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USAID ANALYSES AND STRATEGY FOR ASSISTANCE  
IN FAMILY PLANNING AND FERTILITY REDUCTION  
IN KENYA

USAID/KENYA  
OFFICE OF POPULATION AND HEALTH  
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## QUOTATIONS

"...The nearest clinic is fifteen miles away and its service is spasmodic. The journey costs Kshs. 30/= and one is not certain of seeing anyone when one gets there. I will not go on too long on this subject as I feel very strongly that if services were available within easy walking distance the majority of our members would use the service. Some of the members have managed to have the tubal ligation but that is extremely difficult (to get). Everyone criticizes the women for having too many children but if women in the Western world had to travel the distances (our) women in rural areas are expected to cover to meet an inefficient service they would be discouraged as well..."

excerpt from a letter from a women's  
group member, Kericho, Rift Valley  
October, 1984

"...If we in Kenya are to plan development of industry, agriculture, roads, education, health services and all other sectors, the purpose of which is to serve the individual members of society, then we must also plan for those families. Family planning is indigenous to Africa. It is not an imported concept. Family planning, and child spacing, was the accepted norm. If any person was not 'behaving' properly then he was disciplined by his age mates. What has changed is the life style. It used to be that men did not share the same house with their wife or wives. Now we must adopt new ways, new methods for family planning....We must not be drawn into arguments about which are the best methods. This (argument) is all very interesting for those that have the leisure to spend on these issues, but (family planning) is an urgent matter in Africa. Whatever is available, begin there....Every health center, every hospital in Kenya will have to make available the services of family planning. These services must be within the reach of the ordinary family at a reasonable cost..."

Honorable Mwai Kibaki, Vice President  
Excerpt from Opening Remarks to a  
conference of radio broadcasters  
Nairobi, November 19, 1984

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## EXECUTIVE SUMMARY

Kenya's foremost development problem lies in its unprecedented high rate of population growth and child dependency combined with its limited natural resources. With annual increments of 3 to 4% for almost forty years the momentum of population growth is such that even with very rapid and immediate reduction in fertility the population still will continue to grow to about 60 million by 2050, only three "generations" from now. The adverse consequences of this growth are likely to be profound. To address this problem extraordinary commitment by Government, voluntary organizations, the private sector and donors will be required for the remainder of this century and beyond. USAID's overall development strategy in Kenya depends heavily upon success in reducing fertility, in concert with Government of Kenya policies and other donor priorities and objectives.

USAID's family planning strategy will seek to assist the Government of Kenya: (1) to lower population growth rates to levels that are more consistent with Kenya's ability to provide improved standards of living, and (2) to enhance the freedom and rights of individuals and couples to choose the number and spacing of their children. USAID's objective is to assist GOK to expand and improve the accessibility and quality of all appropriate fertility regulation services, and supporting information and promotion, so that nearly all couples of reproductive age have easy access by the year 1992. USAID will endeavor to make resources available for both clinical and community-based contraception services focused on these objectives: (1) deferring first births by young adults, (2) spacing births among those in the middle of their reproductive years, and (3) completing fertility at earlier ages and with smaller family size. All AID efforts in this sector will be organized around these objectives.

With concerted effort the 1985 estimated growth rate of 3.9% can decline to 2.8% or less over the next 15 years, with the Crude Birth Rate declining from 52/1000 to 35/1000 or less while further reductions in death rates also take place. This will be roughly equivalent to a reduction in the Total Fertility Rate from 8.0 in 1985 to about 4.0 in 2000. To meet these goals the number of reproductive age couples practicing effective contraception (including periodic abstinence) will have to increase from about 425,000 (12% of total) in 1985 to about 2.8 million (40% of total) in 2000. By the year 2000 probably more than 2000 facilities, 20,000 professionals and 70,000 community leaders will need to be active in family planning and fertility regulation.

Government of Kenya policies favor attainment of the above objectives and are congruent with AID and USG policies. All proven safe and effective methods are currently available in Kenya but remain largely inaccessible to the rural peoples due to under-utilization of existing infrastructures and to constraints in medical guidelines. These include non-clinical methods appropriate for young adults wishing to defer first births, clinical and non-clinical methods appropriate for spacing between births, and clinical methods appropriate for those who have decided to terminate childbearing. Abortion remains illegal in Kenya except in extreme circumstances. There are no client/consumer incentives for practicing fertility regulation either in the public or private sectors.

Data from the past ten years show increasing awareness and use of modern methods and declining fertility among older women. From a 1984 national survey about 80% of fertile age women reported knowledge of at least one effective method. The desired total number of children has declined from 8 in 1977 to 5 in 1984. The prevalence of use of effective methods has increased from 6.7% in late 1977 to about 12% in mid-1984. Demand for services in poor rural areas has been demonstrated through numerous pilot studies with both clinical and non-clinical methods.

Kenya has a range of public, voluntary, and private sector infrastructures which can be utilized to attain the goals and objectives, including: a clinic network that already reaches about 40% of the population annually; the most extensive voluntary organization of women's groups in Africa (more than 15,000 community groups); and one of the best private sector mass marketing and private physician systems in sub-Saharan Africa. Though further expansion of clinical infrastructure must take place in order to attain objectives, the main priority and challenge in the family planning sector in Kenya today is to convert the lessons from many successful but disparate pilot projects into well designed national programs for quality service delivery using present structures.

The total costs for attaining objectives may be on the order of US \$500 million over the next fifteen years, of which almost US \$170 million may be required during the next seven to eight years. These requirements are quite small in comparison to expenditures for other health and social services. Financing should be readily available through a balanced combination of GOK recurrent cost budget commitments, consumer/client fees for services, voluntary organization commitments and external donor contributions.

USAID should expect to make substantial contributions of funding and technical assistance to both public and private sector Kenyan family planning programs over the next fifteen years. Support at the level of about \$35 million over a

seven-year period (1985 - 1992) may cover development costs for: (1) establishing national community-based distribution systems for non-clinical methods by Government and NGOs, (2) expansion of the training and clinical services through Government and NGOs, including surgical contraception, and (3) expanding full-cost and subsidized commercial and private practitioner activity. USAID will endeavor to support Government population policy and planning activities, strengthening data and record systems, district-level budget and program planning, and continuous evaluation (including bio-medical and operations research). Support will be provided for technical assistance and program costs for national and local media informational and promotion activity. About one-fourth of the \$35 million may be required to cover the foreign exchange costs of procurement and importation of contraceptives and equipment. Close coordination with the World Bank, Swedish SIDA, Danish DANIDA, the UNDP/UNFPA and other donors will be essential; they will likely play crucial roles in assisting further expansion of the infrastructures for integrated rural primary health care upon which success in family planning will mainly depend.

Key issues currently concern: (1) GOVERNMENT COMMITMENT OF RECURRENT BUDGET IN KEY MINISTRIES AND INCORPORATING POPULATION AND FAMILY PLANNING INTO THE DISTRICT-LEVEL BUDGETTING PROCESS ARE ESSENTIAL FOR LONG-TERM PROGRAMMING. (2) GOK GUIDELINES FOR WHO MAY PROVIDE AND WHO MAY RECEIVE CLINICAL SERVICES COULD BE RELAXED SO THAT YOUNG COUPLES MAY HAVE ACCESS TO MORE EFFECTIVE SPACING METHODS. (3) REPORTING SYSTEMS MUST BE IMPLEMENTED SO THAT THE CHIEF EXECUTIVES MAY BE INFORMED OF PROGRESS AND FAILURE AND SO THAT A SYSTEM OF REWARDS FOR SUCCESSFUL SERVICE PROVIDER PERFORMANCE MAY BE INSTITUTED.

This paper reviews past and current goals and policies for family planning and fertility reduction in Kenya, and analyzes demographic trends and the major determinants of high fertility. Population growth rate goals are expressed in terms of program objectives for fertility reduction. Institutional constraints and capacities for meeting these objectives are examined and assessed. The paper provides a plan for increased levels of funding and technical assistance from the United States to be made available in an appropriate and cost effective manner over the next seven years. This exercise is not a population strategy dealing with mortality, migration or the manifold consequences of high population growth; it does not deal with the indirect determinants of fertility like education and status of women; it focuses only on direct determinants and conditions for successful family planning and fertility reduction by the year 2000.

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**PART I. STRATEGY AND RATIONALE FOR ASSISTANCE IN FERTILITY  
REDUCTION**

**A. History of High Fertility and Population Growth**

Kenya's high population growth rate has drawn attention around the world. The growth rate rose steadily from about 2.2% in 1950 to 4.0% or so in 1980 despite intensifying concern by Kenya's leaders and by Kenya's many friends in the international donor community (Ref. 26). The "problem" mainly reflects Kenya's exceptional overall success in delivering modern health services combined with general conditions of rapid social change and expansion over recent decades. Death rates continue to fall, today approaching the lowest levels in the developing world.

Dramatic mortality declines in recent decades have overlain centuries of steady population expansion into the rich and seemingly limitless arable highlands of East Africa. Fertility rates in East Africa have probably been higher than in most of the rest of the world for at least half a century. In recent decades, better health combined with pervasive changes in marital, coital and childbearing customs have steadily increased the already high fertility. These processes underlying rapid population growth are still underway.

**B. Age Structure and the Momentum of Growth:  
Unprecedented Dependency**

Kenya's greatest natural resource for the future surely lies with her children -- three out of every five people are below 19 years of age. The total fertility rate (TFR: theoretical average number of live births per woman during her life) of 8.0 children around the year 1979 is the highest yet documented for any nation, as is frequently noted. Probably no society has ever before had the opportunity and daunting challenge of educating, inculcating precious folk and religious values, and providing eventual gainful employment for so many children with so few adults to serve as providers and guides.

Certainly no society in European or North American history ever experienced such a high proportion of child dependents; growth rates there seldom ever exceeded 2.0%, and the proportion of children and momentum of growth were always much lower than in Kenya. In Asia, during its peak years of child dependency (mid-60's thru mid-70's), age ratios of 90 dependents to 100 active-age adults were seldom exceeded. Today in Kenya those age 14 and below are more than 50% of the total population!

The needs and demands in Kenya for food, schools, jobs, water, housing, energy and so on have been compounded continuously at between 3.0% and 4.0% per year for over thirty years. The process and its resulting age and dependency structure has a startling quality as shown by the age pyramid in Figure 1. Debate in Kenya continues regarding the subject of ultimate carrying capacity of the land and resources with some Kenyan experts maintaining that an ultimate population of more than 70 million can be accommodated. Most Kenyan leadership and foreign observers, however, seem convinced that the limits are already approaching and that there is little hope of an improved standard of living for a largely rural population under today's means of production and social organization. USAID fully agrees with the latter majority view. Indeed, we believe that Kenya's prospects for improvements in quality and standards of living for its majority are effectively stymied by its rate of population growth and that a profound crisis is possible within the lifetime of today's young people.

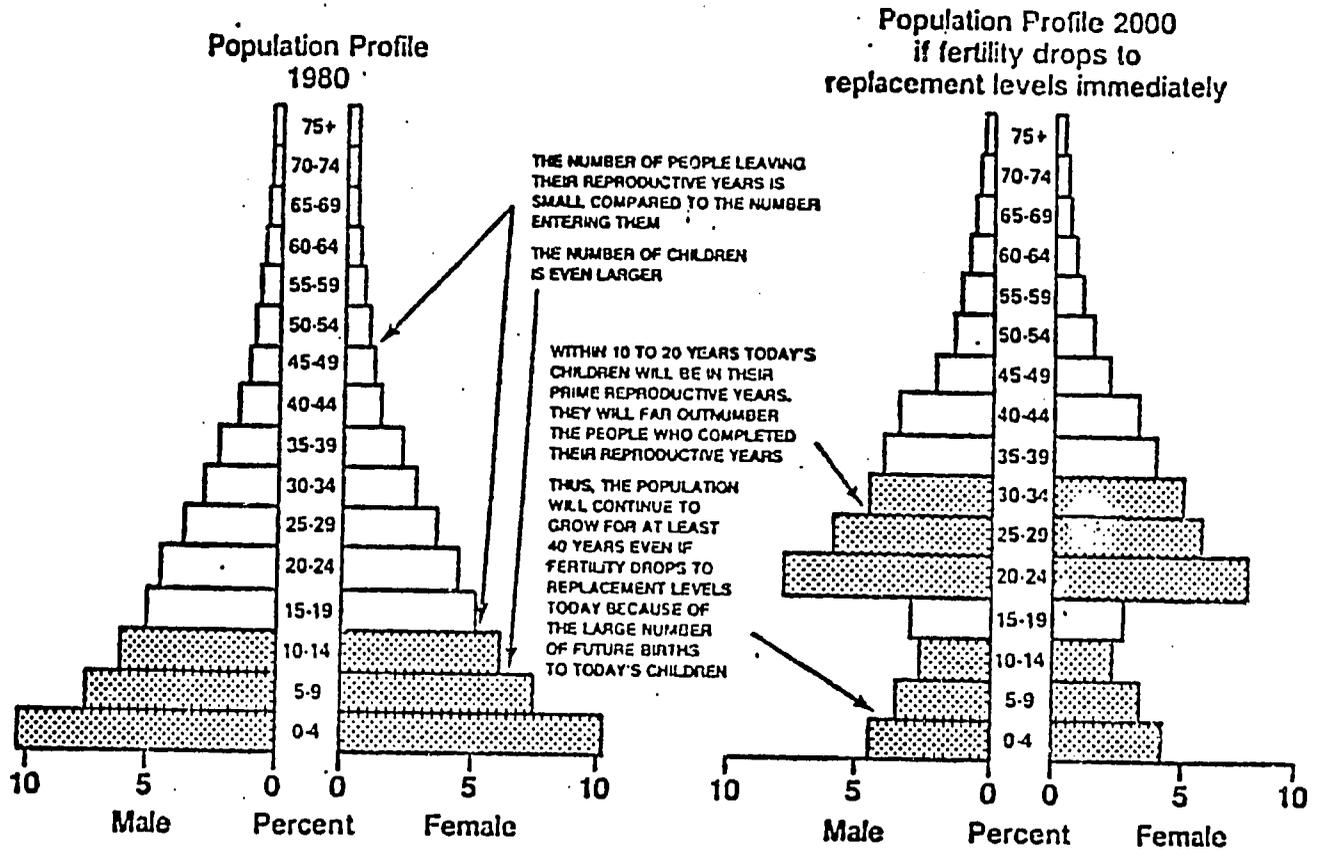
**C. Minimum Eventual Size with Immediate Program Success:  
50-65 Million between 2040 and 2050**

All arable and marginal land, as well as many large cities will, with almost perfect certainty, be filled by the grandchildren of today's young parents. Figure 1 and Figure 2 illustrate the momentum of growth based on Kenya's age structure. Even with rapid fertility reduction beginning in 1980, the momentum of growth based on today's very youthful age structure probably will eventually triple the current population of 20 million. Continued growth is absolutely inevitable for the next five or six decades, even with heroic leadership and rapid declines in fertility.

If hypothetically Kenya's average family size were to decline smoothly from eight (8) children in 1980 to theoretical replacement (just over two) over a thirty year period (i.e. by 2010), Kenya's population would still exceed 50 million by 2040. If this rapid decline were spaced over the thirty year period beginning only five (5) years later in 1985, eventual population equilibrium would be reached at 65 million in 2050 -- the five year delay in onset of decline would eventually mean a difference of 15 million people (Ref. 31)! The timing of fertility decline will radically affect the living conditions of the grandchildren of today's parents.

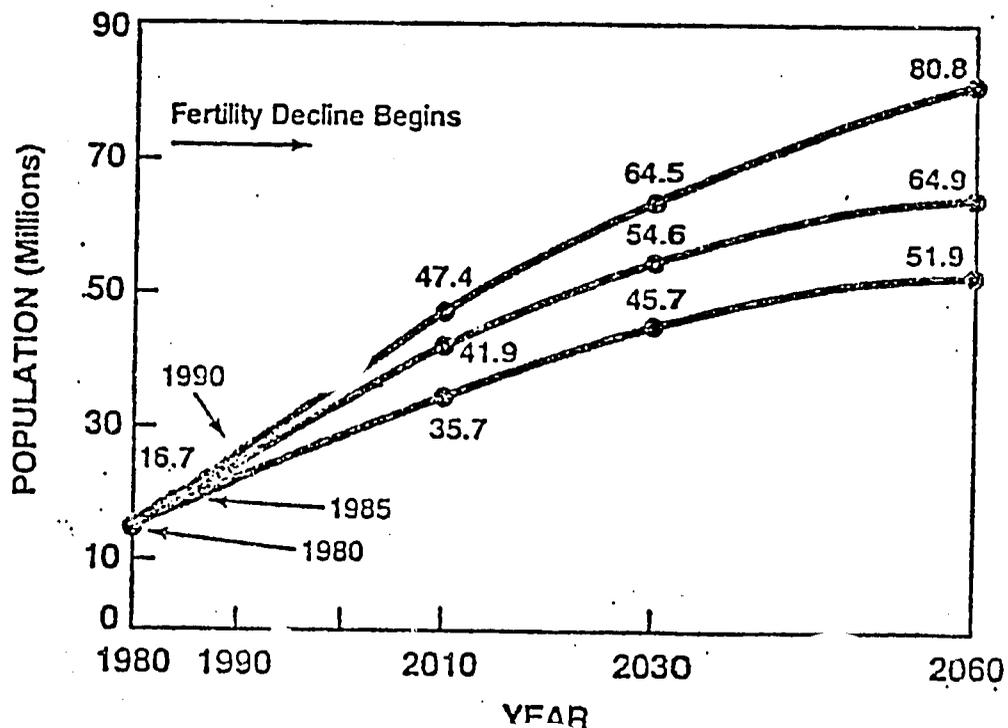
If, on the other hand, fertility declines are slow over the next thirty years (to a TFR of about 7.0) the population will reach about 60 million by 2010 and will eventually exceed 130

**FIGURE 1**  
**KENYA**  
**Momentum of Population Growth**



FIGURES 1 and 2 are adapted from RAPID/The Futures Group presentation on Kenya, 1980.

**FIGURE 2**  
**KENYA**  
**Effects of a Delay in Reducing Fertility**  
**(Fertility Decline to Slightly Over a 2-Child Per Woman Average in 30 Years)**



million 45 years from now -- only two "generations" from today's parents (Ref. 31). We believe that there simply are no feasible alternatives to pursue -- rapid decline is imperative. If it does not occur, the effects of continued high growth rates could destroy much of Kenyan culture, the environment, and the system of government as we know them today.

#### D. Government of Kenya and USAID Goals and Policy

Most of Kenya's top government and political leaders have taken stock of the foregoing. Government has adopted the goal of a 3.5% growth rate in 1988 (Ref. 24). USAID understands that GOK has or will adopt a goal of 2.8% annual growth in 2000. The latter growth figure is consistent with an implicit Crude Death Rate of 7 per 1000 per year and a Crude Birth Rate of 35 per 1000 per year. Unless there are drastic changes towards celibacy and other forms of sexual abstinence, these goals will only be met by large increases in the rate of use of effective contraception. USAID estimates that a CBR of 35 per 1000 is likely to require that about 40% of all reproductive age couples be practicing contraception (Ref. 29). Since the total number of couples will be increasing from about 3.5 million in 1985 to about 7.0 million in 2000, the number of contraceptors in 2000 must be about 2.8 million.

Government today is actively encouraging all thoughtful means of making accurate information and good quality fertility regulation services accessible so that couples may make personal, informed, free choices among a full range of proven safe and effective methods. This policy has been stressed in several major fora by the President and Vice President during recent months. USAID is in full accord with the foregoing goals and policies. Achieving these goals for reduced population growth, however, will require unprecedented determined effort, sustained over an entire generation.

GOK has not yet made the truly serious commitment and allocation of human, physical, and financial resources that will be required in USAID's view. Government may have to relax some of its currently restrictive guidelines on client eligibility (e.g., to use the IUD or the injectable a woman must have three children and be thirty years of age; if she is breastfeeding she may not use any combinational oral contraceptive). GOK's actual financial and management commitments remain quite limited. The budget for curative health care overwhelms that for preventive health care (e.g., fertility services) despite GOK's acknowledgment that the latter is far more critical for the future health of the population.

The Government has not yet examined the full range of legal, bureaucratic and regulatory environments that indirectly create incentives and disincentives for fertility, though the President, Vice President and some parliamentarians have begun to speak out on the subject. USAID expects that these will be among the most controversial issues for the GOK during the next few years and that it is inevitable that disincentives for fertility will eventually be formulated and imposed by Government. We do not believe, however, that it will be appropriate for the USA or other bilateral donors to support this process other than to assist in the sharing of information available through our international data system. For us to become directly involved in these matters during the next few years will needlessly expose our assistance program to severe political criticism, especially since it will be focused on direct services to couples where the presence of direct incentives and/or disincentives would confound Kenyans' interpretation of USG motives. More important, the incentives and disincentives are a more purely internal domestic affair and involve issues in which the USG has little or no direct experience. AID strictly eschews any support for inducements to acceptors of fertility regulation methods or any form of coercion (Ref. 37).

**E. Impediments and Constraints are Major and Numerous**

Most observers -- Kenyans and outsiders alike -- say that rapid fertility decline simply will not be possible for many years to come in Kenya. They cite persuasive reasons, including:

1. traditionally high fertility values based on strong beliefs regarding under-population, and on sometimes competitive clan and ethnic loyalties;
2. indifference and even hostility to "imported" family planning concepts and methods, especially on the part of males;
3. unfulfilled economic, educational and health aspirations;
4. "low" status and power of women in society;
5. need for children's labor in rural economies;
6. lack of assured security in old age combined with a deep seated traditional experience of high loss of infants and children;

7. rural, dispersed living conditions that make information and service delivery difficult;
8. all efforts have so far "failed," and the "situation is hopeless"; the futility syndrome;
9. pervasive rumors and misinformation among both women and men about the dangers and side effects of modern contraceptive methods;
10. apprehension that easy accessibility to fertility regulation methods will be abused by the youth, undermine their morality, reduce discipline, and favor sexual promiscuity and prostitution.
11. administrative and managerial constraints and the comparative lack of GOK tangible commitment of finances and management.

A study by the Family Planning Association of Kenya in 1979 and several background studies prepared for USAID in 1984 indicate that: (1) most health outreach facilities and paramedic personnel do not yet provide contraception services; (2) most outlets with family planning have limited hours of service per week; (3) shortages of contraceptives occur; and (4) most common and problematic, clients frequently face long waiting at delivery points for family planning services. Almost all field studies have remarked on the fact that many women who come to clinics and hospitals for family planning services actually leave without obtaining a method (e.g., Refs. 7, 12, 15, 16, 21).

The list of impediments and constraints is long indeed, the foregoing including only major ones. Even some of the most ardent supporters of family planning understandably feel pessimistic.

#### **F. Recent Assessments Show Favorable Trends**

Despite the foregoing facts and prevailing opinions USAID has concluded, based on a year of thorough assessments and evaluations (Annex I), that conditions now favor realization of long-established Government goals of reduced population growth. Studies show that awareness of family planning has been high in Kenya since the mid 1970s. Recent trends suggest that more and more couples are using effective regulation methods and that fertility declines already are underway at least among older women (Ref. 4).

Between 1977 and 1984 the percent of fertile-aged married couples who reported practicing some method of fertility regulation increased from 6.7% to about 12%, based on preliminary findings from major national sample surveys (Ref. 1). Overall use rates for methods seem to be increasing at about 13% percent each year despite the constraints listed above, apparently "demand" driven.

During 1983 several baseline surveys were undertaken in poor rural areas prior to the introduction of community-based services delivery studies. These studies showed that awareness levels were high and that use levels were higher than those previously estimated in rural areas. These pilot projects have also shown that the levels of use of contraception increase with accessibility, and that there are no serious political issues at the local level; to the contrary, most project personnel have encountered supportive communities (Ref. 5).

There are long waiting lists for free tubal ligation services at many of the provincial and district hospitals where the service is offered (Ref. 2). Between 1969 and 1979 fertility among women aged 40 and above declined about 50%, a phenomenon almost always occurring in societies as they begin sustained fertility decline. We take all of the foregoing to constitute strong evidence of substantial and growing demand for services. These observations provide a main basis for deciding upon an assistance strategy that stresses making quality services more accessible.

#### G. Fertility Related Mortality: Direct Benefits of FP

There is wide agreement in the public health field that high fertility rates do not decline very much unless infant and child mortality first decline. The relationship makes strong sense on both rational and humanistic grounds. It is also apparent from most of the quantitative data available from societies with high ("traditional") levels of fertility and mortality. Kenya's mortality of infants and children (I/C), while low in comparison to all but a few African countries is still unacceptably high, especially in some areas (e.g., Nyanza, Western and Coast Province). Nationwide, almost one of twelve infants born in Kenya dies in the first year of life. Siaya District in Nyanza still has an I/C death rate of about one in five by age ten.

However, it appears likely that infant/child mortality in large areas of Kenya may already have reached levels that are below those that would exercise significant inhibition on parents' adoption of child spacing or fertility termination methods. In Nyeri District of Central Province it appears that the I/C death rate is one in twenty or lower. In areas akin to Nyeri's recent experience, USAID believes that further reductions in I/C mortality will depend directly and mainly upon improved fertility regulation more than upon continued improvement in obstetrics and child care.

The commitment of health professionals to strengthen delivery of family planning services can be enhanced by more widespread recognition that the foremost health risks in Kenya for women and infants relate to reproduction and high fertility. About 200 mothers die for each 100,000 live births in Kenya. These deaths in childbirth make up about forty percent of all deaths among young women aged 15 - 35. These maternal deaths are especially tragic since they usually occur to women with large numbers of children. Childbearing risks remain high because many births are not attended by skilled physicians or midwives, the time between pregnancies is short, women average 8 births and usually complete their childbearing over age 35. Risk of dying in childbirth and infancy increases markedly to mothers over age 35, after the fourth child born and when birth intervals are less than two years apart, all of which are typical features of reproductive experience in Kenya.

If Kenyan women used family planning and had 4 or fewer children about half the approximately 2000 lives lost in childbirth each year would be saved and the infant mortality rate would decline by about 25% (Ref. 16). If the objectives of the strategy described in this paper were achieved (TFR = 4 in 2000) we estimate that over 6,000 maternal deaths and more than 80,000 infant deaths could be averted over the next 15 years.

By dramatic contrast, the risk of dying from a side effect of modern contraceptives is quite low, generally about 5% of the risk of dying in childbirth in Kenya (Ref. 16). In fact the major risk of death among contraceptive users relates to risk of childbirth when contraceptives are not used effectively or when they fail. Therefore use of very effective methods such as oral contraceptives, IUDs, Depo-Provera and especially voluntary sterilization offer the most striking health benefits for Kenyan women and children.

Currently, medical screening is required prior to use of oral contraceptives and Depo-Provera. Unfortunately for many women this rules out access to these methods. Because their relative safety compared to childbearing is so great, women probably should not be denied access to oral contraceptives because medical facilities are not available. Simple screening procedures by non-medical delivery personnel and provision of simple information to users about the danger signals of contraceptive risks has proven a safe and effective procedure in other countries and are proving to be so in Kenya. Ministry of Health has been making rapid strides in recent months towards improving guidelines for oral contraceptives. Improved access to modern birth control techniques can be expected to make a substantial contribution to the success of Kenya's health and population programs.

#### H. USAID's Strategy: Full Access to Quality Services

USAID and the Government of Kenya agree on priorities in family planning and its overall significance to development. Virtually everyone representing major bilateral and multi-lateral donors is in full agreement with current GOK emphases on reducing population growth by increasing family planning and fertility regulation services (Ref. 40). The translation of these interests into rapid declines in rate of growth necessarily involves at least one of two types of changes in fertility: (1) women and couples will defer child birth to later ages than at present and, (2) total fertility and completed family size will be smaller. These changes are theoretically independent but usually move together because in societies with comparatively good health status they are products of the same mix of controlling factors: (1) sexual abstinence, and/or (2) use of contraception.

USAID believes that the only effective option in Kenya is also the one that characterizes the USA, as well as all of the many documented international cases of successful fertility reduction in both industrial and developing societies: access to and use of safe and effective contraception (Ref. 29). We agree that such accessibility is also consistent with undesirable norms of sexual behavior, a point that deeply troubles Kenya's church and other leaders. We do not, however, find any evidence that accessibility actually induces greater extramarital sexual behavior. Indeed, there is ample evidence in the U.S.A and in Kenya that the norms of behavior actually changed prior to the availability of most modern methods of fertility regulation. Kenya's leaders in fact are presented with faits accomplis in this matter as will be clear from data later in this paper. President Moi frankly acknowledged this in a press statement on the controversy about sterilization in December, 1984.

The Government has achieved notable success in the development of health care delivery, educational, planning and other infrastructures during recent decades. USAID agrees with Government leadership that the only reasonable option is to dedicate great effort to ensuring that each of these is brought into play in assuring that all Kenyans have access to quality information and services for fertility regulation.

### I. Delivery Systems

The USAID strategy in Kenya is to seek to support the most rapid possible expansion in the access of the Kenyan public to the already sanctioned methods now available only to the few. Kenya already has good potential for delivery of a full range of modern contraception. Over recent years the Kenyan medical profession has fostered the introduction of all proven modern methods of contraception. These methods are to some extent already available to the urban elite and are increasingly available to the rural peoples due to progressive leadership within the Government.

Access to these methods is currently limited by a variety of supply constraints, mostly due to under-utilization of existing infrastructures in rural areas where 85% of the population live (Refs. 2, 8, 12, 15, 18). Use of contraceptives is also constrained by demand factors, mostly related to prevailing rumors of side effects and lack of accurate information, and due to absence of effective promotional media activity. USAID strategy addresses both supply and demand issues.

AID will seek to provide resources to several of the most important delivery systems for family planning services that should be expanded in Kenya over the next ten years to meet strategy objectives. In order of priority these are:

1. public sector hospitals, clinics, dispensaries and their medical, paramedical and outreach workers; probably more than 100 existing additional facilities will require upgrading by construction and/or equipping; personnel provided fertility regulation training will have to expand about nine-fold to reach a level of about 13,000 clinical services providers (See, e.g. Refs. 2, 7, 14).
2. church, women's groups and other community-level development groups; today only a handful among perhaps 20,000 local community development groups have undertaken community-based distribution (CBD) of non-clinical contraceptives; these activities have been largely

successful in fourteen (14) pilot studies. It is now time to expand nation-wide on a highest priority basis (See, e.g. Refs. 8, 12).

3. traditional practitioners and midwives; only a handful among many thousands have as yet received orientation or training in family planning or fertility regulation; it will be important to gain the allegiance of the majority of midwives who will continue to be the key peri-natal contact with most women (See, e.g. Ref. 12).
4. commercial, consumer goods and pharmaceutical outlets; today probably no more than about 200 of 15,000 total retail outlets carry non-clinical contraceptives and few are in rural areas; culturally appropriate subsidized marketing will provide significantly greater accessibility to a large portion of couples and help to recover part of the costs of family planning delivery (Ref. 18).
5. church and other NGO hospitals, clinics and personnel; an estimated five-fold increase in the number of voluntary organization upgraded facilities would fill out their current and anticipated capacities to offer clinical services complimentary to those of the GOK. Including periodic abstinence training, the number of additional personnel required will be on the order of several hundred (Ref. 15).
6. private medical (and surgical) practitioners; probably fewer than 250 of about 1000 private practitioners now offer some form of fertility regulation services; this proportion should be increased and compensation provided to those who offer services to the indigent (See, e.g. Ref. 13).

Based on numerous background studies during 1984 (ANNEX I), USAID concludes that each of these delivery systems can be expanded significantly. The net aggregate effect will be sufficient capacity to deliver all the services needed to meet the goals for reduction in the rate of population growth. USAID will make resources available to support Government and NGOs in expanding all these delivery systems. The order of priorities above is based on estimates of their quantitative potentials for reaching the public over the next ten to fifteen years.

Item 2 and 3 above concern community-based distribution (CBD) which we regard as the second highest priority, but probably the single most difficult feature of the program to craft in an effective way. In part this is due to the large

number of organizations that have come to be involved and wish to expand their activities. We believe that a strong and effective national CBD program will take several years to build and will be complex from a managerial point of view. The GOK probably will have to pay more attention to this element of its program than to others and should take a close look at numerous other programs around the world for ideas.

While there has been long debate in Kenya about the proper balance between communication and services (demand versus supply), we believe that the best approach for USAID is to stress access to quality services to meet existing and future demand. This is founded, in turn, on beliefs that quality service will: (1) meet human rights requirements, (2) generate their own demand, and (3) that leadership itself will succeed mainly in the task of sanctioning and encouraging popular adoption of effective methods.

#### J. The Role of Communications and Media

Accessibility to high quality services generates its own demand over long time periods, and top political leadership will play the single most crucial role in communication, but with Kenya's unprecedented annual growth rate, special additional effort will be required to accelerate public interest and motivation beyond the level of "awareness". The USA has one of the finest overall media systems in the world, in the technological sense, and considerable experience in the past twenty years within our own voluntary sector in the fields of community outreach and socially oriented advertising for family planning. USAID will seek to support with funds and appropriate technical assistance a variety of Kenyan-based mass media and interpersonal communication programs, especially as these are directed to (1) conveying the best skills to service providers, (2) conveying the most accurate and appealing information about specific methods to the public, (3) informing about the proven advantages to women and couples of later and fewer children, and (4) combating the frequently ridiculous rumors and falsehoods currently surrounding all modern methods (See, e.g. Ref. 9).

Participation by the National Council on Population and Development, the Ministry of Information and Broadcasting, the Ministry of Health, the National Family Welfare Centre, and NGOs will be required for a cohesive national level strategy.

Based on discussions between the GOK and USAID, a special initiative is to be undertaken in the current fiscal year to intensify media support to the family planning demand creation program being supported by USAID under Part A of its Family Planning II project.

Continued high level political support is critical to the success of the family planning program, for which regular reporting and pertinent data analyses are also essential. Currently, usage rates are not available on a district or locational basis. Management and performance of the program will be improved immensely by concise data reporting to the President and Vice-President on a very regular basis. USAID has supported significant recent improvements in reporting through its Health Planning and Information Project within the Ministry of Health, and will seek to extend this support over another three to five years.

#### K. Implementing the Strategy Analysis

To meet sector objectives, USAID's strategy implementation -- under GOK direction -- should include the continuation or initiation of the following specific funding and technical assistance:

1. - bilateral support directly to the National Council for Population and Development (NCPD) for: (1) Government population policy and planning formulation, (2) coordination of Government's public information programs, (3) support to District-level planning and budgeting activities, and (4) undertaking continuous evaluations of national programs.
2. - bilateral funding for contracts with one or more US-based technical assistance agencies in the areas of policy information, program evaluation and communications, under the review and guidance of the NCPD.
3. - bilateral contracts with two or more Kenya-based agencies to undertake public relations and media campaigns, under the active guidance of the NCPD.
4. - bilateral funding directly to the Ministry of Health for greatly expanding the number and geographical distribution of properly trained MOH medical, clinical, nursing and paramedical personnel.
5. - bilateral funding for AID/W's central contract with INTRAH to provide MOH with a flexible resource for funding special needs in training.
6. - bilateral funds for procurement of contraceptives (IUCDs, oral contraceptives, condoms, female barrier methods, and equipment) through AID/Washington's Bureau of Science and Technology, Office of Population.

7. - USG local currency funding to the Ministry of Health for the physical distribution and other logistic costs of distributing contraceptives within country.
8. - bilateral funding to the Family Planning International Assistance and/or the Centers for Disease Control for technical assistance to the MOH and to USAID in logistics.
9. - bilateral funds for AID/W's contract with the Associations for Voluntary Surgical Contraception in order for AVSC to provide assistance to MOH and NGOs in: training in surgery, client counselling, fertility clinic management; and in equipment procurement, professional networking and program safety surveillance.
10. - bilateral grant support, under the review and guidance of the NCPD, the Ministry of Culture and Social Services and the Ministry of Health to a Kenya-based agency for a national community-based distribution program with a strong management core based on volunteer leaders of women's groups, churches, social workers and traditional practitioners, located in all towns and villages. This support could be directed through the PATHFINDER FUND due to their extensive work and experience in this area.
11. - bilateral contract support, under the review and guidance of the NCPD, to a Kenya-based agency(ies) to establish a national program to stimulate full-cost commercial and to implement a program for subsidized marketing of non-clinical contraceptives through retail outlets in all market towns and villages of Kenya;
12. - bilateral funds to the AID/W grant to the International Federation for Family Life Promotion to support Kenyan agencies in a national program for training in fertility (ovulation) awareness, periodic abstinence and "natural" family planning to achieve nation-wide accessibility to information and training in this method; under the guidance of the NCPD.
13. - bilateral funds to support to an AID/W contractor to work with the Ministry of Finance and Planning, Central Bureau of Statistics, on periodic area probability sample surveys to independently assess the pace of and problems in the program, and to support information analyses and dissemination to be carried out by the Population Studies and Research Institute of the University of Nairobi. The Westinghouse/Population Council contract would be the leading candidate agency to assist.

14. - bilateral host country contract support for improved information, planning and management within the Ministry of Health. Drew University has assisted MOH to introduce effective record systems and budget planning at the District level, which skills will be focused more on family planning in the next few years. This assistance needs to be continued through 1986.
15. - bilateral funds to support introduction of services, communication efforts and operations research on family planning in the private, mostly commercial sector (e.g., factories and plantations). John Snow, Inc. is managing 35 separate activities. The project is scheduled to end in 1987; further activities of this type may warrant support beyond 1987.
16. - centrally-funded, AID/W activities should continue to provide important flexibility to meet needs in the areas of: bio-medical and operations research; and training in the areas of surgery, management, epidemiology, communications, and policy. To date the centrally-funded activities have actually accounted for more expenditures in Kenya than has the bilateral project support; this pattern should shift markedly during the next two years, though the main activities and organizations will remain, to be funded in the future under bilateral account and according to Mission strategy objectives.

#### L. Costs

For Kenya to achieve the rapid decline in fertility projected in this paper, the number of couples using effective methods will have to increase from about 400,000 in 1984 to over one million in 1992 and to about 2.8 million in 2000. Budget data suggest that about \$7.3 and \$6.4 million were programmed for family planning in the years 1982 and 1983, respectively (See, e.g. Refs. 21, 23). Not all of the budgets were actually allocated or disbursed, and some of the budget went for research, data collection and buildings and thus should be spread over several years. Our estimate is that the per-user costs on the average were about \$27 and \$23 respectively in those two years.

The costs of successfully delivering fertility regulation services depend directly on the methods and their modes of delivery. International experience shows that an approach that makes services attractive within an integrated framework (i.e., accessible through an extensive clinical health infrastructure), combined with social marketing and community-based distribution is most likely to be both effective and low cost.

USAID's strategy will seek to assist GOK in achieving the most cost-effective combination of methods, delivery systems and supporting services. We assume that the strategy described in this paper will result in a gradual shift towards lower per-user costs (even assuming steady inflation), to an average of about \$15 in 2000. The projected costs from 1985 through 2000 for providing family planning and fertility regulation services and for meeting goals are over \$570 million. The projected costs for the first half of that period, through 1992, are \$166 million. The costs for 1985 should be about \$10 million.

To the extent that consumers/clients can afford and do actually pay part or all of the costs of their services, the foregoing figures will not have to be programmed directly through Government or by donors. We cannot foresee economic conditions and probable trends in discretionary "household" income over the next fifteen years with any accuracy. We assume that only about one-half of the above costs may be carried by consumers, if Government fosters the private sector service delivery that will make this possible.

USAID should be prepared to contribute about \$35 million over the period, 1985 - 1992. If there occurs a shift towards more consumer pay for services (to about 40% by 1992), we estimate that USAID contributions can cover about 33% of the total \$106 million in public sector and subsidized voluntary and private sector costs over the next seven to eight years.

#### M. Financing

Over the past five years Government has invested about Kenya shillings 1,400 million per year (about U.S. \$100 million) of its total Recurrent Budget into Ministry of Health. Of these, about 68% (U.S \$70 million per year) are claimed by the government hospitals mostly for curative care. Rural Health Services obtains only about 9% (or U.S. \$9 million per year). Funding for preventive and promotive health measures (which should include family planning) claim only 5.5% (or U.S. \$5.5 million). Over the past ten years about 60% of Development funds have also gone mostly for hospitals (25% for district hospitals, 16% for provincial hospitals and 20% for Kenyatta National Hospital); only about 10% have gone to preventive and promotive health programs, including family planning. The main elements of the family planning effort by Government have been almost exclusively funded by donors through the Development Budget (Ref. 17).

By some estimates the clinical infrastructure today is already reaching as many as 40% of the rural people with readily accessible services. The declared goal of GOK is to be able to reach all of the population by the year 2000 (which could mean about 50% of the population in contact with services in an average year). Given the generally bleak picture for GOK revenues and increased public sector subsidies there is little reason to believe that funds for the next five years will be higher than they have been during the past five years (Ref. 10). Since the overall likely cost requirements for public sector investment in a successful family planning program likely will amount to over \$160 million during the next seven years the problem of resources is severe.

Planning finances must be a main feature of family planning strategy in Kenya. Government will have to allocate more of its scarce resources to the program and take the step of including family planning in its recurrent expenses. Funding could come from internal reallocations within and across GOK ministries. It could also be found by a bold reorganization or reform in the mechanisms for financing health services. USAID analyses of health care financing in Kenya suggest that the entire support structure for health could greatly benefit by shifting some or most of the burden for financing hospitals and curative treatment from public to private financing. More of the costs of curative care should be born by consumers, permitting savings thus realized to be applied to development and recurrent cost requirements for preventive and promotive public health measures. We believe that private management and better fee recovery at Kenyatta National Hospital alone could provide the GOK resources to fund over one-third of the costs of a successful national family planning program over the next seven years. It is a part of USAID strategy to engage the GOK in policy dialogue to increase the performance of the private sector in delivering curative services and to preserve the savings for public health (Ref. 10).

Donors have for years carried significant costs for developing the infrastructure for health services in Kenya. Further expansion in that infrastructure is essential to the success of family planning. USAID will collaborate closely with other donors in ensuring that our resource allocations are efficiently and jointly programmed in the health sector. A notional objective for financing family planning and fertility reduction programs would entail one-third contributions each from GOK, USAID and other donors. This assumes, however, that other donors play the major role in supporting development costs for the non-family planning health investment that will be indispensable for achievement of GOK health and fertility reduction goals over the next ten to fifteen years.

USAID is committed to continuing the strong informal and formal coordination that already exists between donors. It is obvious that a division of labor and investment by types of activity will be indispensable to all parties in assuring that scarce resources are efficiently deployed. It could be most appropriate for the United Nations Fund for Population Activities (UNFPA) or the World Bank to play lead roles in coordination since they soon will (we understand) have resident staffs in Nairobi and are multi-national in character.

Major GOK inter-ministerial communications and planning efforts are likewise good candidates for the multi-laterals to support since these donors are inherently disposed to support direct government activities. We can not be certain of other donors future emphases but it would seem natural for World Bank to lead in construction and related investments. The Nordic bilateral donors have and could continue to make strong contributions to expansion of facilities.

USAID, more than any other major donor, has a strong mandate to support private sector activities, both voluntary agencies and commercial/private practitioner initiatives. Our strategy proposes to so concentrate our efforts.

Intensive coordination will be called for throughout 1985 in particular since existing USAID and several other's formal agreements are scheduled to end this year. SIDA and DANIDA are concluding a process of program evaluation and reformulation. We must fully share documents and encourage high-level meetings between representatives of all concerned donor agencies. The purpose of strong coordination will be to achieve a maximum of GOK commitment of its resources while assuring that each donor concentrates its resources on what it can most effectively accomplish, leaving no major constraints unaddressed.

## PART II. DEMOGRAPHIC AND POLICY BACKGROUND

### A. 1966 GOK Policy Initiative: A Context of Low Demand and Inaccessible Services

Kenya was the first country in Sub-Saharan Africa to formally adopt a population policy favoring reduced fertility, and to inaugurate a program to achieve that policy's goal. Three years after independence, in 1966, the Government announced its intention "to pursue vigorously policies designed to reduce the rate of growth through voluntary means." Government announced that family planning was to become a part of its overall development policy, and launched its National Family Planning Programme in 1967.

In 1966 Kenya's population was about 10 million, its Crude Birth Rate (CBR) was about 50 per 1000 per year, the Crude Death Rate (CDR) was about 16 per 1000, and its annual growth rate was about 3.4%.

Though vaguely incorporated into official policy in 1966, fertility reduction planning and strategies did not take shape in any vigorous way. All records available to USAID about this period document a low public knowledge about and negligible demand for fertility regulation methods, or for family planning awareness in its true, wider sense. In fact, the exuberant growth motifs pervading Kenyan life at that time seemed openly hostile to the popular adoption of modern methods of fertility regulation of any kind.

Service delivery was also effectively precluded by absence of the thousands of "high tech" personnel who are essential for the provision of high quality services to millions of fertile couples. The need for importation of contraceptives and professional fertility management skills were also important constraints. Public sector services were limited to a few sites and were virtually restricted to those women who were at high risk from subsequent pregnancies. The very few private practitioner services in Nairobi and Mombasa were at prices beyond the reach of those who were not affluent or powerful. Access to family planning and fertility regulation information and services in Kenya resembled many other developing countries in 1966.

**B. 1973 Program: Extended Health Infrastructures**

By 1973 an intensification began to occur in the Government program signaled by a five year (1974-79) Maternal and Child Health/Family Planning Programme in the Ministry of Health (MOH). With contributions from the University of Nairobi and the Ministry of Finance and Planning (MOFP) specific demographic and program targets were set and a comprehensive plan was written to achieve the targets. By 1973 the MOH had expanded a generally good quality organization of clinics, personnel and supporting logistics and was achieving improved accessibility to health services by many rural families. This expansion had been paralleled by improvements in potable water availability and prevailing patterns of nutrition, sanitation and hygiene.

By 1973 the population had grown to 13 million, the CBR had probably gone up to 52/1000, the CDR declined to 14/1000 and the growth rate had increased to about 3.8% per year.

**C. 1977-79: Peak Population Growth Years**

The 1979 Census and national demographic surveys in 1977 suggest that Kenya probably attained a CBR of 54/1000 in 1979, with a growth rate of at least 4.0% that year -- arguably the highest rates of fertility and natural increase in recorded human history at the national level. Obviously, while fertility increased during the 1960s and 1970s, mortality declined even more. By 1979 Kenya had achieved one of the lowest mortality levels in Africa, a CDR of 14/1000 or lower. These figures are clear testimony to the effectiveness of Government and private sector preventive health activities, and testimony to widespread, underlying social changes that led to rapid adoption of modern health practices by much of the population.

**D. Development Trends: The Cost of Children Goes Up**

During the post-Uhuru period, 1963 to 1979, Kenya experienced an acceleration in major development improvements and adoption of innovations. These included rapid expansion in primary and secondary education, steady increases in per capita income, rural electrification, land redistribution and agricultural production, and other development. Increasing fertility appears to have fit neatly into the general pattern of improvement and expansion, irrespective of stated Government policies favoring reduction of population growth. Under African socialism, in the 1960s and 70s, the policy was that social services should be free to all who have need. There was little reason to sense that more children were anything but a blessing.

Kenya's economic and agricultural production growth, however, now have declined from an average annual 6.6% during 1964-1973 to 4.6% during 1974-1983. Even lower rates have characterized the past four years. Government has imposed fairly severe budgetary stringencies across all sectors. Many subsidies are under great pressure. We believe that recent economic recession, rising school fees, escalating costs of arable land and urbanization are all sharpening public perceptions of the costs of children.

#### E. GOK Leadership and Policy in 1984: Active Commitment

During the past two years Government's resolve to reverse long term population growth trends appears to have become more firm. The 1983 KANU Party Manifesto, published prior to the elections contains a brief but very strong statement regarding the need for family planning. During 1983 the Government consolidated the National Council for Population and Development, housed in the Office of the Vice President and Ministry of Home Affairs, to provide overall stimulation and coordination for population policies and planning, and to stimulate more active promotion of knowledge about family planning concepts and information about fertility regulation. A \$65 million new program was launched through the MOH to further extend clinic and personnel outreach to rural areas.

Very clear speeches and public statements by the President and the Vice President during the past year have urged Kenyans to plan their families more in accord with the ability of parents to rear and educate their children. There is little to question about their commitment, eloquence and readiness to engage debate on family planning. Their position in essence is that there actually is no longer any debate about whether or not family planning and fertility reduction are central to further development and should be urged by all leaders. The only debate concerns methods -- admissible technologies, the most desirable agents of delivery for ensuring equitable access and whether the mass of unmarried young adults and sexually active adolescents may be included. Leadership has stressed that the Government firmly supports public access to quality methods and affirms the absolute right of all couples to freely make informed decisions without any coercion or inducements. Churches are strenuously debating with Government over the issue of information and services for the unmarried; we predict that Government will prevail.

In July, 1984 a two-day Leaders' Seminar involving many GOK Ministers, parliamentarians, church and voluntary organization leadership, the press and other media, and nearly 2000

professionals from many disciplines was presided over actively by the Vice President. Despite strong debate among leaders resolutions from this conference are regarded by many senior Kenyans as major new sanctions for more vigorous family planning activity. The leadership and resolutions of the Seminar warmly endorsed donor contribution to the Kenyan program. These resolutions and USAID's interpretations of key issues debated and discussed at the Seminar are an important part of the policy background provided in this paper, ANNEX 2.

In August, 1984 Kenya's delegation to the U.N.-sponsored International Conference on Population in Mexico City was the highest level delegation present among the more than 100 countries represented: the Vice President, two senior Ministers and three Permanent Secretaries. Altogether twenty six leaders participated and provided strong leadership for all of the African delegations present.

#### F. Time Trends and Goals in Population Rates

In August, 1984 the GOK Cabinet reviewed and approved a Population Guidelines Policy Paper which has now gone to parliament for 1984/85 sessional review. The Paper calls for a reduction in population growth from Government's estimate therein of 3.8% in 1984 to 3.5% in 1988. Other GOK planning documents have suggested an objective of 2.8% growth in the year 2000. This rate of growth would be consistent with a CBR of 35/1000 and a CDR of 7/1000 in 2000, as shown in Table 1.

Our encouraging description of recent policy events and goals should not be misunderstood. USAID believes there is strong forward momentum at the level of highest leadership, including some ministerial level political leadership and senior government civil servants, most voluntary agencies, media, business and labor leaders, and

Table 1: Time Trends, GOK Goals and Estimated Implicit Rates of Births and Deaths\*

<u>YEAR</u>	<u>POPULATION (MILLIONS)</u>	<u>GROWTH PERIOD</u>	<u>RATES YEARLY</u>	<u>ESTIMATED CDR</u>	<u>RATES CBR</u>
1948	5.4				
		3.3		15	48
1962	8.6		3.3		
		3.4		15	49
1969	11.0		3.6		
		3.8		14	52
1979	15.3		4.1	13	54
		-			
1984**	19.4		3.9	12	51
		-			
1988	22.4		3.5	11	46
		3.2			
1992	25.5		3.1	8	39
2000	32.3		2.8	7	35

\* Central Bureau of Statistics (1948 - 79); National Council for Population and Development; and USAID interpolations.

\*\* World Bank's 1984 World Development Report estimates that Kenya's 1984 growth rate was 4.4%, which seems much too high. We accept the GOK figures as more likely in view of the necessary assumptions about CDRs and CBRs and recent data on prevailing use of fertility regulation as in text following. USAID's best guess is 3.9%, CDR = 12 in 1984.

some momentum in the churches. But there are many influential local leaders, we believe, who remain uninformed, misinformed and/or otherwise opposed to government or other effective fertility regulation promotion. There may be at last a near consensus in 1984 that family planning in a general sense is somewhere on the list of priorities, but there is serious debate about the approaches to fertility regulation. Consensus on the techniques and technology of fertility regulation and on who can actively deliver and receive services is no more likely in Kenya than it is in the U.S.A. for the foreseeable future. Determined leadership is indispensable.

### PART III. DIRECT DETERMINANTS OF KENYA'S HIGH GROWTH AND FERTILITY

Given a strongly supportive policy environment, it is crucial to have a complete picture of all the factors that directly determine fertility, and to make the best possible guesses about current trends in these factors, in order to make the best program strategy decisions. For example, if contraception use levels are stationary or declining (given a stationary or increasing level of services availability) then one would expect investment in information and promotion of family planning to be the highest priority. Conversely, if use levels are increasing (given stationary or increasing promotion) then resources should be focused on assuring the expansion of attractive services. The degree to which these trends are strong or weak would likewise influence relative emphasis on "supply of services" versus "demand generating" investments.

The use of contraception is only one factor that determines fertility levels and will be dealt with later in a separate section of this paper. The other determinants are limited to these:

- (1) the percentage of women of reproductive age who enter into sexual union and are thereby likely to become pregnant;
- (2) the frequency and timing of sexual union; frequent and/or prolonged separation of partners (e.g., in migrant work patterns), and deliberate abstinence (e.g., after childbirth or around the time of periodic ovulation) may be powerful factors;
- (3) post-partum, lactational amenorrhea; when mothers breastfeed infants frequently and leisurely they do not ovulate for many months post-partum;
- (4) fetal loss; a significant portion of all conceptions fail to reach live birth due to many factors that lead to spontaneous miscarriages, stillbirths and induced abortion;
- (5) sterility; a few females and males are born naturally sterile but the number rises through the reproductive years, reaching 100% in females by the age of 50; primary and secondary pathological sterility due mostly to sexually transmitted diseases;

The same level of fertility occurs today internationally in different societies based on different mixes of contraception use levels and the above factors (Ref. 20). Kenya's fertility is extremely high because the combination of factors above favor it.

#### A. Age Patterns of Fertility

The age pattern of fertility plays a profoundly important role in growth rate, more or less independent of the above direct determinants of fertility. This is understood most easily by contrasting the growth rate of two hypothetical societies, each of whom have the same total fertility or completed family size, say two (2) children. If in one society the second child is born by mothers aged twenty (20) and in the other not before average age of thirty (30), then it can be seen that the average generation time and growth rates will be more than one-third (33%) higher in the former (e.g. parents to grandchildren in 38 years vrs. 58 years). Kenya's overall population growth is attributed in significant measure to the fact that fertility begins early and is highest among the young, irrespective of the total number of children being born.

Time trends in this regard have been most unfavorable in recent years due either to earlier ages of first sexual intercourse or to declining average age at menarchy (earlier age at maturation of ovulation and fecundity). Table 2 provides the hard evidence. (It is referred to several times throughout this paper.) The total fertility rate (TFR) between 1969 and 1979 showed an increase of almost 4%, but the underlying shift in the age patterns of fertility during those short ten (10) years was profound. The figures summarize many changes in Kenya very succinctly. The rapid rise in teenage fertility, and the substantial rises among those in the twenties are most unfavorable trends for reducing growth rates in the near future.

To affect this age fertility pattern would seem to involve: (1) early education on reproductive physiology, (2) strong adult moral example and persuasion favoring deferral of coitus or use of contraception by the young, and (3) spacing births by intensive breastfeeding, abstinence or contraception. These will be taken up in following sections.

Table 2: Age-Specific Fertility Rates in Kenya, 1969-79

Age Groups	Census 1969	Surveys* 1977	Census 1979	Rates of Increase (69-79)
10-14	-	6	3	-
15-19	132	172	179	36%
20-24	331	360	368	11%
25-29	337	373	372	10%
30-34	294	308	311	6%
35-39	223	236	226	1%
40-44	135	128	105	-22%
45-49	<u>68</u>	<u>35</u>	<u>14</u>	<u>-80%</u>
TFR	7.6 =====	8.0 =====	7.9 =====	=====

These data made available by Population Studies and Research Institute; Henin, personal correspondence, 1983. Raw data are available from a large 1983 National Demographic Survey but have not yet been analyzed by GOK/MOFP, Central Bureau of Statistics. Their tabulation will be a critical test for confirming or denying the conclusions advanced in this paper.

\* Weighted Averages of 1977 National Demographic Survey and 1977/78 Kenya World Fertility Survey - USAID.

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B. Proportion Married or in Active Sexual Union:  
Virtually 100%

Prevailing sexual patterns involve nearly universal female participation; as in North America today, celibacy is rare in Kenya. Many societies in history have regulated fertility partly by the total celibacy of a certain proportion of females. No data available to us suggests that there are any significant recent trends which would lead to lower fertility levels due to this factor in Kenya. Nor do we think that celibacy is a factor that can be easily influenced in a directive way. It would not be appropriate for the USG to stress celibacy in its assistance strategy, given our own... culture's strong norms favoring near universal marriage and sexual activity.

In Kenya women's sexual activity tends to begin only a few years or even months after ovulation is established and tends to continue throughout most of the reproductive years. Divorce and widowhood are frequent by any worldwide standards (about one-third of first marriages are terminated by divorce and/or widowhood within 29 years of marriage); however, high rates of remarriage or subsequent unions (supported by high levels of polygamy) ensure that most women of reproductive age are in union at any point in time (Ref. 20).

C. Frequency and Pattern of Coitus: Loss of Abstinence; Nearly Maximum Exposure Rates

Trend data in Table 2 show that fertility is increasing among younger women. Though most of the rise in fertility is directly attributable to ever shorter intervals between births, the data suggest that sexual activity levels at youngest ages probably has been increasing. Age patterns of sexual activity may actually have been constant over the period with changes in ovulation/maturation, health or other factors. Good data do suggest, however, that average age at marriage has risen from just over 18.5 to over 20 between 1962 and 1979 (Ref. 20). To the extent that marriage age reflects underlying norms for age at first coitus, trends in a critical factor could be improving. We do not know.

Changing prevailing norms about age at first coitus should be a very high priority for leaders in Kenya, as it should be for leaders in the USA. Kenya's leaders are fully aware of the many important ramifications of this issue and are committed to encouraging later age. However, it is not at all clear what to do about this problem, as several decades of recent experience in North America amply testify. AID is prepared to support any promotional efforts in this regard but very little knowledgeable technical assistance can be counted upon from the USA that would likely be effective in Kenya.

The Polygamy Factor

Sexual frequencies and marriage patterns also favor high and increasing levels of fertility in Kenya. This subject has several aspects. Strong evidence from demography and anthropology indicates that the coital frequency of females is lower in polygamous arrangements than in monogamous ones. Polygamy lowers fertility because male time and energy are shared, because wives beyond the first tend to have older husbands (greater age differentials), and because polygamous women tend more often to have separate households sometimes at a great distance from each other and from the husband.

Polygynous wives are more often infertile due to the problem of infections of the reproductive tract that result in sterility. Finally, abstinence from intercourse following childbirth used to be a powerful influence on child spacing in Kenya and is more common in polygamous than in monogamous unions.

It is not well documented, but the prevailing wisdom in Kenya seems to be that monogamy has become increasingly common in recent decades. The spread of Christian teaching is cited as the main reason; a gradual increase in the relative power of women has also occurred. Monogamy entails continuous cohabitation and proximity of partners, making abstinence supremely difficult and, in effect, significantly increasing the frequency of intercourse and exposure for females.

Many cultures in Kenya used to practice post-partum abstinence for as much as three years while the mother was breastfeeding. The result was an average interval between births of three to four years. Abstinence was probably the single most powerful fertility regulation "method" in traditional households. The practice was supported by beliefs conveyed ritually; for example, that breastmilk was contaminating to men and semen was contaminating to the breastfeeding. These beliefs and practices have virtually disappeared in recent years with the effect that most women now return to coitus after intervals of only a few weeks or months, akin to patterns throughout the rest of the world today.

USAID believes that the role of donors does not easily fit into deliberate efforts to encourage prolonged sexual abstinence of couples. We do not understand what effects this would have on prevailing marriage patterns or trends in the status of women. We have no experience to share. And our own culture does not support its promotion.

#### D. Sterility, Natural and Pathological: Steady Declines

A natural ability to conceive is estimated to characterize about 97% of women in sub-Saharan Africa. Natural infertility is high during the early months or years after menarchy or the onset of menstruation and ovulation (referred to as the period of adolescent infertility). This infertility diminishes through the mid-twenties when fertility is at its highest. It increases again throughout the late thirties and forties, eventually reaching menopause, a state of natural and total infertility or sterility (Ref. No. 20).

Trends in Kenya suggest that there probably has been a gradual decline in the age of menarchy and therefore a trend towards earlier ovulation and fecundity. This has the effect

of extending the overall duration of the reproductive period and of increasing the potential (and actual) exposure to pregnancy. This may well be the chief reason fertility is seen to be rising in Table 2 among females aged 10 - 19. Age at menarchy will continue to decline in Kenya in direct relation to a number of modernization factors, including urban residence and better nutrition. Though interesting, this factor does not contribute significantly to overall fertility levels and does not warrant any intervention measures, even if measures were available, which they are not.

As shown in Table 2 evidence might suggest that infertility among women approaching menopause has been increasing. This is not due to any known trends towards earlier ages of menopause or natural infertility, however. As will be shown later, elective surgery to achieve tubal occlusion, or surgical contraception, may be one of the reasons for the decline. Its growing popularity indicates that women are now choosing to become infertile at earlier ages than would be imposed by natural processes. There are no interventions to foreshorten natural infertility nor are any processes being sought.

#### Pathological sterility

Studies across sub-Saharan Africa indicate that infertility due mainly to infections and subsequent occlusion of the fallopian tubes account for more variation in fertility rates than any other factor. If about 3% of women are "naturally" infertile during their twenties, and another 15% are infertile due to pathologies, this translates into an average two children fewer in the overall maximum total fertility rate (TFR). Improvements in the prevention and early detection and treatment of sexually transmitted diseases are responsible in a significant way for the rise in fertility in Kenya in recent years, perhaps by almost as much as one child in the TFR. Improved hygiene and treatment have resulted in a pathological sterility level of perhaps 7% today and the level will undoubtedly decline further in coming years, continuing to be a force for increasing fertility.

These trends are only to be encouraged and can in no way be seen as an acceptable "passive" restraint on fertility to be tolerated or ignored. The human and ethical issues involved in infertility make it important to allocate a fair measure of resources to the public health programs and social marketing that is required to further reduce it. This is an integral part of underlying issues in the movement towards greater reproductive rights. USAID should continue to provide support for promotive health activities to reduce the incidence of

sexually transmitted diseases, improve their early detection and treatment and, to a lesser extent due to the great expense and low success rates, support for the training of specialists in the diagnosis and treatment of infertility. Aside from the ethics involved, to do so will confirm in the public's view the sense that a balance of interests and rights underly the family planning movement. Better sexual hygiene also directly supports better understanding and use of fertility regulation methods.

E. Fetal Loss: Low and Declining

Rates of spontaneous abortion and stillbirth seem to be quite similar across cultures and peoples -- around 20 percent of conceptions. The rate is influenced somewhat by disease rates. Epidemics of malaria may increase intra-uterine mortality, but malaria is endemic to Kenya and is at comparatively low levels for the region. Data on this subject are poor, but we judge the effects of malaria and other diseases on fertility to be low and declining in Kenya. Improved nutritional and ante-natal health services have steadily improved the fetal loss rates in Kenya.

Induced abortion is probably very low in Kenya. Data are scarce and AID/Washington virtually prohibits the use of our funds to even document its prevalence or trends in its occurrence. Informal evidence suggests that induced abortion is increasing. Hospital admissions records for treatment of incomplete abortions certainly seem to have increased over the past five years, based on informal interviews with gynecologists and casual perusal of hospital records.

USAID will in no way support the promotion or provision of abortion services, in strict accord with the clear language of USG legislation. The Government likewise does not in any way support access to information or services. USAID believes, however, that there are good reasons to support epidemiologic studies of the rates, distribution and sequela of induced abortions for the purpose of improving preventive measures.

F. Lactational Amenorrhea/Breastfeeding

Modern nutrition education and promotion favor supplemental feeding of infants only a few months after birth because it improves weight gain and survivability. It has the unintended effect of diminishing breastfeeding. Trends towards wage earning among women also encourages more rigid scheduling and longer intervals between breastfeeding as well as earlier weaning. The effect of all these is to diminish the intensity and the duration of nipple stimulation in breastfeeding women.

This, in turn, diminishes the secretion of the natural hormone, prolactin, and shortens the interval between parturition and the return of ovulation. Women enter risk of pregnancy much sooner than in past generations because today they ovulate sooner, and because they are more likely to be in active sexual union at that time.

The results of these changes in sexual behavior and breastfeeding combine as shown clearly in Table 2: high and increasing fertility of young women during the 1970s. Today the level of breastfeeding in rural areas is quite high but probably because it is not intensive (timing and supplementary feeding), it does not seem to confer very much protection from pregnancy. USAID consultants estimate that breastfeeding in recent years probably confers an average of about four to five months of effective protection per live birth. Fertility will almost certainly rise even more if lactational amenorrhea declines further. If the average conferred protection could be increased by even a month or two health and fertility regulation benefits would be measurably improved.

Through bilateral and/or centrally-funded training and communications assistance USAID will support all reasonable efforts to encourage widespread retention of traditional intensive breastfeeding practices. The reasons are only partially because of its very powerful fertility regulation effects, per se. As is well-known from much modern research, breastfeeding is good in many ways for infants and their mothers. Government has taken several steps to encourage better knowledge of its benefits and the liabilities of bottle feeding. USAID should join GOK and voluntary organizations in actively discouraging accessibility to infant feeding accessories and formulas or their promotion.

We do not know how effective social marketing and promotion can be, nor do we know very much about the cost effectiveness of alternative promotion strategies. There is little or no success at actually increasing the type of breastfeeding that confers an ovulation in North American, Asian, Latin American, European or other African cultures so far as we know; but only occasional serious efforts have so far ever been made and those in only a few countries. Lactational amenorrhea levels have never been shown to increase though it is possibly true of some societies that are at very low levels. Close monitoring and evaluation of the impacts of numerous and varied intervention efforts will be crucial to investments in this area over the next few years. All major institutions involved in family planning need to be engaged. The best outcome, however, is that current breastfeeding practices will not further decline.

G. Proportion Using Effective Contraception:  
Low but Increasing

Figure 3 illustrates the power of contraception in determining fertility. It shows the distribution for twenty-nine countries in 1980 of crude birth rates (CBR) and percent of married women of reproductive age using contraception. The fit is very good ( $R^2 = .89$ ) (Ref. 29). Kenya clearly shows a high fertility pattern and a low use effectiveness in use of contraception. Overall, in this linear relationship, every percentage point increase in prevalence of use of contraception on the average lowers CBR by about 0.4 births; or, each point reduction in CBR correlates with an average increase of 2.5% in the prevalence of use of methods.

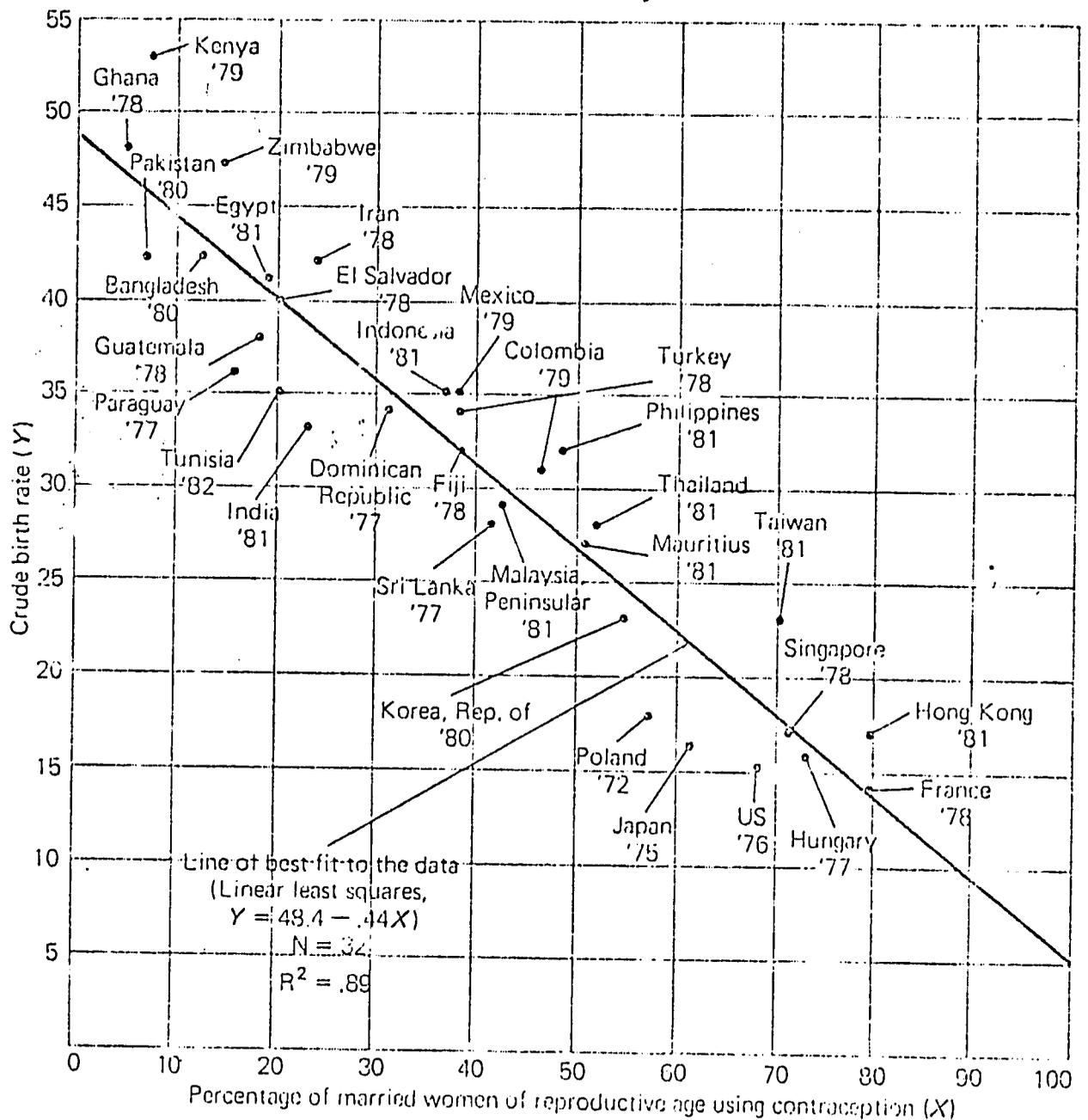
The types of methods used, the age distribution of use and the average effectiveness of couples in applying the methods are all crucial to the actual fertility effects in particular settings. Kenya's outlying position in 1977 with respect to the regression line suggests two possibilities: (1) an unusual convergence of high fertility factors other than contraception (as has been argued earlier), and/or (2) unusually poor or ineffective use of methods. Both are probably true. This indicates that special efforts should be made to improve the use-effectiveness of contraception in Kenya, a point that has been stressed by the Ministry of Health in its persistent concern about "continuation rates" on methods which are definitely low by international comparisons.

The relationship in Figure 3 will be used subsequently in projections about the level of use rates required to achieve policy goals for population growth.

H. Priorities for Intervention: Defer Births, Maintain Lactational Amenorrhea, and Increase Effective Contraception

To summarize this section, two factors other than coital exposure levels and (lack of) contraception have been identified as strong contributors to Kenya's high and increasing fertility rates: declines in effective breastfeeding and declines in pathological sterility. Interventions for both are called for. Effective interventions may roughly balance in their effects on future fertility; i.e., improvements in infertility prevention and treatment may balance improvements in breastfeeding. It is far more likely, however, that breastfeeding levels -- with effective policies and promotional action -- will succeed at best only in holding constant this factor's constraint on fertility. The likely net outcome of historical trends for these two important factors will be further increase in fertility.

FIGURE 3: Contraceptive prevalence rates among married women of reproductive age and crude birth rates one year later



From: Ref 29, Nortman, Population Council, 1982.

Spontaneous abortions and natural sterility are minor factors that in any event are difficult to influence and are not included in USAID's strategy. USAID will not be involved in abortion in any way. Assuming support for breastfeeding, the main determinants of fertility reduction then become only two: abstinence and contraception.

## ABSTINENCE

USAID does not support the promotion of widespread total celibacy and foresees no prospect for such a hypothetical effort even though its theoretical impact could be great. Kenya has never had any traditions of total celibacy nor of later-age celibacy, both of which have provided powerful restraints on fertility in some societies (as among Catholics in Ireland and among Hindus in India, respectively). However, many Kenyans say that the practice of post-partum abstinence (and perhaps delayed onset of coitus) used to play important roles in spacing between births (and in deferring first pregnancies), and thereby eventually limiting the size of families (see PART III, Exposure and Abstinence sections).

The facts are today that abstinence of any kind has basically disappeared and is no longer a significant norm in Kenyans' sexual behavior nor a restraint on fertility. Abstinence should and could contribute significantly in the future, especially if young Kenyans could somehow be persuaded to delay the beginning of their sexual experience, and if modern methods of periodic abstinence for couples were adopted in a most effective way. USAID will endeavor to support all reasonable efforts in the Kenyan family planning program to strengthen both types of behavioral change in its support to training and communication programs.

We will support efforts to promote voluntary delay in the onset of sexual activity, but do not have standards of success based on international experience and cannot judge the probable results of investment efforts. This factor is very powerful in accounting for the comparatively low fertility of Ireland (given high marriage percents) and has been a major determinant of declining fertility in the Peoples Republic of China. In both cases, however, strong moral or ideological sanctions have been invoked by the church or the state. In both cases strong local institutions have great influence over marriage (and coitus). USAID does not know of any base for effectively promoting this in Kenya other than to (1) legislate and actually implement strong social and administrative supervision of later marriage age requirements and (2) implement existing

infant registration requirements. In both cases strong social censorship of deviation by church and/or state is essential, reinforced by incentives and punishments for early marriage and/or pre-marital birth registration. Many Kenyans today speak of the "loss of discipline" regarding sex. If there is a thorough commitment to reducing fertility government and religious institutions will be put to use to implement ever more strict sanctions.

The virtual disappearance of the norm of post-partum abstinence in Kenya has played a major role in increasing fertility in recent decades, but USAID does not know of any effective interventions to revive traditional practices and finds it to be at variance with prevailing strong norms in our own culture. Unless it can be shown not to have an unfavorable effect on marriage patterns and the status of women USAID prefers not to support promotion of post-partum abstinence.

Sexual abstinence after the completion of desired family size could theoretically be effective and has been of some limited significance in India in past years. However, as in the case of post-partum abstinence USAID does not know how Kenyans would go about such an effort and we know of no experience in trying to do so in any country by deliberate promotion. If such promotion were to be effective it could (would likely in Kenya) turn out to be supportive of polygamy by males and detrimental to progress in the improvement in the status of women as we understand these relationships in Kenya today. Total abstinence measures, therefore, are deserving on the whole but -- except for deferring onset of coitus -- are of low priority to USAID due to a host of infeasibilities.

#### CONTRACEPTION

Modern techniques of contraception include periodic abstinence (a part of "natural" family planning) based on detection and/or prediction of the day of ovulation and days at risk of pregnancy. The method of periodic abstinence (PA) is becoming more known in Kenya and has considerable potential for expansion (See Ref. 15). To date PA influences the fertility rate very little though theoretically it could; data from the Philippines shows PA users to have unintended pregnancy rates equal to condom users. So far no more than a few thousand couples in Kenya have undergone the months of training required, and there are no Kenyan data known to us regarding unintended pregnancy rates. It is also the only method of contraception so far sanctioned by the Roman Catholic Church for its adherents, and they constitute perhaps twenty-five percent of the population (about 800,000 couples). USAID proposes to provide significant support to this approach.

Support for this form of contraception must, however, be in some way conditional on PA program personnel not being involved in the frequent and sometimes slanderous charges about the dangers of "artificial" contraception. Deliberate campaigns of disinformation against other family planning methods will have to be treated similar to abortion promotion, strictly prohibiting USAID direct or indirect support to such program implementing organizations. Terms of conditionality could be operationalized in terms of scientific, epidemiological evidence on comparative risks of methods, method failures and pregnancy risks. Proponents of PA will be encouraged to define the contra-indications for this method in terms of risks of failure to mothers' health, especially for those among whom the method seems most in demand: the older, high parity mothers. As is the case with all contraceptive methods, the risks of failure and the availability of other methods must be explained to clients, in accord with AID's official policy guidelines for ethical contraception delivery.

Other methods of contraception are better known and are taken up in the following section. USAID believes that Government's approach, making a full range of safe and effective methods accessible to the entire public is sound, appropriate and will succeed.

#### PART IV. CONTRACEPTION USE LEVELS REQUIRED TO MEET GOALS

Kenya's growing political commitment to family planning as a central feature of development has been paralleled (or even anticipated) by a sizable increase in family planning use by the public in recent years. The probable achievements during the past few years are not recognized or acknowledged as yet by Kenya's population observers (or by many GOK program officers). USAID is the first to stress that only limited "hard" demographic evidence is yet at hand to confirm actual declines in fertility but several sources converge on the view that adoption of family planning is growing.

##### A. 1977/78 National Fertility Survey: 6.7% Users

The 1977/78 Kenya National Fertility Survey showed that some knowledge of modern contraceptive methods was already then quite high in Kenya. Eighty-four percent of the respondents reported knowledge of at least one modern method. However, only 42% knew where to obtain services and supplies, and only nine percent knew of any family planning services available within 30 minutes of home. Fewer than 7% of married women of reproductive age were using any method, modern (4.3%) or traditional (2.4%), in 1977/78 (Ref. 21).

##### B. 1984 Contraceptive Prevalence Survey: 12% Users

Preliminary results of the 1984 National Contraceptive Prevalence (CP) Survey show that between 11% to 13% of all married couples of reproductive age are now practicing some method (7% modern and 5% traditional or new periodic abstinence techniques). This represents a significant increase in reported use of fertility regulation methods in six and one half years. All methods appear to have increased. If there have been no major declines in breastfeeding then these findings suggest that the CBR could have declined by as much as three points since 1977, to around 51/1000. Assuming further mortality declines since 1979 to the level of about 12/1000, Kenya's 1984 population growth rate should be around 3.9%, supporting the GOK's estimates.

We stress that long delays in analyses of the 1984 survey preclude definitive statements on current use levels. Our figures are based on review of preliminary univariate ("marginal") computer output prepared by the Central Bureau of Statistics, available in November, 1984. Additional data cleaning, sample weighting and cross-tabulations will be required to get firm estimates. The estimate of 12% current use is solely USAID's estimate and is not to be attributed to the GOK/CBS.

C. Trends in Age-Specific Fertility, 1969-79:  
Declines Among Older Women

Additional data support the conclusion that fertility decline is now more probable than before. Table 2 (earlier) showed the age distribution of fertility as the number of births during the year to women of each five-year age group. Although the Total Fertility Rate (TFR), increased during the period, 1969 to 1979, that increase was clearly attributable to increased fertility among the younger women, ages 15 thru 34, due to closer birth intervals. Fertility among older women, however, shows a steady decline over the years. This pattern of declining fertility among older women is recognized as the earliest and most sure sign of fertility transition, as shown repeatedly in demographic history around the world. Table 2 also reveals dramatically why the Vice President of Kenya has been stressing the high priority of reaching younger couples whose fertility is highest and increasing.

The findings above may be the first important indications that Kenya has begun a process of fertility decline, after more than fifteen years of official policy and expansion of underlying service delivery infrastructures in the health system.

D. Illustrative Objectives for a Successful Program:  
40% in the Year 2000

Quickening political and policy commitment, substantial evidence of rising demand for and use of effective fertility regulation services, and recent social research findings all converge to suggest that Kenya, however slowly and belatedly, probably is now entering a stage of declining fertility during the early 1980's, a decline which could soon accelerate if effective strategies for public and private sector are adopted. If rapid fertility declines occur, the pursuit of virtually all national development goals will be greatly enhanced.

Over the next sixteen years, the current estimated total fertility rate of almost 8.0 children per woman could easily decline to fewer than 4.0 children per woman by the year 2000. Declines greater than this already have been demonstrated in other countries with socio-economic settings in some ways comparable. At current levels of use effectiveness of methods and at current marriage and pregnancy ages, this would require that slightly fewer than three of every five couples be practicing fertility regulation. This level of contraception prevalence probably would be consistent

with a CBR of 35, a CDR of 7, and an overall annual growth rate of about 2.8%; the latter being the goal for the year 2000 sometimes mentioned in Government planning documents.

The key strategy questions now facing Government and Kenya's international donors concern: (1) how rapidly decline can and should occur and, (2) how to make the most efficient investments in contraception methods, and in the numerous infrastructures available for promoting and delivering services.

E. Implications for Strategy (Tables 3 and 4)

Fertile-aged, sexually active couples in Kenya number over 3 million in 1984. This figure will rise to over 4 million in 1990 and to almost 7 million in the year 2000. Nearly all of these additional people have already been born or conceived. Most of them in fact are currently or will soon be enrolled in school, which further suggests why family planning educational strategies for youth are so important.

In 1984 about 12% of couples (425,000) are using some method of fertility regulation. If average completed childbearing were at or below 4 in 2000, about 40% of couples (2.8 million) at that time would be using some modern method of contraception (or abstaining from coitus) during most of the potentially reproductive phase of their lives. These figures are shown in Table 3.

Table 3: Summary Estimates of Change

	1978 (mil)	1984 (mil)	2000 (mil)	Change (1984 - 2000)
Population Size	15.3	19.4	34	+14,600,000
No. Couples, Fertile Age	2.65	3.5	7	+3,800,000 (all young)
% Regulating Fertility	6.7*	12 **	40	+45% (all ages)
# Regulating Fertility	.18	.42	2.8	+3,425,000

\* Kenya Fertility Survey

\*\* Kenya National Contraceptives Prevalence Survey  
(Preliminary Results)

The challenge in this scenario, then, is to achieve a 6.5 fold increase in absolute numbers of users over the next 15 years. This means an increase in the rate of use of effective methods by an average of about 12% per year in simple compound terms. To put this into perspective, consider that the estimated number of users appears to have increased almost two-fold during the six and one half years between the 1978 and 1984 national surveys -- an average annual increase in number of users of about 13% per year. The main challenge and requirement for strategy is to maintain the momentum now under way, by keeping up the rate of increase in fertility regulation that appears to be underway.

This formulation of the situation sounds very unfamiliar to Kenyans, donors and observers alike, accustomed as we all are to an aura of family planning program failure in Kenya. USAID believes, however, that it is likely that Kenyans are already changing their contraception and/or sexual behavior in favor of fertility reduction. To corroborate this it would be necessary for the Government to put a very high priority on the analysis of the 1983 National Demographic Survey and confirm that actual fertility estimates show age specific declines, and to complete analyses of the 1984 CPS.

As stated earlier, it is important to be clear about the general trends already underway because strategy decisions necessarily entail relative allocations of scarce resources between improving "supply" and generating "demand." If fertility regulation is in fact already increasing by as much as 10 to 15% per year, we infer that the highest priority should be to assure "supply;" striving to avoid any brake on the process imposed by restrictive guidelines on accessibility or lack of high quality supplies and services.

TABLE 4 Illustrative Estimates of Effectively Protected Couples

<u>Methods</u>	<u>Percentages</u>				<u>Numbers</u> (000's)		
	<u>1978</u>	<u>1984</u>	<u>2000</u> (1)	<u>2000</u> (2)	<u>1984</u>	<u>2000</u> (1)	<u>2000</u> (2)
No method	93.3	81.0	55.0	45.0	2,835	3,850	3,150
Breastfeeding	(35.0)	(30.0)	(25.0)	(20.0*)	(1,050)	(1,750)	(1,400)
Abstinence	[2.4]	4.0	5.5	7.5	136	385	525
Withdrawal		.0	.5	0.5	0	35	35
Condoms	[2.7]	.5	2.0	5.0	18	140	350
Female barrier		.5	1.0	2.0	18	70	140
Oral contraceptives		4.5	11.0	12.0	153	770	840
I.U.C.D.s	[1.6]	1.5	6.0	7.0	51	420	490
Injectables		.5	4.0	6.0	18	280	560
Sterilization		<u>1.0</u>	<u>10.0</u>	<u>15.0</u>	<u>34</u>	<u>700</u>	<u>910</u>
Prevalence of Use	6.7	12.0	40.0	55.0	425	2,800	3,850

\*Declines in breastfeeding percentages reflects declines in fertility. This model assumes no decline in the percentage of mothers who breastfeed. If breastfeeding rates decline, then contraceptive use must be correspondingly greater in order to meet the goal.

USAID has utilized two sets of illustrative projections to the year 2000. The first (1) directly reflects the implicit objectives of the GOK's expected goal of 2.8% growth rate in 2000 (CBR=35). The second (2) reflects more optimistic scenario which we think could be achieved if all impediments and constraints (see Part I, Section E) were lifted. The text following is written with scenario 2 in mind.

## F. Past, Current and Illustrative Predicted Levels by Method

The ease (or difficulty) with which the illustrative national objective could be reached may be examined by looking at the scale of potential changes for each major method of fertility regulation already available and used in Kenya. When looked at by individual methods of fertility regulation, and considering the variety of existing infrastructures for delivering services, the overall task does not appear as formidable as it is usually made out to be. Table 4 provides figures on past, current and illustrative projected use levels of contraception in Kenya on a national level.

### **Surgical Contraception**

Many observers recently have noted the frequently long waiting lists for receiving free tubal ligation services at most of the provincial hospitals. Though the recent tubal ligation "camps" (actually at hospitals) organized by private sector to take up backlogs of clients on waiting lists have prompted some controversy (and probably some inadvertent promotion), the events have elicited very enthusiastic responses from women in the areas where they have been held, and have enjoyed high level political support in various districts.

USAID studies of mortality suggest that probably 2000 women will die in Kenya in 1984 in childbirth or due to childbirth. Most of these are older women with six or more children. Many of these deaths and the tragedies to their large families could be avoided if safe and attractive tubal ligation services had been more readily accessible. Further, most of the 90,000 infants who will die in Kenya in 1984 are born to older women of higher parities. Many of these deaths would have been averted with better fertility regulation among these older women. USAID believes that many or even most of the more than 300,000 Kenyan women who have six or more children intuitively understand the health threats posed by high fertility and are actively seeking help in order to physically survive.

The 1984 CP Survey suggests that the number of women in Kenya who have elected tubal ligation (TL) has risen from negligible in 1977 to well over 40,000 by 1984. This very large increase is quite plausible based on interviews with surgeons and leading Ob/Gyn specialists. At least 125 physicians are estimated to have completed some training in this simple surgical skill in Kenya over the past few years. An informal reckoning of the number of procedures being provided during 1984 at the main clinic facilities in the

country totals to over 5000, including the private sector; the total number of procedures could be as many as 6000 this year. The growing use of TL among older, higher parity women supports the data in Table 2 and the thesis that fertility transition is beginning.

Over the past five years AID has assisted the University of Nairobi, the Family planning Association of Kenya and numerous reproductive health specialists. The assistance has included: training in modern surgical procedures, client counselling, clinic management, information networking and program safety surveillance, and provision of some equipment. AID has also assisted in training and information for the diagnosis and treatment of infertility.

The growing popularity of fertility termination services is also illustrated by the great interest shown recently by public and private sector surgeons and clinics. During a one-month visit by officers of the Associations for Voluntary Surgical Contraception in July, 1984, many institutions exhibited commitment and developed proposals for: setting aside or establishing operating theaters for VSC; committing surgeon/nurse teams to regular time/sessions for VSC clients; completing training in modern mini-laparotomy and laparoscopy techniques; and producing plans to establish low cost services. The AVSC was unable to respond to all of the requests for assistance. USAID expects that bilateral assistance to Kenya in all of the above VSC activities will increase during the next few years (Ref. 2).

Kenya's first national conference on reproductive health and surgical contraception in August, 1984 was heavily attended by Kenyan surgeons and family planning professionals and constituted the first time that sterilization as a term was used openly in professional discourse (according to the conveners) (Ref. 27).

The picture in 2000 could easily show that sterilization accounts for 15% of fertile-aged, sexually active couples. Experience in all countries where good male and female sterilization services have been readily available for some time shows a typical 20% or more of couples selecting this inexpensive and most effective method. It is a powerful preventive health service for older women with high parity and those for whom further pregnancies represent a serious threat to their health. It is most notable that not only political leadership, but family planning professionals greatly underestimated the rapid expansion of sterilization in Latin America all during the 1970s. There were no public promotions and yet the level for the region has shown steady increases.

It likely will be similar in Kenya. AID supported the evolution of modern surgical contraception methods and will be able to continue providing support to this vital service, both financial and technical. Key issues concern safety, good pre- and post-procedure counselling for clients, and adequate funding systems to compensate institutions and surgeons so that the poor may share in the access to VSC.

### Injectables

The injectable contraceptives have a unique appeal for women in the middle-to-late reproductive years. Perhaps as many as 6% would choose it if easily available. Clinical service providers frequently prefer to offer the injectable to women who are considering or waiting for tubal ligation. Most countries in the world have authorized the availability of injectables to their publics for family planning, despite the United State's highly conservative FDA policy which is inappropriate for most countries, probably including the U.S. (as clearly recommended on two major occasions by FDA's own professional Obstetrics and Gynecology Advisory Committee.)

USAID does not provide injectables. The only donor doing so is Danish DANIDA. GOK expects seventy thousand (70,000) vials of 3 month formulations under DANIDA assistance -- enough for about 17,500 person-years of protection, or about 0.5% of couples, a figure identical to the estimate of 0.5% prevalence from the 1984 CP Survey.

### Intra-uterine Contraceptive Device

The intra-uterine contraceptive devices could easily be found acceptable to as many as 7% or more of women, if their safety and accessibility were improved. Under these conditions the IUCD always appeals to a significant proportion of women in the middle of their reproductive history. Informal canvassing of clinic service providers of FP suggest that the new Copper "T" is becoming popular but severely constrained by supply problems. USAID can meet all IUCD requirements in Kenya over the next few years through central AID/W procurement.

The foregoing sums to 28% of 7 million couples (or about 2 million) who would be using methods that involve clinics and well trained personnel. The remaining 27% (1.9 million) would be relying on non-clinical methods that can be provided by non-clinical people.

## Oral Contraceptives

The oral contraceptives will probably remain a most popular method in Kenya, reaching a level of at least 12% over the years. The orals have a consistent appeal to youthful couples wherever they have been made accessible. Youth will certainly form the vast majority of sexually active people in 2000 and for those who want to delay their first pregnancy the oral contraceptive is an ideal choice in most cases. The oral contraceptive has proven worldwide to be an amazingly safe and effective biochemical formulary, and has been the subject of the most extensive pharmacologic and epidemiologic research in history. A tripling of today's rate of use of the oral contraceptives could confidently be expected over the next few years if steps are taken to make it accessible through community-based programs and subsidized commercial sales. Absolute risk levels -- especially with the ultra-low doses that have evolved during the past decade -- are so low in younger women, and their risks in comparison to the complications of unwanted pregnancies are so very favorable, that these should be regarded ethically as over-the-counter formulations in Kenya and in the rest of the world.

USAID understands that Swedish SIDA intends to gradually reduce its support for contraceptives and seeks more financial commitment from Government for these purchases. USAID supports SIDA in this effort, but AID could meet the contraception requirements in Kenya if necessary, and could supply OCs that are identical to the formulations currently being purchased by SIDA.

## Barrier Methods

There are numerous temporary and semi-effective barrier methods that depend mainly upon the woman, mostly spermicides. They suit a small number of people, usually only for limited periods of time when making transition to other, more secure methods. There seems to always be some small market for them in all countries; 2% in the year 2000 is a fair guess.

It is widely said that Kenyan men have not been willing to help out in the matter of birth control. It is highly unlikely that this situation will persist as economic factors in childbearing become clearer to males. In fact, Kenyan males have never really had easy access to methods or information about them. Males participate in fertility regulation by: total or periodic abstinence; coitus interruptus/withdrawal; by... using the condom; or by having a vasectomy. Over the next 16 years as many as 13% of couples could be relying on methods

that depend mainly on the direct collaboration of male partners. Attaining 13% could be a worthy challenge; many women might think it an outrageously low estimate. Periodic abstinence training is already in high demand in areas where it has been introduced. Condoms are selling well recently in the commercial market. Male participation in fertility regulation happens also to be a regular feature of successful preventive health programs; condom use is associated with improved sexual hygiene and reduction of sexually transmitted diseases, a very relevant consideration in Kenya. AID can provide condoms to the GOK's program at whatever level required.

#### SUMMARY ON METHODS

The rate of adoption of family planning methods projected here is less than or roughly equal to the diffusion rates for numerous other successful innovations in recent Kenyan history. These include the acceptance of new vaccines, the adoption of new agricultural practices (e.g., hybrid and Katumani maize, and fertilizers), the spread of radio receivers and other commercial products, and the administratively induced land consolidation movement during the late 1950's and early 1960's. The assertion is often heard in Kenya that family planning will take a long time, that all change in deep-seated customs takes a long time among traditional peoples, and the like. While true in some ways, international evidence nevertheless shows that rapid change does occur when political and public will power is exerted. USAID will be able to fully assist Government in meeting rapidly growing requirements for contraception in Kenya.

## PART V. CURRENT USAID PROGRAM: 1984-92

The following outline summarizes current USAID activities in the fields of population, family planning, fertility regulation, health planning and information, and mortality reduction. AID's activities in these related fields are roughly organized into two types: (1) those that are funded and administered through USAID/Kenya bilateral projects, and (2) those that are funded and administered mainly through AID Washington, centrally-funded contracts and grants with U.S.-based organizations. USAID/Kenya uses both mechanisms, in roughly equal measure, to meet program strategy objectives. As will be seen, the portfolio of activities fall into categories based on substantive objectives like policy, information, clinical training, research, and services and commodities. The portfolio is large. For each entry basic information is provided about current and expected levels of activity.

### A. Bilateral Projects

1. Family Planning Private Sector: Total funding obligation: \$4.5 million; Duration: 9/30/83 thru 8/31/87; Implementing Agencies: John Snow, Inc., under the direct guidance of the GOK/National Council for Population and Development; Objectives: 35 sub-projects with large employers for: training, technical assistance, management and logistics, monitoring and evaluation; minimum of 30,000 clients; 21 sub-projects initiated, another 6 nearing final negotiation; Comments: excellent overall environment (requests from private sector), inherent project flexibility and good support from GOK.

2. Family Planning-II: (AID portion of the joint donor assisted Integrated Rural Health and Family Planning: \$65 m); USAID funding: \$4.0 million; 8/30/82 thru 9/30/85. Mid-project evaluations completed.

(a) Part A: Ministry of Home Affairs/National Council for Population and Development; to support policy and IEC at NCPD and to support four or more NGOs in FP promotion activity (\$3.0 million); about \$2.5 million behind schedule in expenditures NEED TO RESTRUCTURE IMPLEMENTATION AND FINANCE PLAN; MORE DIRECT USAID CONTRACTING LIKELY WITH A SHIFT OF FUNDS TO AID INTERMEDIARIES. A DEOBLIGATION AND REOBLIGATION OF FUNDS WILL BE REQUIRED FROM FP-II TO FP-III PROJECTS.

(b) Part B: Ministry of Health/National Family Welfare Center; to support in-service training of Enrolled Community Nurses and Clinical Officers (\$1.0 million); Clinical Officer training suspended, now resumed; ECN training proceeding mostly per plan; expenditures are behind schedule and will likely to amount to almost \$500,000 by termination date on 30 September 1984. RECENT USAID TRAINING ASSESSMENT EXERCISE AND EVALUATION URGES MOH TO MODERNIZE AND INTENSIFY CURRICULUM AND MATERIALS, EXPAND THE NUMBER OF TRAINING SITES AND TRAINEES, AND REVISE RESTRICTIVE GUIDELINES ON ACCESSIBILITY TO CONTRACEPTIVES. DEOB/REOB WILL BE REQUIRED AS PER PART A ABOVE.

3. Population Studies and Research (University of Nairobi); \$2.7 million; 6/29/76 thru 9/30/84. This eight-year project successfully completed in September, 1984; thorough evaluation scheduled for February, 1985.

(a) Training: eleven (11) long-term, Ph.D programs completed in the USA; all returned and were placed by the University; more than 35 M.A. students trained, some now occupying positions in population planning units in GOK ministries.

(b) Research: many books, theses and articles written with direct policy influence, seminars conducted for leaders.

4. Health Planning and Information Project (MOH): Funding: \$2.45 million; August, 1979 thru December, 1985; Government contract with Drew University (USA). This project has introduced a greatly expanded capacity within the MOH for collecting and evaluating health information for management, improved systems for budget and personnel management and extensive management training. The analysis and dissemination of health information is rapidly improving, including data for family planning users. New computerization and MOH personnel commitments auger well for improved management.

## B. Centrally-Funded Projects/Monitoring

### 5. POLICY RELATED ACTIVITIES:

(a) RAPID/The Futures Group: computer modeling for interactive population projections and planning, and for application to new District-focus planning (e.g., setting objectives in family planning use at district level).

RAPID has established collaboration with the NCPD, including micro-computer training and modeling, and district exercises. This project may link with the HPIP (above) in assisting the planning process for district-level family planning objectives and budgeting.

(b) U.S. Bureau of Census: workshops on fertility and mortality estimation techniques with University of Nairobi/PSRI.

(c) POPULATION COUNCIL: to collaborate with USAID in completing Section 104 (d) assessment, examining the probable fertility impacts of alternative USAID development investment strategies in agriculture, education and health.

(d) WESTINGHOUSE: Kenya's 1984 National Contraceptive Prevalence Survey; CBS's marginal tabulations now seem likely in December; published results likely available in March, 1985. Funding for Second CPS will be included in new USAID bilateral project.

#### 6. BIOMEDICAL RESEARCH:

FAMILY HEALTH INTERNATIONAL and CENTERS FOR DISEASE CONTROL; IUD studies with prophylactic antibiotic, with University of Nairobi, Department of OB/GYN over two years. This is a priority study designed see if the IUCD can be made more accessible.

#### 7. OPERATIONS RESEARCH:

(a) JOHNS HOPKINS UNIV./CHRISTIAN ORGANIZATION RESEARCH ADVISORY TRUST (CORAT); four (4) large community-based distribution sub-projects with Christian denominations.

(b) FAMILY HEALTH INTERNATIONAL; four (4) sub-projects under negotiation with Kenya Catholic Secretariat for evaluating periodic abstinence training programs. Funding for future activities will be included in the new USAID bilateral project.

#### 8. INFORMATION AND TRAINING

(a) JOHNS HOPKINS/JHPIEGO: six (6) to eight (8) senior physicians per year are trained in reproductive health and laparoscopy; sixteen (16) KLI laproscopists in-country and 32 teams of MDs and nurses, (mostly used for infertility treatment).

(b) INTRAH: assistance to the MOH/Nursing and NFWC in organizing workshops, teaching methodologies and materials TA.

(c) WORLD WIDE TRAINING FUND: used occasionally on an and hoc basis for US based training in communications and clinical services.

(d) JOHNS HOPKINS UNIVERSITY/POPULATION COMMUNICATION SERVICES: two (2) important media sub-projects under negotiation (TV and radio); helpful technical assistance to USAID and to NCPD. PCS activities will come under USAID bilateral funding.

(e) POPULATION INFORMATION PROGRAM: provides POPULATION REPORTS monthly publication to over 1,200 technical readers in Kenya; very responsive to requests for literature and assists to Kenyan researchers.

#### 9. FAMILY PLANNING SERVICES

(a) FAMILY PLANNING INTERNATIONAL ASSISTANCE (FPIA): six (6) sub-projects, mostly paramedical, some clinical; some IEC, training and commodities, well established and respected; regional headquarters in Nairobi. FPIA's activities will come under new USAID bilateral funding.

(b) PATHFINDER: six (6) sub-projects, mostly community-based distribution, some IEC, training and clinics; well established and respected; regional headquarters in Nairobi. USAID's funding for a national CBD program will likely be through Pathfinder by virtue of its extensive work in this area.

(c) CONTRACEPTIVE RETAIL SALES (CRS): The Futures Group (TFG); sector assessment on CRS completed. Helpful technical assistance and possibly funding for national CRS program expected under new USAID bilateral project.

(d) ASSOCIATIONS FOR VOLUNTARY SURGICAL CONTRACEPTION (AVSC): eight (8) sub-projects to support service delivery at 21 sites; more actions under negotiation; AID's main source of technical assistance and program management assistance for tubal ligation services. AVSC will serve as intermediary for USAID's investments in VSC with funding under new bilateral project.

(e) CENTER FOR DISEASE CONTROL: technical assistance in program evaluations and study designs. Assistance in obtaining and distributing technical literature on family planning methods.

(f) INTERNATIONAL FEDERATION FOR FAMILY LIFE EDUCATION (IFFLE): provides assistance in periodic abstinence and family life education training, program evaluation and program management. We expect IFFLE to play intermediary role in funding and assisting "natural" family planning activities under new USAID bilateral project.

#### 10. COMMODITY PROGRAM SUPPORT

Kenya currently receives few commodities under the AID procurement system. USAID has estimated that if SIDA commodity contributions diminish to zero by 1989, given projections in Table 4 the requirements on GOK or other donors would probably amount to about \$10 million over the period, 1985 thru 1992 if the 55% prevalence figure were to be attained.

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JULY 1984 LEADERS SEMINAR: TEXT AND USAID COMMENTS

The main text of recommendations approved on July 12 and printed in full by The Kenya Times, July 13 and by Medicus, September, 1984 issue are as follows:

I. General:

(1) That time has come for Kenyans to make concerted efforts to reduce the population growth rate;

(2) That all government ministries and agencies and all non-governmental organizations must specify population components in their development programmes and activities and must pursue them effectively;

(3) That each District Development Committee should develop strategies to achieve national targets in reducing the population growth rate. (It should be noted that the national target is to reduce population growth rate from 4.1 percent per annum to 3.5 percent per annum by the end of 1988.

II. The Role of Leaders:

(1) That time has come when the government, all leaders in this country, should emulate the example of His Excellency the President and provide effective leadership in all matters of family planning;

(2) That all the people of this country, especially the leaders, fully support all efforts of reducing the population growth rate;

(3) That leaders at all local levels must be involved in guiding, organizing and integrating the development of community level programmes;

(4) That the government through the National Council for Population and Development should undertake the training and development of leadership at grass-roots level in order to support the technical services.

### III. The Role of Education:

This Seminar notes:

(a) That the traditional methods and values have been eroded and that there is increasing danger of our youth experimenting in sexual activities without the benefit of adequate information;

(b) That the responsibility of the parent has to a large extent been passed on to the teacher, who is expected to teach family life education in the school;

(c) That this expectation has not been fully met and therefore resolved;

(1) That the designed curriculum must be strengthened and should aim at different age groups consistent with their biological development and morality;

(2) That education should be used to shape the attitudes of young people towards population and family life education and the related problems of rapid population growth;

(3) That the Ministry of Education develops a specific and appropriate curricula for all levels of education structures in order to meet the expressed expectation of the parents, the needs of the young, and the requirements of the Nation or the reduction of population growth rate;

(4) That although moral values are eroded we should not remain complacent and therefore must intensify moral and ethical teachings to our youth;

(5) That there is need for teachers, parents, Ministry of Health and non-governmental organizations to cooperate closely in family life and population education activities.

### IV. Clinical Services:

This Seminar notes:

(a) That the traditional methods of family planning are disappearing fast and although the seminar appreciates the role of traditional methods, for the country to achieve significant impact in slowing down the rate of population growth, this country will also have to increasingly rely on modern scientific methods coupled with appropriate knowledge, information and education;

(b) That whereas awareness of family planning methods is very high (84 percent) the acceptance rate is distributing low (10 percent) and therefore resolves: (1) that there is need for increased commitment to family planning amongst opinion leaders, parents and others and to increase availability of clinical services; (2) that there is need to provide special clinics in addition to those that are already providing basic medical services;

(c) That the institutionalized methods have so far failed to reach the majority of the people in the population who are most affected and therefore this seminar resolves that there is need for mobilization of the whole community together with all non-governmental organizations, including the private sector services to achieve the goal of reducing the population growth rate;

(d) With appreciation and approval the dedicated services the country has received from the government as well as non-governmental organizations in the field of family planning and emphasizes the need for constant vigilance and improvement in the quality of management, personnel and facilities;

(e) That so far emphasis is mainly on women whilst those activities directed towards men have tended to lag behind and therefore resolves that family planning programmes should lay emphasis on motivation and involvement of men in reducing population growth rate;

(f) That the provision of comprehensive medical services in all areas as an integral part of development will increase protection and survival of children, allay parental fears and encourage the adoption of small family sizes;

(g) That single parenthood is an emerging social phenomenon which requires responsible societal concern;

(h) That adolescent pregnancy is an emerging serious problem associated with many deaths and much suffering and therefore requires sympathetic and very urgent attention.

#### V. Mass Media:

This seminar notes that mass media has an important role to play and should therefore be used to the maximum in providing information and mobilizing of the project.

## VI. Funding Agencies:

The seminar appreciates the role of funding agencies and encourages this healthy cooperation to continue and be intensified. It also recommends that the National Council for Population and Development should provide comprehensive coordination of all the activities connected with family planning.

The Vice President's opening remarks addressed most of the policy, programmatic and project issues raised by Embassy and USAID with GOK during recent months: notably, the inadequacy of providing family planning (FP) services only through integrated clinical health facilities, the restriction of clinical FP services to higher parity women, the absence of male-oriented promotion and services, the (mostly inadvertent) restrictions on fuller commercial performance and the absence of strategies for reaching youth or for using mass media in the program.

His address stressed the need to focus information and promotion programs on benefits to individuals, families, communities, regions and to the nation, in that order. He also announced that import restrictions were being eliminated on all approved contraceptives, a policy we have urged in order to expand normal full-cost commercial performance.

The recommendations of the Leaders Seminar provide a broad sanction for the GOK and especially its National Council for Population and Development (NCPD) to proceed with more ambitious programs to engage all major ministries of government and the private sector. We find support in the recommendations for many of our current policy and project efforts. These include: social marketing/commercial retail sales, national organization of physicians and nurses for family planning, better performance reporting systems for the Chief Executives, establishment of dedicated space and time for family planning clinics and deployment of personnel dedicated to family planning service delivery within the health system, and greatly expanded free or nominal cost distribution of non-clinical contraceptives through community agents and women's groups.

Debates during the seminar centred on three main issues:

- (a) The appropriate scale of family planning investment in the overall development process; several MPs and some educational leaders spoke at length (and with limited information) about excess attention and investments to FP,

usually maintaining that FP may be helpful but that maximizing socio-economic equity was a far greater priority. Seminar leaders did not clarify that, in fact, investments in actual FP activities have been limited, despite policy pronouncements and large integrated health projects in recent years.

- (b) The role of educational institutions: the Ministry of Education presented a paper that eschewed any responsibility for sex and family planning education in curriculum, while accepting responsibility for education in population dynamics. (See however recommendation in III, above)
- (c) Several MPs raised issues concerning the safety of modern contraceptives, reporting instances of reported side effects to one or another of the methods; it is clear that concerns about the safety of contraceptives are pervasive in Kenya. No mention was made of the estimated 2,000 maternal deaths during childbirth this year, the estimated 90,000 infant deaths, the rising abortion rates and their mortality sequela, or that many of these deaths could be avoided by more effective family planning.

Representatives of many major religious denominations attended and were among the strongest supporters of family planning throughout the second day of debate, both Protestant and Roman Catholic. In these discussions religious representatives differed only with respect to the extent to which they thought education on reproduction and sex should be part of the formal public educational curricula. Churches appear to be at the center of the current push for more active family planning program.

Mass media follow-up and post-seminar interviews with GOK officials, MPs and others confirms our view that this seminar may have substantial and long-term positive impact on creating a more open environment for family planning and fertility regulation.

NEW PROJECT IN FAMILY PLANNING-III

In response to Kenya Government's expression of commitment to expanding family planning services and promotion -- and its endorsement of donor support for this program -- the United States Government proposes a seven (7) year assistance project at \$35 million in grant for the period 1986 through 1992.

To attain its development goals, the Government of Kenya must intensify efforts, as never before, to establish organizational capacity to meet the massive challenge of changing fertility behavior. Extraordinary commitment will be required, including levels of Government budget allocation as yet not seen in Kenya. AID is committed to assist Kenya in tackling this greatest single development challenge.

PROJECT PURPOSE: To lower the Total Fertility Rate of 7.8 children per fertile female in 1984 to 5.0 in 1992 in accordance with the objectives of Kenya's 1984-88 Development Plan and its Population Policy Guidelines. This would rank among the most rapid fertility declines in history and constitute a singular success in development planning.

BRIEF PROJECT DESCRIPTION: In 1984 about 475,000 couples among a total of 3,600,000 practised some effective method of fertility regulation. To attain project objectives by 1992 about 1.5 million of 4.5 million couples (one in three) will need to be using effective methods.

The methods available and used in Kenya to some degree today include:

- "natural" (abstinence, rythm and withdrawal) -- about 5% of couples in 1984;
- non-clinical contraceptives (condoms, spermicides and oral contraceptives) -- about 5% of couples in 1984;
- temporary clinical (IUCDs and injectables) -- about 2% of couples in 1984; and
- permanent clinical methods (tubal ligation and vasectomy) -- about 1.5% of couples in 1984.

Accessibility to these methods is currently limited by a variety of supply constraints, mostly due to under-utilization of existing infrastructures in rural areas where 85% of the population live. Use of contraceptives is also constrained by demand factors, mostly related to prevailing rumors of side effects and lack of accurate information, and due to absence of effective promotional media activity. This project addressed both supply and demand issues.

Actual and potential delivery systems for family planning services that have been engaged in successful family programs in other countries and which could be expanded in Kenya include:

- public sector hospitals, clinics and dispensaries (about 500 of 1300);
- church and other NGO hospitals and clinics (perhaps 40 of 250);
- private medical (and surgical) practitioners (perhaps 250 of 1000);
- traditional practitioners and midwives (a handful among several thousand);
- church, women's groups and other community-level development groups (a handful among perhaps 20,000 local community groups); and
- commercial, mass-market and pharmaceutical outlets (about 200 of 15,000 total outlets).

Based on numerous background studies during 1984, USAID concludes that support to Government in expanding each of these delivery systems under this project is feasible. So doing Government could attain the maximum possible accessibility to highest quality family planning services.

Accessibility to high quality services generates its own demand over long time periods, but with Kenya's unprecedented 4% annual growth rate, special effort must be made to accelerate public awareness of the advantages of smaller completed family size, and to widely disseminate accurate information about the use of specific methods.

Campaigns should be launched, assessed and redesigned at frequent intervals. Communications programs tailored to relevant rural groups are also essential. Both types of promotional programs would directly support specific fertility regulation methods, and their various delivery systems.

Continued high level political support is crucial to success for which regular reporting and pertinent data analyses are essential.

To meet the above objectives, this project will commit AID support to:

- the National Council for Population and Development for Government population policy and planning formulation, its public information programs, and its support to non-governmental service organizations;
- USAID will provide grants to Kenya-based agencies to establish national programs to stimulate commercial marketing of contraceptives through retail outlets;
- a national community-based distribution program with a strong management core based on women's groups, churches, social workers and traditional practitioners;
- and will support a national program for training in fertility awareness/periodic abstinence ("natural" family Planning).

under (2) above: the Ministry of Health for training, supervision, contraceptives and equipment. the project will also support a grant to the International Program of Associations for Voluntary Sterilization for technical assistance and program funding to expand tubal ligation and vasectomy services through the private and public hospitals and clinics. About one-third of these funds will provide commodity and equipment support through the Ministry.

RELATIONSHIP OF PROJECT TO A.I.D. STRATEGY: This project conforms well with AID's policies and strategies on assistance in the field of fertility regulation. Kenya's laws and medical regulations restrict abortion availability more than is true in the U.S.A. No inducements are provided Voluntary Surgical Contraception clients and informed consent is routinely required. USAID Kenya's Country Development Sector Strategy places fertility reduction among its highest development sector objectives.

HOST COUNTRY AND OTHER DONORS: This project will be administered mainly through private Kenyan agencies under policy guidance and supervision by the Government of Kenya. Government is already implementing a nationwide rural health and family planning project which project is expected to extend through this proposed project period with major support from World Bank, SIDA, DANIDA and ODA.

BENEFICIARIES: The immediate beneficiaries will be an estimated 2.5 million couples nationwide provided with access to family planning services (an estimated 4.0 million couples years of protection during the life of project). Immediate beneficiaries also include a large, undetermined number of infants and children who will enjoy a greater concentration of household and affective family resources. Long term beneficiaries include the major portion of Kenyan society in so far as diminished population growth improves multi-sectoral development.