of the women accepting FP services during the period 1976-78 were less than 30 years of age, over 65% had four or fewer living children at the time of acceptance and about 25% had no formal education. Almost 30% of the active clients are from Nairobi, and another 25% are from the Central Province. These characteristics of the acceptors have not changed significantly over the years (Annex 15). Although the program is not purposely focussed to family spacing the data above shows that it caters to demand for family spacing rather than limitation. The demand for family limitation needs to be created through activities directed towards changing family size norms.

Reasons for Deviation from Targets

4.6 Ambitious Targets

In the absence of data from Kenya, the original targets (paragraph 4.1) were based on assumptions regarding contraceptive practices from Asia. The conventional wisdom based upon such experiences is that birth rates decline at the rate of one per thousand when national family planning programs are started. The targets based upon these assumptions proved to be unrealistically high. An average annual growth of 27% in the number of new acceptors was presupposed by the targets whereas the growth rates had not exceeded 19% in any one previous year except only the first year of the program. Only about 223,000 new acceptors were recruited during the years 1970-74, the five-year period immediately preceding the program period, whereas a target of recruiting about 740,000 new acceptors was set for the period 1975-79, nearly a three-fold increase. Early in the program period, GOK recognized that targets had been set too high and in consultation with IDA, revised them downwards.

4.7 Performance Decline

In 1978, the number of first visitors declined by 14% from the 1977 level and by another 5% in 1979 (Annex 12). In the absence of this decline, and projecting the long-term trend, the shortfall in achievement (relative to the original targets) would have been about 40% as compared to an actual shortfall of 50%. The reasons for performance decline in 1978, the first such decline since the program began, are not clear. A comparison of provincial and district performance carried out by the E&R Division suggests that the decline was not localized. Except for Nairobi, the number of first visitors declined almost

^{1/} Kenya Supervision Mission Report, October 1976.

^{2/} Mosley, W. H., "Population Growth, Family Size Expectations and the Level of Contraceptive Practice among Married Couples--Implications for Strategy and Planning of the National FP Program in Kenya", PSRI, Univ. of Nairobi (mimeo.) 1980.

everywhere. Several explanations were mentioned to the Mission--viz., lack of transport at field level may have affected supervision and reduced the number of clinics held by mobile teams, some health facilities may have failed to report and, therefore, the statistics may not represent actual performance, and several changes occurred in senior staff of NFWC at about the same time and these changes may have affected program operations. In the absence of a detailed study into the causes of decline these reasons are purely speculative in nature.

4.8 Limited Demand

There are strong traditions among Kenyans which explain the high fertility aspirations and limited demand for FP services. The data from KFS indicates that only about 17 - 20% of the currently married women do not want any additional children. Although these findings are not strictly comparable, a village survey in 1967-68 in Uganda^{1/} found that 40% of the respondents wanted as many children as possible and another 30% desired ten or more children. The responses to questions on desired family size should be interpreted with caution. A desired family size of about six was reported in 1967.^{2/} The mean desired family size was found to be 6.8 in the 1977 KFS. This increase may in part be due to a larger number of living children because of reduced infant and child mortality and corresponding increases in expectations. But it also suggests a strong traditional desire for having many children in East Africa. An estimated total fertility rate of about eight by KFS reflects these high fertility aspirations.

4.9 Socio-anthropological studies indicate several traditional motives supporting the intense desire for children. Children are often seen as wealth and as continuity of life. For women, children are an important source of help at home and for men, they offer a guarantee of "personal immortality".^{3/} The only factors that lead to a concern with the large size of families are financial particularly with respect to school fees and other costs of education. Health concerns of large families seem irrelevant. Education also affects the desired family size, a higher level of educational attainment leading to a smaller total desired family size; but the difference seems significant only with secondary school experience (KFS). The other modernization factor affecting desired family size is urban/rural differences. When standardized for the number of living children (using the nationwide distribution of women by number of children), 25% of women in Nairobi did not want any more children compared to about 21% in the

1/ Masters, Keith W., and Fralia, John, "The Influence of Custom and Tradition on Maternity Care in Ankole District: A Report to the MCH Advisory Committee of the Ministry of Health, Uganda", East African Medical Journal, Vol. 47, No. 11 (Nov. 1970), pp. 551-7.

2/ Heisel, Donald F., "Attitudes and Practice of Contraception in Kenya", Demography, Vol. 5, No. 2 (1968).

3/ For a detailed discussion of these issues, see Molnos, Angela, "Cultural Source Materials for Population Planning in East Africa", Vols. I through IV, Institute of African Studies, University of Nairobi, 1973.

central province and about 15% in all other provinces. The contraceptive prevalence rates are much higher in Nairobi. By 1978, the contraceptive prevalence rate was estimated to be 39.5% in Nairobi as compared to only about 5% in all of Kenya (estimates of NFWC).

4.10 Weak Political Support

Both its colonial history and the multi-ethnic composition of Kenya have led to population growth being a sensitive issue and political support for FP has been developing only very slowly. The population density is also perceived to be low and although there have been several definitive studies on the adverse impact of the high rate of population growth on development and the resultant pressure on good land (80% of the population lives on 18% of the land area), the perceptions of population pressure are not shared widely. Under the present Administration, however, there has been a marked increase in the level of Government support to the population program.

4.11 Knowledge and Attitudes

Nearly 84% of all women in the KFS sample had heard of at least one of the modern methods of contraception; however, only about 29% of all women had ever tried any method, and only about 11%, a modern method. (See Annex 17) The proportion who had tried any method of contraception varied according to marital status: 32% of ever-married and 19% of single women had been users. This difference, however, was reversed when the number of living children was taken into account. Fourteen percent of single women with no child compared to 12% of similar ever-married women had used contraception at some time in their lives: the corresponding figures for those with at least one child were 42 and 33%. Thus contraception is rather more likely to be employed in pre-marital liaisons than to control fertility once a union has been established. Only about 6% of all married nonpregnant women in the KFS sample were practising a modern method of contraception and another three percent used traditional methods. Though 42% of all married women were aware of the existence of the FP facilities, only 6% had visited one in the last 12 months and 6% had visited one long time ago. To create demand, therefore, I&E activities would have to influence attitudes and beliefs rather than only provide knowledge of FP, a task difficult to achieve in the short run.

4.12 Limited Availability of FP Services

Although the demand for contraceptive services is quite limited, the availability and quality of FP services also affect the acceptance and use rate. Only about 55% of the Government and very few NGO rural health facilities offer FP services. Even in these facilities, frequently only one nurse is trained in providing FP services, making availability of services rather uncertain. Since the oral pill is the most widely accepted method, a client would have to visit a clinic at least once every three months for resupply. While FHFES have reached some women, this outreach program covers only a small percentage of the population and FHFES do not provide any services. Kenya's rural health delivery system also continues to be overburdened by curative demands, which take precedence over the provision of promotive and preventive services, including MCH/FP.

4.13 There are, however, encouraging signs in program performance. Data indicate that during 1977, there was a 30% increase over the previous year in the number of clients requesting MCH services at clinics. About 440,000 first visits and 850,000 revisits for antenatal services, and 465,000 first visits and 1,050,000 revisits for child welfare services were carried out in 1977. Although complete figures for 1978 are not available, the NFWC estimates that the number of MCH clients continued to increase, although at a lower rate (about 17%). These figures show that already a majority of pregnant women (about 65%) and a smaller but growing portion of children are being reached by the Program. As this increasing utilization of MCH services brings about a reduction in infant and child mortality rates, it can be expected to have an indirect positive effect on family planning acceptance as well. In addition, these mothers, who are already motivated regarding the welfare of their children, represent a crucial target group for direct FP information and motivation efforts.

B. Institutional Impact

4.14 A limited first phase effort of institutional development was carried out in which NFWC and a field program was developed. The details were discussed in Section III. Overall, training, expansion of services and service statistics are the strong points of NFWC. The weaknesses were identified in I&E, internal management, and lack of feedback to SDPs and coordination among different divisions of NFWC. About 750 FHFES were in the field as of June 1979. However, much needs to be done to improve their efficiency and effectiveness. Supervision and management of the program at all field levels--dispensary, RHC, district and province--also needs to be strengthened.

4.15 To strengthen its institutional role, NFWC needs to develop linkages with other relevant departments or specialists within MOH--pediatrics, obstetrics and gynecology, and rural health. These departments need to be more closely involved in development of the MCH/FP program and training activities. There is also a need for better public relations, for other departments perceive NFWC as privileged in view of the physical facilities and transport available to NFWC.

4.16 NFWC will continue to be a focal point for MCH/FP activities. However, its capability will have to be strengthened in some areas and its role will have to be modified in other areas as the program expands. It will have to strengthen clinical services and evaluation of the program. While the Research and Evaluation Division will retain its specialized function with regard to MCH/FP service statistics, it will collaborate with the recently formed Department of Health Information System for field level collection of data. During the second phase, for which the plans are now being developed, inter-agency efforts involving many other ministries and NGOs is proposed for I&E activities. The Health Education Unit and I&E Division of NFWC will continue to play an important role in the expanded level of activities.

4.17 The field level MCH/FP activities cannot be strengthened in isolation of the overall rural health program, as rural health facilities provide all services--curative, preventive and promotive. For this purpose, facilities and staff need to be augmented, supervision and supportive services--supply, transport and research--need to be strengthened, and NFWC needs to develop linkages with the supervisory structure at field levels.

V. COVENANTS AND THEIR FULFILLMENT

5.1 Within constraints, the Borrower, by and large, carried out the project with due diligence and efficiency as required in Section 3.01a of the Development Credit Agreement. However, coordination with MOW and District Development Authorities for provision of electricity and water has affected functioning of some of the RHDCs.

5.2 The Project Construction Director was appointed as this was a condition of credit effectiveness. The first procurement officer was appointed only in February 1976 and an accountant was designated only after the mid-term review of 1977 (paragraph 2.29). Thus, the project management set up as required in Section 3.01b(i) was implemented with many delays.

5.3 An Interministerial Working Committee, as required in Section 3.01b(ii) was established for it was also a condition of credit effectiveness. But the committee met only twice (as compared to at least once every three months as planned at appraisal) during the project period and minutes or records of their meetings are not available.

5.4 Section 3.03(a) of the credit agreement was substantially complied with except that the program advisor was appointed only in June 1976 (paragraph 2.8).

5.5 Chief officers for the four functional divisions of NFWC were appointed as required in Section 3.03b. But due to shortage of appropriately trained Kenyans, initially expatriate personnel headed the training and clinical services divisions. The Research and Evaluation Division has been headed until now by an expatriate advisor. The head of the I&E division also directs the Health Education Unit within MOH.

5.6 A detailed staffing plan for all teaching positions in the Community Nurse Training Schools--as required in Section 3.05(a)--was made available. However, a detailed rural health services manpower planning system together with a personnel record system--as required in Section 3.06(a)--was not developed (paragraph 3.14).

5.7 Except for the dormitory which is still being used for housing medical students, all goods and services financed out of the proceeds of the credit are used exclusively for the purposes designated under the project--as required in Section 3.08(b).

5.8 The acquisition of sites for about 25% of RHDCs was delayed by about 12 months, but the covenant in Section 3.10 requiring acquisition of land rights was substantially complied with.

5.9 The borrower has not adequately fulfilled the covenant in Section 3.11 of the credit agreement. The maintenance of vehicles and facilities is inadequate for lack of budget and suitable organization structure.

5.10 The borrower has also not fulfilled the covenant in Section 4.01 with respect to maintaining special accounts for expenditures on the project including the project construction unit.

5.11 All other covenants in the Credit Agreement have been fulfilled--including those relating to Credit Effectiveness, specified in Section 8.01.

5.12 A large number of covenants relating to program operations were included in the Credit Agreement to indicate the Bank's interest in software although the project had included mostly financing of hardware.

VI. ROLE OF THE BANK

6.1 The GOK requested the World Bank's assistance in the formulation and appraisal of the program. Consequently the Bank took the lead in sector review as well as in the appraisal of the program. During this period of program formulation, prolonged discussions were held. These were essentially technical in nature and were related largely to the scope of the program and to the Government's ability to implement it. In October 1973, under GOK chairmanship a donor meeting was held to secure agreement on the proposed donor financing plan. Although a number of donors were eventually able to find a common meeting ground in the MCH/FP program, their philosophies, objectives and expectations regarding the Government's performance have continued to differ to some extent, and understandably so. The principal differences were in two areas--degree of integration of FP with MCH and rural health program, and the degree of emphasis on infrastructural inputs. In particular, questions were raised as to the relevance of some of the program inputs for fertility reduction; that many inputs were really health inputs; that the program should perhaps be vertical and be focussed more directly on fertility reduction efforts. It was also felt that construction of CNTSS and RHDCs were peripheral to contraceptive service delivery and IEC activities. Therefore, the program was perceived as a very expensive way to reduce fertility. However, provided the basic concept of integration of FP services into the health services system is accepted, it is not possible to strengthen the infrastructure for provision of FP services without at the same time strengthening health services broadly.

6.2 The project was supervised by a total of 15 missions. The interval between missions averaged 4.8 months and the period in the field about 11 days per mission--both reasonable figures in view of the need for donor coordination and the fact that on three occasions only one person visited the field to resolve special issues. In terms of mission composition, a population specialist (mission leader), an architect and an IEC specialist were almost always included. There was a fair amount of continuity in supervision as the same project officer, IEC specialist and architect were involved throughout the duration of the project.

6.3 Although the project included largely hardware inputs, the supervision missions also concentrated to a very large extent on implementation of the program. The supervision missions were helpful in resolving problems and removing bottlenecks related to procurement, disbursement and project management. The

missions also helped to focus continually on the steps needed to strengthen the program. Although many corrective actions were identified by each mission, some of the problems continued to recur and were discussed by several subsequent missions. This was perhaps due to a lack of unanimity among mission members and various MOH officials on the extent and nature of the problems and/or difficulty in implementation of the necessary corrective actions. The Bank's supervision missions were found to be useful by GOK and are so acknowledged by senior MOH officials. The project was timely as it coincided with the heightened concern about population growth arising out of 1969 census results. It was the first time that GOK requested large-scale external assistance in population area; the project responded to this request and contributed to the first five-year MCH/FP program.

Donor Coordination

6.4 During the implementation phase, GOK was to take the lead in coordination of donors. Towards that end, several donor briefing meetings were held in Nairobi from June 1974 to November 1976. Throughout this period, the Program Director and Deputy Director were in active contact with donors. The Program Advisor was also helpful in maintaining contact with donor agencies. As many donors were involved, several separate supervision missions visited Kenya in a year and were imposing a serious burden on the time of senior MOH officials. Therefore, MOH requested the Bank and UNFPA in November 1976 for a joint mid-term review. The mid-term review mission in March 1977 represented the apex of donor interaction and cooperation. The review mission included representatives of five donor agencies--UNFPA, USAID, SIDA, ODM (now ODA) and IDA--and UNDP. The consolidated report of the inter-agency team was shared with the GOK at the conclusion of the mission and a final version was submitted in August 1977. The mid-term review reaffirmed the appropriateness of the original program, identified specific weaknesses in the implementation of the program and, in collaboration with GOK, developed corrective solutions. It also provided an opportunity for donors to exchange views on program progress. GOK responded in October 1977 on the status of follow-up action. Subsequently, donor interaction was reduced to informal contacts during supervision missions, partly because of the changes in donor agency staff in local offices and in senior MOH officials and partly because of the need for GOK to concentrate on formulation of the second phase program for the period 1980-84.

6.5 The lack of formal donor coordination has not affected the performance of the program adversely, and informal contacts have helped the program implementation. It did, however, impose a burden on GOK in coping with several supervision missions, different procurement, accounting, disbursement, and project cycle duration and different reporting requests of different donors. Only two difficulties seem to have arisen. Although in principle NORAD had expressed an interest in participating in the program, it subsequently chose not to do so. The difference between GOK and NORAD principally seems to have arisen on the design of the RHDCs, which were perceived by NORAD to be more elaborate than necessary. Secondly, differences arose on the nature of equipment to be supplied by USAID. These difficulties were not really a matter of lack of donor coordination but rather a disagreement on specification of hardware.

6.6 In summary the Bank's role has been productive and has been mutually rewarding vis-a-vis GOK. In view of this experience GOK has asked the Bank to take the lead in the second phase of program formulation.

VII. MAJOR ISSUES

7.1 There are no major issues in project implementation. The project was, by and large, implemented as designed. A two-year delay in implementation was due to several reasons, but primarily because of lack of full-time involvement of staff and minor procedural delays.

7.2 The institutional objectives were largely realized but demographic objectives were not achieved. Therefore, issues are sectoral--relating to program and population policies. In program design, the issues relate to choice of program strategies, understanding of local culture and institutions, role of MOH, integration of FP with MCH and rural health, and expectations of short-term demographic impact. In discussing population policies, the focus is on continued high rate of population growth and what future course of action may be necessary.

A. Program Design

Program Strategy

7.3 At the time of program formulation, three strategic choices were made--the program was located in MOH and MCH/FP services were integrated with rural health services, these services were to remain largely clinic based, and I&E activities were to be conducted by a new field worker, FHFE. Each of these choices were believed to have advantages over their alternatives. But each of them also imposed limitations on what could be accomplished.

7.4 The rural health services organization at headquarters in MOH was new and weak. MOH had taken over rural health facilities from county organizations in 1970 and was in the process of strengthening them. The growth of MCH/FP services was, therefore, limited by the overall growth in the system infrastructure and its efficiency and effectiveness. Strong MCH/FP services could not be offered in the context of weak rural health services.

7.5 The services were largely clinic based, thus limiting their reach. The services were not easily accessible and consequently, increased the effort required in receiving services. MCH/FP services also received low priority from MOH staff as compared to curative services. A reorientation of the priorities in the health services will require considerable training and will take a long time.

7.6 I&E activities were to be conducted by a new field worker called FHFE. About 650 FHFEs were recruited and trained during the program period but their

efficiency and effectiveness need to be improved (paragraph 3.17 - 3.20). This choice also placed two additional limitations on the growth of the program. First, it took some time to add the workers to the program. Secondly, the social environment was not very supportive of workers carrying out only MCH/FP motivational activities.

7.7 In principle, alternatives existed for each of the above choices. The program could have been organized vertically. Commercial and community based contraceptive delivery systems could have been developed and I&E activities could have been organized as a multi-agency/multi-ministerial effort utilizing some of the existing cadres of field staff. Each combination of these choices would have yielded a different strategy and there were many such possible combinations. It is not possible here to compare the program strategies with all other alternative strategies.

7.8 In practice, each choice was made in view of the constraints imposed by prevailing social environment, sensitive nature of family planning and limited previous experience. In 1966, several years prior to the program formulation, GOK had announced the adoption of FP as an integral part of MCH services and had formed a FP unit in the MOH. As the first phase of the program, development of rural health services were being strengthened by setting up or upgrading static rural health facilities. Thus expansion to community outreach had necessarily to be postponed to a later stage. In most countries, MCH and FP programs are integrated in the overall context of health, and a similar approach was adopted in Kenya. The cost-effectiveness of vertical programs over a long period, in any case, is uncertain.

7.9 Demand for contraceptive services is very limited since spacing of children and fertility limitation are not widely accepted ideas in Kenyan society. Therefore, a limited pilot experiment of community-based distribution of contraceptives started by Population Services International experienced considerable opposition from a segment of the community.^{1/}

7.10 Given the reluctance of GOK to launch a broad-based large-scale communication program for population and family planning, it was indeed not possible to have multi-agency/multi-ministerial I&E activities. However, such a strategy is envisaged in the second project.

Understanding of Local Culture

7.11 It is difficult to say whether the program design chosen reflected an adequate appreciation of local culture and institutions. However, several persons with experience and knowledge of East Africa Region were included in appraisal and supervision missions. In particular, the project officer, architect and I&E specialist had previous work experience in that region.

^{1/} Black, Timothy R. L., and Harvey, Philip D., "A Report on a Contraceptive Social Marketing Experiment in Rural Kenya", Studies in Family Planning, Vol. 7, No. 4, April 1976, pp. 101 - 108.

7.12 Many elements of FP programs are somewhat culture-invariant, including delivery of services and training of paramedical workers. The local setting influences the following design elements: I&E activities should be designed with an understanding of possible resulting behavioural response and communication patterns in the community, choice of type of workers employed should reflect acceptability, and program activities should take into account status and role of adult males. Moreover, the pace of expansion of the program will be limited by the pace of change in fertility norms.

7.13 There was no precedent for MCH/FP programs in the region, there was no large-scale action research project to serve as a pilot model, and the research base for designing interventions in this sector was weak. Therefore, the program concentrated on providing core infrastructural elements and on institutionalizing capability to respond to local conditions by developing operational research, a suitable organizational framework, and leadership. This institutional capability is, however, still inadequate and needs to be further strengthened.

Role of MOH

7.14 Given the present state of contraceptive technology, any FP program requires close links with the health services. The minimal necessary role for MOH involves provision of clinical contraceptive services and interpersonal communication in the context of MCH services. Any expansion of this role beyond the minimal level depends upon environmental conditions. If the private sector is well developed or capable community organizations exist, then non-clinical contraceptives can be distributed through these channels also. If population issues are not too sensitive politically and culturally, then large-scale I&E activities can be launched through MOH and other ministries. Finally, other institutions can be involved in research and evaluation. In the Kenya program, only the minimal role was assigned to MOH (except for distribution of non-clinical contraceptives). For expanding the program, this role needs to be strengthened and, with the present climate of gradually developing political commitment, activities within other ministries need to be initiated.

Integration of FP with MCH Activities

7.15 In 1966, the GOK had decided that FP activities would be an integral part of MCH services. The program design reflected this integration, but emphasis was on FP, as the Bank was interested in funding population activities. The emphasis on FP was reflected in all the activities to be carried out by NFWC—clinical services, training, I&E, and Research and Evaluation. Some of this emphasis was reflected in the early stages of program implementation. The FHFES were not integrated in the health services as they, unlike other health workers, did not provide any services and were paid a salary comparable to considerably better trained staff. A separate supervisory cadre of FHFOs was created at the district level. A separate information system was developed to collect information on FP acceptors. In a later stage of program implementation, the activities began to be integrated. The FHFES were spending a significant part of their time recruiting clients for MCH services. Consequently, 74% of all the clients recruited by FHFES in 1978 sought MCH services. The separate cadre of Family Health

Field Officers was abolished and the staff was merged with the old cadre of Health Education Officers. The annual reports of NFWC also began to include MCH service statistics. Thus, in practice, a compromise emerged between emphasis on FP and a total integration within MCH services.

Expectations of Short-term Demographic Impact

7.16 There are two views on setting short-term demographic targets. The argument for setting short-term targets is that, in the absence of such targets, the performance cannot be evaluated. On the other hand, when the means required to achieve the targets are not known with certainty and the targets are not achieved, the staff is demoralized and frustration with the program results. This latter problem can be reduced if the targets are set within a long-term population perspective of at least 15 years, for such a perspective allows enough time for psychological and programmatic adjustments to occur without undue stress. Realistic short-term targets can only be achieved if the program has capability for monitoring and feedback and institutional support for necessary corrective action exists. Finally, the program affects fertility through contraceptive usage but population growth is also determined by mortality trends. As it turned out, in the Kenyan setting, rising education and health levels resulted in a decline in death rates. The absence of a long-term perspective, lack of feedback capability, and exclusion from consideration of other determinants of population growth in setting demographic targets rendered such targets largely meaningless.

B. Population Policies

7.17 A comprehensive discussion of consequences of population growth and determinants of fertility in Kenya can be found in a Bank report issued in March 1980.^{1/} A review of Kenya's agriculture sector in this report indicated that population pressure on land has resulted in migration to marginal areas and in improper cultivation and hence reduction of productivity potential. To accommodate increasing population pressure on land, marginal land will have to be developed, which involves a substantially more resource intensive operation, that will mean slower growth of the sector and less prospects for absorption of the increasing population dependent on land. Another important consequence of rapid population growth is the increased public expenditure for providing basic needs services--education, health, water and housing. Thus a continued high rate of population growth will affect development adversely.

7.18 The report also studied determinants of fertility in Kenya. Based upon the findings of this study and other available evidence, it concludes the following. Although the current MCH/FP program can contribute a great deal more towards the goal of fertility reduction, a large-scale reduction in fertility by strengthening FP education and services alone is unlikely in Kenya without a general attitudinal change in favour of small family size. The significant breakthrough must come through policies and programs that affect the determinants

^{1/} The World Bank, "Population and Development in Kenya", Report No. 2775-KE, Development Economics Department and East Africa.

of fertility behaviour and attitudes. A comprehensive population policy must have, therefore, three broad objectives:

- (a) to provide comprehensive FP services to meet untapped demand;
- (b) to provide incentives and disincentives which encourage family limitation without disaffecting people about FP or without impeding freedom of choice; and
- (c) to emphasize development programs which are valuable in their own right and which will accelerate the smaller family size norms.

7.19 In the report submitted in 1967 to the Government of the Republic of Kenya by an advisory mission of the Population Council, it was recommended that as an initial and probably essential step the GOK clearly declares its policy regarding a reduction in the rate of population growth. The report did not specify the process of formulation and content of such a policy.

7.20 A comprehensive population policy would have increased program performance, but the social and political climate should support such a policy. Some experience with program activities is necessary before a population policy can be formulated. This is so because it is only through program experience that critical constraints and ways to remove them can be identified. Although several countries have moved towards comprehensive population policies in the last five years, it is difficult to say whether Kenya has reached this stage.

VIII. RECOMMENDATIONS AND LESSONS LEARNT

Recommendations

8.1 A few specific recommendations emerge from the experience of implementing the project:

- (a) A three-year duration of the project is too short for a first project which also involves setting up new institutions (e.g. the NFWC).
- (b) The project should ideally provide for a suitable mix of financing of hardware and software needs. Strongly complementary inputs should preferably be financed under one project.
- (c) Arrangements for financing need to be spelt out more definitely in the context of multi-donor operations such as that of the First Population Project.

- (d) It is necessary to involve the local staff of the Ministry in formulating the project in order to reflect the constraints and needs of the local environment. (In the First Population Project, sufficient local staff involvement was prevented by Government staff constraints.)

Lessons Learnt

8.2 On balance, the project was implemented reasonably well, it being the first such project in East African Region. The shortfalls in achieving demographic targets were due to many reasons including ambitious targets, limited demand, and weak political support for the program. The project was worth doing for it was part of the first such program in Sub-Saharan Africa. A few lessons have been learnt in this process:

- (a) Institutionalizing a new population program is a difficult task. Such institutions cannot be effectively developed if there is some disagreement in the Ministry of the borrower about their nature or the political support is weak.
- (b) There is a need to moderate expectations in terms of demographic impact from newly instituted population programs in Africa where fertility may still be increasing. Rather, the emphasis should shift from quantitative targets to development of appropriate policies, programs, and institutions.
- (c) Support for integrated health/FP systems in a situation of high and increasing (or at least not declining) fertility may lead to even higher rates of population growth if receptivity to health services is much greater than receptivity to FP services.
- (d) There is a need to learn more. The means to lower population growth in the East African region are not clear and considerable research and experimentation is necessary.

ANNEX I: DETAILS OF PROGRAM FINANCING AT APPRAISAL

<u>Country (Agency)</u>	<u>Amount US\$ million</u>	<u>Terms</u>	<u>Items Financed</u>
<u>Denmark (DANIDA)</u>	0.6	Grant	Nurse training school at Eldoret and technical assistance for nurse tutor advisers
<u>Federal Republic of Germany</u>	0.9	Grant	Nurse training school at Kakamega
<u>Norway (NORAD)</u>	1.8	Grant	Three rural health centers and recurrent costs.
<u>Sweden (SIDA)</u>	5.4	Grant	Technical assistance for training and information and education; recurrent costs; contraceptive supplies; training programs; and mass media program costs.
<u>United States (USAID)</u>	0.7	Grant	Special equipment; technical assistance for HEU and fellowship support; and some recurrent costs.
The UN Fund for Population Activities (UNFPA)	1.2	Grant	Office equipment; vehicles; technical assistance for the clinical services and evaluation and research divisions of the NFWC; recurrent costs for the first three years.
Sub-Total	<u>10.6</u>		
IDA Credit	12.0	Standard IDA terms See Paragraph 5.06	
Expected future annual commitments by USAID and Population Council (US\$.3 million)	1.9	Grant	(Continuation of grant above)
Total External Financing	24.5		
GOK	<u>14.3</u>		
Total	<u>38.8</u>		

ANNEX 2: A COMPARISON OF PROGRAM AND PROJECT INPUTS

<u>Category</u>	<u>Five Year Program</u>	<u>IDA Project</u>
Community Nurse Training Schools	8	5
Rural Health Demonstration Centers	30	27
National Family Welfare Center	1	1
Family Planning Unit	1	1
Health Education Unit	1	1
Vehicles	190	90
Fellowships	28	-
Advisory Staff Man-Years	NA	3.0
Research Studies	NA	2.0
Operating Cost - US \$	NA	0.0
Total Cost - US \$ Million	38.8	15.4

ANNEX 3: UTILIZATION OF COMMUNITY NURSE TRAINING SCHOOLS

Name of School	Date Started Mo/Yr	1977 In-Training	1978 Entry	1978 Discontinued	1978 Re-Entry	1978 Passed (P) & Failed (F)	1978 M-In-Training - Males	1978 F-In-Training - Females	1978 Total	1979 Entry
1. Thika	5/71	113	34	24	11	P30 F0	0	153	153	64
2. Machakos* (200)	1/75	157	58	13	2	P25 F1	42	127	169	65
3. Mombasa (Coast-General)	7/67	258	90	24	1	P46 F1	79	162	241	105
4. Nyanza	9/66	215	100	3	14	P46 F4	76	209	285	70
5. Meru* (100)	1/79	-	-	-	-	-	-	-	-	27
6. Nakuni* (200)	1/79	-	-	-	-	-	-	-	-	60
7. Muranga	6/77	25	70	4	0	-	31	49	80	70
8. Nyeri* (100 for 250 Total)	1/78	-	50	0	0	0	22	28	50	58
9. Homabay* (100)	1/79	-	-	-	-	-	-	-	-	23
10. Eldoret	7/77	23	26	3	0	-	18	31	49	29
NGO's			322						445	NA
Total		1157	750	127	32	224	359	1158	1472	NA

*Constructed under the Project

ANNEX 4: KENYA FIRST POPULATION PROJECT

PROJECT IMPLEMENTATION SCHEDULE

PROJECT CYCLE

		1973				1974				1975				1976				1977				1978				1979				1980			
		JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ		
PROJECT CYCLE										S	S	S	S	S	S		S				S	S	S	S						S	Extended Closing Date (12/31/79)		
										S Agreement Signed (4/1/77) Effectiveness (7/31/74)												Original Completion Date (6/30/77)											
A.	CIVIL WORKS					xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx																				
	1. Site Acquisition					xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx																				
	2. Architects' Appointment					xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx			xxx																	
	3. Design, Working Dr., Specification					xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx																				
	4. Advertisement and Prequalification									xxx	xxx					x																	
	5. Bidding (ICB)) Machakos CNTS											xx																					
	& Evaluation) Nakuru CNTS											xx																					
	& Comment) 100-place CNTS																																
	NFWC, Nairobi									xx	x		x																				
	RHC Group 1										xx																						
	2												x	x	x																		
	3																																
	6. Construction Machakos																																
	Nakuru																																
	100-place CNTS																																
	NFWC, Nairobi																																
	RHC Group 1																																
	2																																
	3																																
B.	FURNITURE AND EQUIPMENT																																
	7. Masterlist, Estimates, Specific.																																
	8. Advertisement (local) & Prequal.																																
	9. Bidding, Evaluation & Comment																																
	10. Supply Machakos CNTS																																
	Nakuru CNTS																																
	100-place CNTS																																
	NFWC, Nairobi																																
	RHC Group 1																																
	2																																
	3																																
C.	VEHICLES																																
	11. List, Specification, Advertisement (ICB)																																
	12. Bidding, Evaluation, Comment																																
	13. Supply																																
D.	TECHNICAL ASSISTANCE, STUDIES																																
E.	DISBURSEMENTS IN US\$ MILLION BY APPRAISAL					0.1	0.1	0.3	1.5	3.2	5.3	6.9	8.0	9.1	9.8	11.1	11.5	12.0															
	" " " " AS IMPLEMENTED												0.9	1.0	2.6	2.6	3.7	5.7	5.7	7.8	8.3	8.8	10.0	10.5	10.5	11.1	11.6	11.6	11.8	12.0			

KEY

--- Schedule as appraised
xxx As implemented
S Supervision mission

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ANNEX 5: DISBURSEMENTS BY CATEGORIES (IN US\$)

	As Appraised			As Implemented		
	Allocated Amount	% of Total	% of Sub-total (w/o Unallocated)	Disbursed Amount	% of Allocated Amount	% of Total
I Civil Works, Furniture, Equipment, Fees	8,000,000.	66.7	90.4	10,905,965.17	136.3	90.9
II Vehicles, Office Equipment	650,000.	5.4	7.3	919,417.15	141.4	7.6
III Program Advisor	90,000.	0.8	1.0	126,251.87	140.2	1.1
IV Nursing Activities & Other Studies	110,000.	0.9	1.3	48,365.81	43.9	0.4
Subtotal	(8,850,000.)	(73.8)	(100.0)			
V Unallocated	3,150,000.	26.2	35.6			
Total	12,000,000.	100.0	135.6	12,000,000.00		100.0

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ANNEX 6: SCHEDULE OF DISBURSEMENTS (in US\$'000)

	<u>Appraisal Estimate</u>	<u>Actual</u>	<u>Actual as % of Appraisal Estimate</u>
<u>1973/74</u>			
June 30, 1974	0.10		
<u>1974/75</u>			
Sept. 30, 1974	0.10		
Dec. 31, 1974	0.32		
Mar. 31, 1975	1.52		
June 30, 1975	3.21		
<u>1975/76</u>			
Sept. 30, 1975	5.32		
Dec. 31, 1975	6.89		
Mar. 31, 1976	8.03	0.97	12.1
June 30, 1976	9.13	0.98	10.7
<u>1976/77</u>			
Sept. 30, 1976	9.88	2.64	26.7
Dec. 31, 1976	11.18	2.65	23.7
Mar. 31, 1977	11.48	3.69	32.1
June 30, 1977	12.00	5.74	47.8
<u>1977/78</u>			
Sept. 30, 1977		5.74	47.8
Dec. 31, 1977		7.85	65.4
Mar. 31, 1978		8.32	69.3
June 30, 1978 ^{1/}		8.80	73.3
<u>1978/79</u>			
Sept. 30, 1978		10.09	84.1
Dec. 31, 1978		10.48	87.3
Mar. 31, 1979		10.49	87.4
June 30, 1979 ^{2/}		11.13	92.8
<u>1979/80</u>			
Sept. 30, 1979		11.62	96.8
Dec. 31, 1979 ^{3/}		11.62	96.8
Mar. 31, 1980		11.77	98.1
June 30, 1980 ^{4/}		12.00	100.0

1/ Original closing date

2/ First extended closing date

3/ Second extended closing date

4/ Last payment was made on 7/9/80

ANNEX 7: EXPANSION OF SERVICE DELIVERY POINTS

<u>Category</u>		<u>Year</u>					
Government (Full-Time)	Province	Up To 1974*	1975**	1976	1977	1978	1979
	Central	26	43	45	46	52	NA
	Coast	19	20	30	35	36	NA
	Eastern	12	25	40	45	51	NA
	N/Eastern	-	-	3	3	3	NA
	Nyanza	8	30	31	44	47	NA
	Rift Valley	28	19	28	51	60	NA
	Western	17	21	27	37	42	NA
	Total	110	158	214	261	291	365
	Original Target	110	208	275	302	360	400
Government (Part-Time)		NA	NA	NA	44	43	NA
Municipalities		NA	NA	NA	44	43	NA
Missions		NA	NA	NA	34	35	NA
FPAK		NA	NA	NA	8	8	NA
Private Companies		NA	NA	NA	3	3	NA
Total Full-time and Part-time		NA	NA	NA	497	505	NA
Mobile Clinics		NA	5	10	15	17	NA

*Source - NWFC Report on National FP Program 1974-1979

**Source - Appendix 4, Supervision Report - March 1976

Source Annual Reports, NWFC 1976, 1977, 1978

ANNEX 8: IN-SERVICE TRAINING FOR MCH/FP

Staff	Up to					Target	% Achieved
	1974	1975	1976	1977	1978		
EN/Midwife/ECN	-	304	483	635	851	633*	135
NT/S and Instructors Including Registered							
Nurses		30	68	109	151	97	155
FHFE		40	196	289	423	817	52
FHFO			7	14	14	47**	-
Clinical Officers	0	0	0	0	0	215	0
Nursing Officer in Charge			14	14	14	65	22
Matrons			9	9	9	70	13

*Original targets were revised upwards because more than 2 nurses were required to ensure that 1 is appointed in a RHF (others at hospitals).

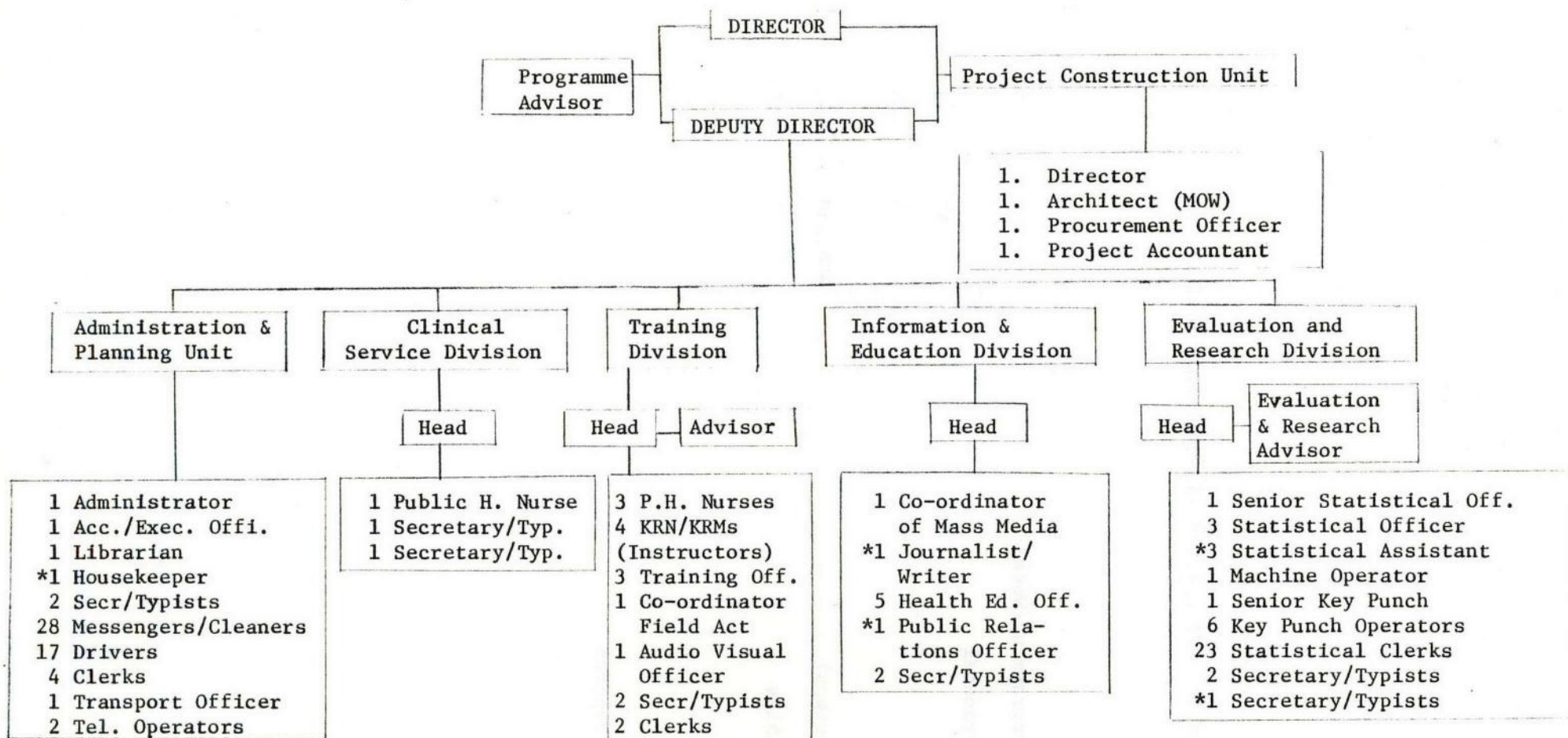
**FHFO category was merged with HEO category.

Source Annual Reports of NFWC, Years 1976, 1977, and 1978.

ANNEX 9: INFORMATION AND EDUCATION ACTIVITIES

	1976	1977	1978
Mass Media			
Minutes of Radio Programming/Week	30	30	30
Seminar for Health Personnel			
# of Seminar	16	15	19
# of Participants	768	704	969
I&E Materials			
(# of Boards and Posters)	486,150	141,443	NA
# of Shows and Exhibits	2	10	12

Source: NFWC Annual Reports



ANNEX 10: ORGANIZATIONAL STRUCTURE: NATIONAL FAMILY WELFARE CENTRE (NFWC) JANUARY, 1979

*Vacant

ANNEX 11: NATIONAL FAMILY WELFARE CENTER STAFF

Category	Original Plan:					
	Total Positions to be Filled by End of Programme	1974	1975	1976	1977	1978
<hr/>						
<u>Director Office</u>						
Director	1		1	1	1	1
Deputy Director	1		1	1	1	1
Secretary	2		NA	2	2	2
<u>Administrative & Planning Unit</u>						
Under Secretary*	-		-	-	-	-
Administrative Officer**	-		-	1	1	-
Executive Officer	1		1	1	1	-
Project Accountant	-		-	1	1	-
Other	21		8	16	16	50
<u>Clinical Services Division</u>						
Division Head	1		-	1	1	1
Public Health Nurse	2		1	1	1	1
Other	3		-	2	2	1
<u>Training Division</u>						
Division Head	1		1	1	1	1
Public Health Nurse	-		-	-	1	1
Training Officer	-		-	1	1	3
Audio Visual Officer	1		-	-	-	-
Instructor	3		-	3	6	6
Other	5		-	5	7	6
<u>Evaluation & Research Division</u>						
Division Head	1		-	-	-	-
Senior Research Officer	1		-	-	-	-
Research Officer	2		-	2	2	3
Other	16		6	11	13	32
<u>Information & Education Division</u>						
Division Head	1		1	1	1	1
Health Educators	-		-	-	-	5
Journalist/Writer	1		-	-	-	-
Other	4		-	4	3	3

Source: Annual Reports of NFWC

ANNEX 12: NUMBER OF FIRST VISITORS IN THE FP
PROGRAM COMPARED WITH ORIGINAL AND REVISED ESTIMATES
OF ACCEPTORS

	# of First Visitors/ <u>1</u>	Original Estimates for Acceptors/ <u>1</u>	Revised Estimates for Acceptors/ <u>2</u>
1975	53,472	55,500	51,643
1976	61,227	91,500	60,621
1977	72,647	127,500	90,658
1978	62,408	168,500	114,400
1979	59,000/ <u>3</u>	192,500	138,235
Total	308,804	635,500	455,377

1/ Source: Appraisal Report

About 98% of all first visitors accept a contraceptive method.

2/ The World Bank Development Economic Department, Population and Development in Kenya, March 10, 1980, p. 177. The revised estimates were prepared in September of 1976.

3/ Provisional estimates.

ANNEX 13: ESTIMATED NUMBER OF USERS

ACCORDING TO KENYA FERTILITY SURVEY 1977-1978

Kenya Fertility Survey Estimates: Reproductive Age Group 15-49.

	<u>NO.</u>	<u>%</u>
Total Sample	8,100	100.0
Never Married	1,782	22.0
Married	6,319	78.0
Widowed/Divorced/Separated	569	7.0
Currently Married	5,750	71.0
Currently Pregnant	1,533	19.0
Currently Married non-Pregnant	4,217	52.0
Using Modern Methods	253	4.4
Using Traditional Methods	135	1.7
Currently Married Women of Reproductive Age	2,231,000	
Currently Active Family Planning clients according to NFWC Annual Report	108,570	4.9
Practicing According to KFS	98,164	4.4

ANNEX 14: THE CONTRACEPTIVE METHOD ACCEPTED BY FIRST

VISITORS 1974-1978^{1/}

Year	Pill %	IUD %	Injectable Contraceptives %	Others %	Not Specified	Total
1974	80	10	6	4	-	N=40,600
1975	78	10	6	6	-	N=48,139
1976	76	12	5	6	1	N=58,778
1977	71	14	7	6	2	N=71,376
1978	70	16	6	7	1	N=61,075

^{1/} Source: NFWC. Nairobi City Council data is included.

ANNEX 15: CHARACTERISTICS OF ACCEPTORS

AGE OF ACCEPTORS FROM 1974 TO 1978^{1/}

Age	1974 %	1975 %	1976 %	1977 %	1978 %
Under 20	10	12	12	12	13
20 - 24	34	35	36	35	29
25 - 29	25	25	26	27	25
30 - 34	15	14	15	14	15
35 - 39	8	8	8	8	10
40 - 44	3	3	3	3	7
45 +	0.3	0.5	0.5	0.1	1
Not Stated	4	3	-	-	-
Total	N=40,600	N=39,137	N=50,678	N=52,516	N=61,075

^{1/} Nairobi City Council is not included from 1974-1977 but is included in 1978 total.

LIVING CHILDREN OF ACCEPTORS, 1974 - 1978

Number of Living Children	1974 %	1975 %	1976 %	1977 %	1978 %
None	4	3	3	3	4
1	18	19	19	20	20
2	18	19	19	19	20
3	14	14	15	15	10
4	12	12	13	12	11
5	11	10	10	10	11
6+	23	21	21	21	20
Not Stated	1	1	-	-	4
Total	N=40,600	N=39,137	N=50,678	N=52,516	N=61,075

1/ Nairobi City Council is not included from 1974-1977 but is included in 1978 total.

EDUCATION OF ACCEPTOR ATTENDING THE FAMILY
PLANNING CLINIC AT FIRST VISIT DURING 1974 TO 1976^{1/}

Educational Level	1974 (%)	1975 (%)	1976 (%)
No Formal Education	26	26	25
Standard 1 to 3	7	8	7
Standard 4 to 7	46	45	46
Form I to III	10	11	13
Form IV to VI	6	7	8
Higher	0.3	0.4	0.3
Not stated	4.7	2.6	0.7

^{1/} 1976 NFWC Annual Report

GEOGRAPHICAL DISTRIBUTION OF FIRST VISITORS
FOR FAMILY PLANNING SERVICES, 1977-78^{1/}

PROVINCE	% of Total Population, 1977	% of First Visitors, 1977	% of First Visitors 1977
Nairobi	5.3	27	28
Central	15.1	21	18
Coast	8.6	9	11
Eastern	16.9	18	18
North-Eastern	1.9	*	*
Rift Valley	19.8	11	11
Nianza	19.9	7	7
Western	12.5	7	7
Total Kenya	100.0	100	100
Total Kenya (000s)	14,348.0	72	62

^{1/} Source: NFWC. (*) = less than one percent.

ANNEX 16: F.P. FIRST VISITORS AND RE-VISITORS

IN THE MCH/FP PROGRAMME FROM 1968-1978

Year	First Visitors	Per cent Increase (Decrease)	Revisits	Per cent Increase (Decrease)
1968	11,711	-	17,891	-
1969	29,761	154	72,879	307
1970	35,136	18	113,695	56
1971	41,000	17	138,656	22
1972	45,205	10	172,279	24
1973	50,054	11	211,307	23
1974	51,446	3	236,370	12
1975	53,472	4	244,244	3
1976	61,227	15	271,532	11
1977	72,647	19	283,679	4
1978	62,408	(14)*	302,799	7

*The decrease in first visitor has not been fully explained but is most probably due to lack of co-ordination of facilities and staff. Further investigations and comparisons are being made to determine the causes.

ANNEX 17: KNOWLEDGE AND USE:

PERCENTAGE OF ALL WOMEN WHO HAD HEARD OF AND WHO EVER-USED CONTRACEPTION BY CURRENT AGE

Current Age	Heard of			Ever-Used		
	A modern method	A traditional but not a modern method	Any method	A modern method	A traditional but not a modern method	Any method
15-19	73	4	76	3	14	17
20-24	88	3	91	11	20	31
25-29	90	3	93	16	19	34
30-34	89	4	93	17	18	35
35-39	89	3	92	14	17	31
40-44	88	4	92	12	20	32
45-49	83	5	89	9	20	28
50	73	13	86	10	23	33
All	84	3	88	11	18	29

Source: 1977/78 Kenya Fertility Survey.

TABLE 4.8 KNOWLEDGE AND USE OF

PARTICULAR METHODS OF CONTRACEPTION

		Percentage of all women who have heard of:	Percentage of all women who have ever-used:	Percentage of currently married fecund non-pregnant currently using:
Modern	(Pill	74	7	3
	(IUD	49	2	1
	(Injection	55	2	1
	(Condom	40	3	0
	(Female Sterilization	54	1	1
	(Male Sterilization	14	0	0
Traditional	(Rhythm	50	13	2
	(Abstinence	45	5	0
	(Withdrawal	25	1	0
	(Douche	12	0	0

Source: 1977/78 Kenya Fertility Survey.

ANNEX 18: TOTAL NUMBER OF CLIENTS ATTENDING
THE MCH/FP CLINICS AT FIRST VISIT

YEAR	FAMILY PLANNING	ANTENATAL	CHILD WELFARE	TOTAL
1974	51,446	n.a.	n.a.	n.a.
1975	53,472	n.a.	n.a.	n.a.
1976	61,227	342,872	357,928	762,027
1977	72,647	439,339	465,260	977,246
1978	62,408	513,210	558,219	1,133,656

Source: NFWC; MCH statistics were compiled only since 1976.