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# USAID/KENYA

# Assessment of Program Impact

October 31, 1991

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## ACRONYMS

| | |
|---|---|
| AIDS | Acquired Immune Deficiency Syndrome |
| API | Assessment of Program Impact |
| AVSC | Association for Voluntary Surgical Contraception |
| CBFP | Community based family planning |
| CBS | Central Bureau of Statistics |
| CIF | Cost, Insurance, Freight |
| CIL | Continental Industries Limited |
| CIMMYT | International Wheat & Maize Improvement Program |
| CPR | Contraceptive prevalence rate |
| CYP | Couple years of protection |
| DAP | Diammonium Phosphate |
| DFH | Division of Family Health |
| DRSRS | Department of Resource Surveys & Remote Sensing |
| EEC | European Economic Community |
| EPZ | Export Processing Zone |
| EPZA | Export Processing Zone Authority |
| FPMRP | Fertilizer Pricing & Market Reform Program |
| FY | Fiscal year |
| GDP | Gross Domestic Product |
| GOK | Government of Kenya |
| HIS | Health Information System |
| HYV | High yielding variety |
| IBRD | International Bank for Reconstruction & Development |
| IPC | Investment Promotion Centre |
| IUD | Intra-uterine Device |
| KAM | Kenya Association of Manufacturers |
| KARI | Kenya Agricultural Research Institute |
| KCPS | Kenya Contraceptive Prevalence Survey |
| KDHS | Kenya Demographic & Health Survey |
| KMDP | Kenya Market Development Program |
| KNFA | Kenya National Fertilizer Association |
| KREP | Kenya Rural Enterprise Programme |
| KSC | Kenya Seed Company |
| LMIS | Logistics Management Information System |
| MOA | Ministry of Agriculture |
| NARC | National Agriculture Research Centre |
| NCPB | National Cereals & Produce Board |
| NGO | Non-governmental organization |
| NTE | Non-traditional export |
| PAM | Policy Analysis Matrix |
| PED | Private Enterprise Development Project |
| PSI | Population Services International |
| RPE | Rural Private Enterprise Project |
| SME | Small and medium enterprise |
| TFR | Total fertility rate |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |
| VSC | Voluntary surgical contraception |

## FOREWORD

In preparing the 1991 Assessment of Program Impact (API), USAID/Kenya reviewed its program logframe from four perspectives. First, does the program logframe accurately reflect the Mission program? Second, are the strategic objectives, targets, sub-targets and indicators related to each other in a logical manner? Third, is the logframe operational, that is, are quality data available on a consistent and dependable basis? Fourth, have the assumptions underlying the logframe been significantly affected by external factors?

Through this review, USAID/Kenya has identified some possible adjustments to the strategic objectives for the agricultural and private enterprise sectors. These rearticulations may clarify the principal focus of each objective (incomes and employment, respectively), without changing the original intent of the objectives or investments supporting them. If further analysis validates this perspective, the Mission may request the Africa Bureau to review the suggested changes.

USAID/Kenya is focusing on the private enterprise objective in the 1991 API. Although focused program support for non-traditional exports has not yet begun, the Mission has promoted the expansion of employment in general, and the small and medium enterprise sector in particular, for the past eight years.

Annex A details changes made to indicators of the goal, sub-goal two and strategic objectives two and three. These changes were based on research which demonstrated the original indicators did not capture the impact of related program activities or were not operational in terms of data availability or quality. The Mission has also decided to include only one outyear projection - 1995. All strategic objectives, targets and sub-targets have been projected to increase annually in an approximate straight line. Thus, inclusion of additional outyear projections would not provide any further information.

## SECTION I

## SPECIAL FACTORS AFFECTING THE USAID PROGRAM

Last year's API highlighted the uncertain political climate as a major factor affecting the USAID/Kenya program. Continuing political insecurities this year have resulted in new rounds of debilitating patronage politics. These political factors are having compounding negative repercussions on governance, the progress of policy reform and the performance of the economy.

**Uncertain Political Situation**: The past year has witnessed little or no improvement in the political and human rights climate. The government continues to be reluctant to accommodate growing demands for political liberalization, respect for human rights, pluralism and meaningful participation in the political process. The GOK has responded to these demands with spending and employment programs to garner popular support. The principal consequences of these circumstances are noted below.

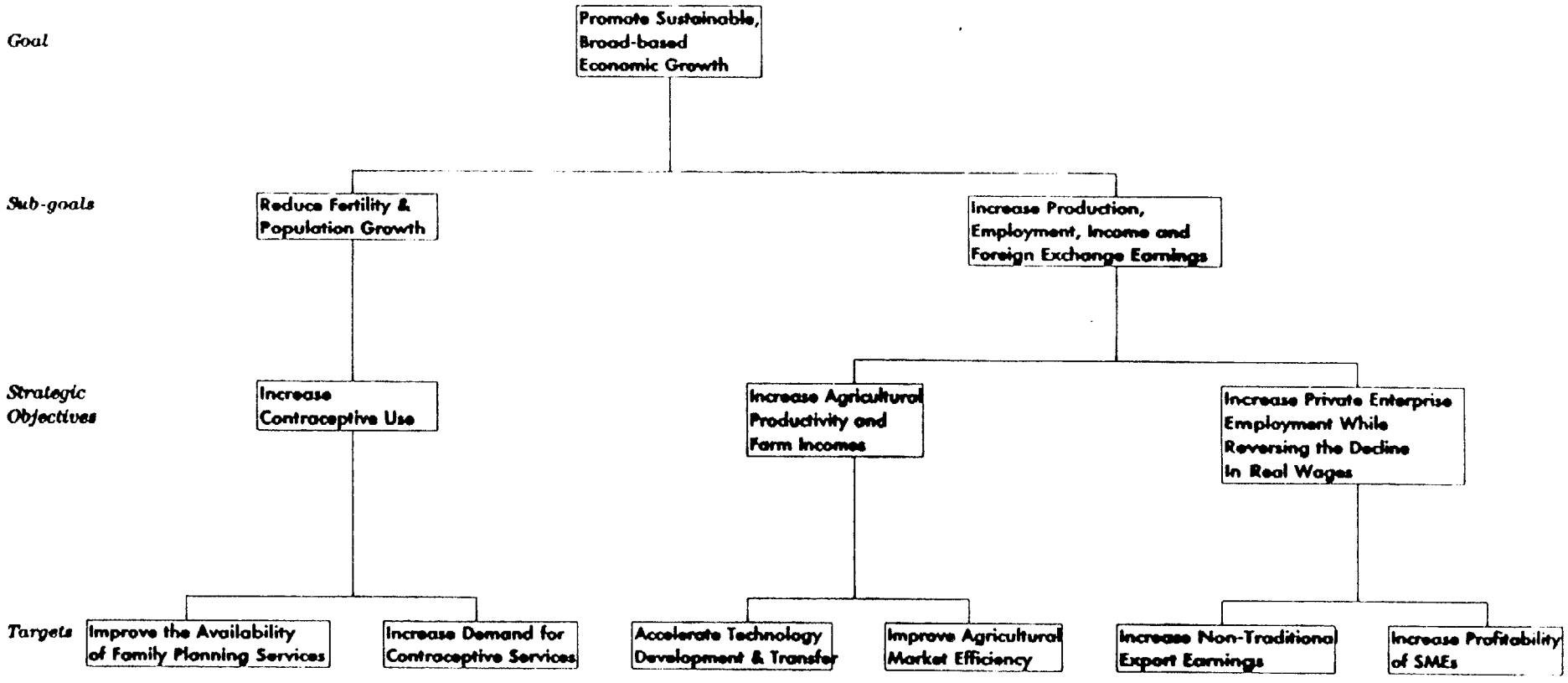
- **Declining Quality of Governance**: The increasing politicization of the civil service (including nepotism and political patronage), weakening of professional standards in public administration, decreased attention to accountability and transparency and an unhealthy tolerance of waste, fraud and mismanagement are indicative of a deterioration in the effectiveness and efficiency of the public sector.

- **Worsening Economic Policy Reform Performance**: The GOK has clearly been backsliding seriously on key sector and macroeconomic reforms, in both letter and spirit. There has been very limited progress in areas such as parastatal divestiture, health care financing, budget deficit reduction and monetary management. This has resulted in a poorer investment climate, an emerging public finance crisis and decreased inflows of official donor assistance.

- **Deteriorating Economic Performance**: Negative effects of the uncertain political situation upon economic performance, exacerbated by the problems of governance and policy reform, are becoming increasingly evident. From 1989 to 1990 government spending escalated by 25 percent, the budget deficit increased 2 percent to 6.5 percent (IMF benchmark of 2.5 percent), money supply increased by 17 percent, purchasing power decreased by 15 percent and wage employment grew at a rate of 2.5 percent while the urban labor force grew by 6.5 percent. In addition, trade and balance of payments deficits remain high, capital flight has increased from a total of $1.5 billion in 1985 to a total of $2.6 billion by early 1991, and current estimates of inflation are 25 percent. While below average rainfall in 1990 and 1991, the Gulf War, and deteriorating terms of trade have been important elements in this picture, political and economic management are considered by USAID/Kenya to be more significant factors.

USAID/KENYA

PROGRAM LOGFRAME



## SECTION II

## PROGRESS TOWARD OVERALL COUNTRY PROGRAM GOALS

Kenya's aggregate economic growth in 1990 declined but remains above average in terms of Sub Sahara Africa economic performance. Although the population growth rate has begun to decline, population continues to grow very rapidly, greatly limiting benefits derived from overall GDP growth. Recent per capita income growth has slowed and may, in fact, have been negative. Infant and child mortality rates remain stable and low when compared with the rest of Africa. These rates may, however, rise over the next few years due to the impact of AIDS. Primary school enrollments, although still high, are declining, in part reflecting the rising cost of education. There is also concern that the quality of education may be falling. The Mission's analysis of Kenya's progress on country-level indicators is discussed below.

**GOAL:** Sustained and Broad-Based Economic Growth

1. Income: After solid economic performance during the 1985-1989 period, in which GDP growth averaged 5.1 percent, the Kenyan economy experienced a decline in real growth in 1990 to 4.5 percent. Many analysts in Kenya, however, believe real GDP growth was actually lower than the official figures because inflation has been underestimated by the GOK. In response to criticisms regarding the accuracy of the consumer price index, the GOK is in the process of revising the CPI, with USAID/Kenya support. The deceleration in growth has been attributable to a decline in foreign aid, higher oil prices caused by the Gulf Crisis, weak international coffee prices and unfavorable weather. Income growth per capita fell below one percent in 1990 compared to 1.2 percent the previous year.

2. Life Expectancy: Life expectancy at birth in Kenya improved from an average of 54 years in 1984 to 59 years in 1988. This improvement was largely due to a significant decline the mortality of children under the age of five. Average life expectancy, however, has remained relatively constant at 59 years since 1988 and is projected to remain more or less at this level for the next few years. It is uncertain that further declines in mortality, and therefore improvements in life expectancy, will be realized by 1995 due in part to the impact of the AIDS epidemic.

3. Infant and Young Child Mortality: The Mission's program strategy aims to decrease infant and young-child morbidity and mortality by reducing the number of high-risk births, and through increased access to oral rehydration therapy and immunization services. Estimates of the declines in infant and child mortality vary, but projections from the 1979 Census indicate that these figures now remain at around 70 and 110 per thousand live births, respectively. These impressive overall figures, however, conceal regional disparities, with estimated infant mortality varying from the low 50s in Central Province to over 100 per thousand South Nyanza

| | Baseline | Actual | | | Data |
|---|---|---|---|---|---|
| | FY 1985 | FY 1988 | FY 1989 | FY 1990 | Sources |
| **GOAL** | | | | | |
| PROMOTE SUSTAINABLE, BROAD-BASED ECONOMIC GROWTH: | | | | | |
| 1) Real Income Per Capita | | | | | |
| a) Using GOK Inflation Estimate | 1.0 % | 1.1 % | 1.2 % | 0.85 % | 1990 Economic Survey |
| b) Using USAID/Kenya Inflation Estimate | 1.0 % | -0.9 % | -0.9 % | -2.15 % | USAID/Kenya Analysis |
| 2) Life Expectancy at Birth | 54 (1984) | 59 | 59 | 59 | 1990 World Bank Report |
| 3) Infant and Child Mortality Per Thousand (Ages 0 to 5) | 136 (1980) | 110 (1987) | n/a | 110 | 1990 UNICEF Report |
| **SUB-GOAL 1** | | | | | |
| REDUCE FERTILITY AND POPULATION GROWTH: | | | | | |
| 1) Reduce Fertility Rate | 7.7 (1984) | n/a | 6.7 | 6.5 | KDHS |
| 2) Reduce Population Growth Rate | 4.1 (1984) | n/a | 3.8 | 3.6 | US Bureau of Census |
| **SUB-GOAL 2** | | | | | |
| INCREASE PRODUCTION, EMPLOYMENT, INCOME AND FOREIGN EXCHANGE EARNINGS: | | | | | |
| 1) Private Sector Contribution to GDP | 62.7 % | 60.9 % | 62.9 % | 60.3 % | 1990 Economic Survey |
| 2) Agricultural Production as a percent of GDP | 29.4 % | 28.7 % | 28.5 % | 28.2 % | 1990 Economic Survey |
| 3) Annual Employment Growth Rate | 5.5 % | 5.9 % | 4.4 % | 5.1 % | 1990 Economic Survey |
| 4) Foreign Exchange Earnings (Total Exports Plus Tourism, $ in Millions) | $1,228 | $1,461 | $1,405 | $1,488 | 1990 Economic Survey |

Province. USAID/Kenya, in collaboration with the Institute for Resource Development, is undertaking a study to assess current and projected mortality trends in Kenya. The rising prevalence of AIDS/HIV in Kenya introduces a new and complex dimension to analysis of infant and child mortality. Preliminary indications are that due to the AIDS phenomenon, infant and young child mortality rates are levelling off and are likely to rise over the next several years.

**SUBGOAL 1:** Decrease Fertility Rate and Population Growth Rate

The rapid growth in Kenya's population over the past two decades has offset many of the economic and social benefits of the relatively robust aggregate economic growth Kenya has experienced during this period. USAID/Kenya expects that the contraceptive prevalence rate (CPR), which increased from 17 percent in 1984 to 27 percent in 1989, will increase to 35 percent by 1995. This increase is expected to result in a reduction of the total fertility rate from the current estimate of 6.5 to 5.8 by 1995. The projected impact of these changes on population growth is estimated to be a decline from 4.1 percent growth in 1984 to 3.4 percent in 1995. A substantial reduction in population growth is critical to expanding the effective impact of social projects and programs, increasing per capita incomes, and enhancing the long term sustainability and equity of economic growth.

The 1989 Kenya Demographic and Health Survey (KDHS) documented the first significant decline in fertility in Kenya's history. The total fertility rate (TFR) declined from 8.1 children per woman in 1977/78 to 6.7 in 1989 and to the current estimate of 6.5 for 1990. Regarding population growth, although the final report of the 1989 Census has not been released, preliminary data indicate that the annual population growth rate has dropped significantly below the 4.0 percent reported in 1985. Current estimates prepared for USAID by the U.S. Census Bureau show a rate of 3.6 percent per year.

The recorded changes in fertility are consistent with other data showing increased knowledge and use of contraception, as reported in the KDHS. Family planning services data from the Ministry of Health, as well as from other large non-governmental organization (NGO) providers such as the Family Planning Association of Kenya and the Family Planning Private Sector Project, continue to show dramatic increases in the availability and use of contraception. In addition, preliminary indications from a recently completed study covering six districts in Kenya suggest a continuing trend of increased contraceptive prevalence. Though USAID/Kenya is greatly encouraged by these changes, a TFR of 6.5 is still one of the highest in the world and must decline to much lower levels if Kenya is to achieve its demographic goal of a 2.5 percent growth rate by the year 2000. It is also important to note that, due to the age structure of the population, even the most optimistic demographic scenario projects a doubling of Kenya's current population of 24.3 million in less than 25 years.

SUBGOAL 2: Increase Production, Employment, Income and Foreign Exchange Earnings

Continued and sustainable economic growth in Kenya is increasingly dependent upon the growth of the agricultural and non-agricultural private sectors. The public sector in Kenya does not have the resources to act as the employer of last resort or to finance increasing levels of productive investment. USAID/Kenya's program strategy recognizes the limitations of the public sector and has concentrated Mission efforts on supporting the private sector with the objective of increasing production, employment, income and foreign exchange.

Real GDP increased at an annual average of 4.35 percent between 1981 and 1990. GDP growth was somewhat sluggish in the early eighties, averaging 3.3 percent from 1981 to 1984, but rebounded in the second half of the decade, averaging 5.1 percent from 1985 to 1989. In 1990 annual GDP growth slowed to 4.5 percent. During the growth of the late eighties, the private sector's role in the economy expanded from a 59.3 percent share of the GDP in 1986/87 to a 62.9 percent share in 1989/90. Similar to the decline in GDP growth, the position of the private sector contracted in 1990 to a GDP contribution of 60.3 percent.

An estimated 522,000 persons found employment between 1983 and 1990. Employment in the modern wage sector grew at an average annual rate of 3.5 percent, generating approximately 300,000 new jobs. At the same time, informal sector employment grew at a rate of 10.4 percent annually, creating 222,000 jobs. Modern sector employment growth slowed measurably in 1989 (2.4 percent) and 1990 (2.4 percent). Employment in the informal sector, however, continued to increase rapidly during these years, growing by 12.7 percent and 13.6 percent, respectively. The employment picture in 1990 provides an indicative illustration of employment trends during the past few years. Of the estimated 92,000 jobs created in 1990, over 83,000 (90 percent) came from the private sector; the majority of those jobs (53,100) were generated by the informal sector.

Foreign exchange earnings increased to $1.5 billion in 1990 from a 1989 level of $1.4 billion. The largest single source of foreign exchange in 1990 was the tourist sector, contributing $433 million. However, given increasing competition from expanding tourist sectors in neighboring countries and an unsustainable level of stress on some of Kenya's most popular national parks, it will be difficult to maintain the recent rate of growth of foreign exchange contributions from the tourist sector. USAID/Kenya's efforts to address this situation focus on emerging non-traditional exports, such as horticultural exports, (the value of which has increased at an average annual rate of over 20 percent since 1987).

## SECTION III

## PROGRESS TOWARD STRATEGIC OBJECTIVES AND RELATED PROGRESS INDICATORS

**STRATEGIC OBJECTIVE 1:** Increase Contraceptive Use

USAID/Kenya's first strategic objective is to increase the use of safe and effective methods of contraception. Specifically, the objective is to increase the prevalence rate of contraceptive use among married women of reproductive age from the current estimated level of 29 percent to 35 percent by the end of FY 1995. Contraceptive use of all methods has increased dramatically, from only 7 percent in 1977/78 to 27 percent in 1989, with an increase from 10 to 18 percent in modern methods since 1984. This rate of change is virtually unprecedented in Africa.

USAID will finance another KDHS in 1993. In the interim, annual changes in contraceptive use are being monitored using aggregate data on couple-years-of-protection (CYP) derived from the newly established Logistics Management Information System (LMIS). The LMIS, which is situated in the Ministry of Health, will, when fully operational, generate quarterly estimates of CYP for all registered service delivery points in both the public and private sectors. It is projected that by 1995 there will be a 25 percent increase in CYP over the estimated June 1991 level of 440,157 (the June estimate was the first time it was possible to derive a national CYP figure).

**TARGET 1.1:** Improve the Availability of Family Planning Services

The primary focus of USAID's population assistance is to increase the availability and quality of family planning information and services in both the public and private sectors. This is being accomplished by extending and strengthening clinic-based and community-based family planning, and through contraceptive social marketing. This program emphasis is based upon the belief that considerable unmet demand for family planning exists, and that extending and improving services will help to activate this latent demand.

The 1989 KDHS strongly supports this assumption. There has been a dramatic decline in mean ideal family size in Kenya - from 7.2 in 1977-78 to 4.4 in 1989, with this change occurring across all age groups. The percent of women wanting no more children increased from 32 to 49 percent between 1984 and 1989, with an additional 26 percent indicating a desire not to become pregnant within the next 24 months.

USAID/Kenya, through the provision of training, materials and technical assistance, has made a substantial contribution to the increase in the number health clinics, public and private, offering family planning services from 758 in 1984 to 1575 by June of 1991. In addition, through the Voluntary Surgical Contraception (VSC) program, the Mission has supported the establishment of 58 VSC sites which have contributed to the substantial rise in VSC procedures -

STRATEGIC OBJECTIVE No. 1

| | Baseline | Actual and Planned | | | Data |
|---|---|---|---|---|---|
| | 1984 | 1989 | 1991* | 1995 | Sources |
| **STRATEGIC OBJECTIVE 1** | | | | | |
| INCREASE CONTRACEPTIVE USE: | | | | | |
| Contraceptive Prevalence Rate | 17 % | 27 % | 29 %** | 35 % | KCPS/KDHS |
| Couple Years of Protection | n/a | n/a | 440,157 | 25 % Increase | LMIS/HIS |
| **TARGET 1.1** | | | | | |
| IMPROVE THE AVAILABILITY OF FAMILY PLANNING SERVICES (Indicators are provided in Sub-targets 1.1a-1.1e) | | | | | |
| **SUB-TARGET 1.1a** | | | | | |
| INCREASE THE NUMBER OF GOVERNMENT HEALTH FACILITIES ROUTINELY OFFERING FAMILY PLANNING SERVICES | 577 | 837 | 926 | 1,088 | LMIS/HIS |
| **SUB-TARGET 1.1b** | | | | | |
| INCREASE THE NUMBER OF PRIVATE SECTOR AND NGO SERVICE DELIVERY POINTS ROUTINELY OFFERING FAMILY PLANNING SERVICES | 181 | 535 | 649 | 1,124 | LMIS/HIS |
| **SUB-TARGET 1.1c** | | | | | |
| INCREASE THE NUMBER OF SITES OFFERING VOLUNTARY SURGICAL CONTRACEPTION | 4 | 47 | 58 | 78 | AVSC/DFH |
| **SUB-TARGET 1.1d** | | | | | |
| INCREASE PERCENT OF SUB-LOCATIONS WITH ACCESS TO COMMUNITY-BASED SERVICES | 10 | 30 | 34 | 45 | USAID |
| **SUB-TARGET 1.1e** | | | | | |
| INCREASE NUMBER OF RETAIL OUTLETS SELLING: | | | | | |
| a) Reasonably-Priced Oral Contraceptives | 0 | 0 | 0 | 120 | CIL/PSI |
| b) Reasonably-Priced Condoms | 0 | 120 | 528 | 580 | CIL/PSI |
| **TARGET 1.2** | | | | | |
| INCREASE DEMAND FOR CONTRACEPTIVE SERVICES | | | | | |
| **SUB-TARGET 1.2a** | | | | | |
| DECREASE PERCENT OF NON-PREGNANT WOMEN CITING LACK OF KNOWLEDGE OF CONTRACEPTIVE METHODS AS CONSTRAINT TO USE | n/a | 23 % | 20 %** | 10 % | KDHS |
| **SUB-TARGET 1.2b** | | | | | |
| INCREASE PERCENT OF WOMEN KNOWING WHERE SERVICES CAN BE OBTAINED FOR: | | | | | |
| 1) IUD | n/a | 60 % | 62 %** | 75% | KDHS |
| 2) Female Sterilization | n/a | 85 % | 87 %** | 95 % | KDHS |

* As of June, 1991

** USAID/Kenya estimate, next round of KDHS planned for January/February 1993

from a few hundred per year in 1982 to a cumulative total of over 62,000 by June 1991. USAID/Kenya has also financed a major expansion in community-based family planning (CBFP) programs. Currently, 34 percent of the sublocations are served by CBFP workers, up from less than 5 percent in 1984.

**TARGET 1.2:** Increasing Demand for Contraceptive Services

USAID believes that there is considerable latent demand for contraceptive services in Kenya. Though this latent demand has, in many cases, been activated through improvements in the availability and quality of services, it is clear that lack of correct knowledge about contraceptive methods and where they can be obtained remains an important factor limiting contraceptive use. For this reason, USAID is supporting a focused effort to address this need, and will monitor changes in this knowledge through both the DHS planned for 1993 and specialized surveys planned within the Client-Provider Education Project.

STRATEGIC OBJECTIVE 2: Increase Agricultural Productivity and Farm Incomes

The agricultural sector plays a major role in the economy of Kenya, contributing 28 percent of Gross Domestic Product, providing over 60 percent of export revenues and employing more than three quarters of the work force. The sector is also a significant source of raw material for the manufacturing sector.

The high and medium potential areas, comprising 20 percent of Kenya's total land area and supporting 80 percent of the rural population, produce virtually all of the output of the major commodities such as coffee, tea, dairy, cereals and pulses, as well as all of the horticultural output. An important characteristic of these areas is the dominance of smallholder producers. Approximately 75 percent of total agricultural production and 60 percent of marketed output is produced by the smallholder sector.

Over the last five years, the Mission's strategy has focussed on increasing agricultural productivity and farm incomes in the high and medium potential zones. The strategy has concentrated resources on: 1) agricultural research, 2) liberalization and privatization of fertilizer and grain markets, 3) agribusiness development and, 4) strengthening of analytical capacity in the public and university sectors.

Agricultural productivity, as measured by value added, has averaged a real growth rate of 4.0 percent per annum throughout these years (1986-90). Overall GDP grew at 4.9 percent during the same period. From 1989 to 1990, however, agricultural value added grew at a slower rate of 3.4 percent and overall GDP similarly slowed to 4.5 percent. A study financed by USAID/Kenya established on-farm profits/acre for representative farms in 5 high potential districts for 1989/90. The incomes varied by agro-ecological zone and crop mix, ranging from an average of Kshs. 3,260 for low return farms to Kshs. 5,834 for high return farms. The Mission will continue to track on-farm profits for representative farms in these districts in an effort to capture indications of change of income at the disaggregated farm level.

In 1989-90, significant declines were recorded for maize, beans and coffee in terms of production and value added. Maize production declined by 13 percent, bean production by 25 percent and coffee production by 11 percent. Factors affecting this performance included inadequate rainfall during the primary growing season, a decline in area planted under major food crops (except for wheat) and a 16 percent fall in producer prices of coffee. Although the production and value of dairy and tea rose substantially, with dairy achieving a 27 percent growth in value between 1989 and 1990, this was inadequate to compensate for declines suffered by producers of maize, coffee, and beans. Research indicates that slower growth in the agriculture sector led to stagnant or declining real farm incomes.

STRATEGIC OBJECTIVE No. 2

| | Baseline | Actual and Planned | | Data |
|---|---|---|---|---|
| | | 1990/91 | 1995 | Sources |
| **STRATEGIC OBJECTIVE 2** | | | | |
| INCREASE AGRICULTURAL PRODUCTIVITY AND FARM INCOME: | | | | |
| Agricultural Sector Value Added, Annual Growth | 4.0 (1986-89) | 3.4 (1990) | 4% annual increase | Economic Survey |
| Maize Yields (MT/Hectare) | 2.20 (1985-89) | 2.15 | 4% annual increase | NCPB/MOA/DRSRS |
| **TARGET 2.1** | | | | |
| ACCELERATE TECHNOLOGY DEVELOPMENT AND TRANSFER | | | | |
| **SUB-TARGET 2.1a** | | | | |
| INCREASE ADOPTION OF NEW TECHNOLOGIES | | | | |
| HYV Maize Seed Sales (tons/year) | 18,516 (1985-89) | 18,289 | 22,225 | KSC |
| % Maize Production Area Under HYV Maize | 63 % (1985-89) | 56 % | 65 % | KARI/KSC/USAID |
| % HYV Maize Area Under Smallholder Production | 80 % (1989/90) | 82 % | 85 % | KSC/KARI |
| **SUB-TARGET 2.1b** | | | | |
| INCREASE DEVELOPMENT & TRANSFER OF TECHNOLOGIES | | | | |
| Number of Seed Varieties Disseminated * | 9 | 11 | 15 | KSC/NARC - Kitale |
| o maize | 7 | 8 | | |
| o sorghum | 2 (1985-89) | 3 | | |
| **TARGET 2.2** | | | | |
| IMPROVE AGRICULTURAL MARKET EFFICIENCY | | | | |
| **SUB-TARGET 2.2a** | | | | |
| IMPROVE FERTILIZER MARKET EFFICIENCY | | | | |
| Marketing Margins For Fertilizer (DAP) | | | | |
| o Mombasa-Nakuru stockist gross margin | | 8.32 % | Market Interest Rate | PAM |
| Domestic DAP Fertilizer Price as % of Adjusted World Prices | | | | |
| o Nakuru stockist price/CIF Mombasa adjusted for internal marketing costs | | 1.15 | Establish 1992 | PAM |
| **SUB-TARGET 2.2b** | | | | |
| IMPROVE GRAIN MARKET EFFICIENCY | | | | |
| Marketing Costs for Maize | | | | |
| o Average marketing costs of maize (Ksh/Kg) | Establish 1992 | | Reduce by 15% | CBS/KMDP |
| o Ratio of private trader/NCPB | Establish 1992 | | | CBS/KMDP |
| Variation in Seasonal and Regional Maize Prices | | | | |
| o Seasonal average price differentials - surplus markets | 38 % | | Establish 1992 | CBS/KMDP |
| o Seasonal average price differentials - deficit markets | 31 % (1990) | | Establish 1992 | CBS/KMDP |
| o Regional average price differentials - western Kenya | 29 % | | Establish 1992 | CBS/KMDP |
| o Regional average price differentials - eastern Kenya | 36 % (1990) | | Establish 1992 | CBS/KMDP |

* A seed variety is defined as disseminated when it is available for purchase by farmers

Maize is the primary focus of the Mission's strategy to increase agricultural production and farm income. This concentration derives from the dominance of maize in the agricultural sector. Maize is the most widely grown crop in the country and, until 1990, was the commodity with the largest gross value of production. In addition, maize is an important source of income for producers in high potential areas as well as the most important and cheapest source of calories (52 percent of gross national production) and protein (42 percent of gross national production) in Kenya.

**TARGET 2.1:** Accelerate Technology Development and Transfer

The adoption of high yield varieties of maize is one means of significantly increasing the yield and aggregate production of maize[1]. USAID/Kenya has supported the development of high yield maize varieties in recent years primarily through the Kenya Agricultural Research Institute (KARI) and secondarily through Egerton University, which collaborates closely with both KARI and the International Wheat and Maize Improvement Program (CIMMYT). In the past, KARI has focussed greater effort on breeding high yielding genetic material and it is only recently that other attributes, such as disease resistance and cultural practices, have begun to receive increased attention.

One of the four new varieties developed by KARI with the support of USAID/Kenya is a more disease resistant version of the hybrid H626. The initial version of the hybrid 626 is a medium to high altitude variety, also developed with Mission support, which has been marketed since 1989. The demand among farmers for the initial version is high, and sales in 1990/91 reached a level of 1,000 tons. Forecasts by the Kenya Seed Company anticipate sales of 6,000 tons by 1995, which would make H626 the second most widely used maize variety in Kenya.

The potential yield of the new disease resistant H626 is 9.5 MT/ha (research level) compared with on-farm yields of 2 MT/ha to 4-6 MT/ha for varieties currently in use. The availability of the new H626 variety for purchase in time for the 1992 planting season should reduce significant losses (estimated at 30 percent of production in medium - high altitude areas in 1989) resulting from the maize streak disease. The Mission has also begun to support KARI's increased emphasis on addressing issues related to the gap between research and on-farm yields, i.e., the dynamics of different farming systems, agronomic practices and crop protection.

Another technology developed by KARI through Mission-supported programs is a new sorghum variety that was released in 1991. This new variety has considerable potential for blending with wheat for bread flour, replacing up to 25 percent of the wheat. This development could have significant impact on the GOK budget, as

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[1] The decrease in the use of HYV maize in 1990/91 was due to inadequate rains which resulted in a shift to wheat production.

substantial amounts of resources can be saved via a reduction in wheat imports. Currently, three major flour millers in collaboration with KARI are exploring the potential for contract farming for the new sorghum variety.

**TARGET 2.2:** Improve Agricultural Market Efficiency

In recent years, USAID/Kenya programs have focussed on the two most important product and factor markets for Kenyan agriculture, the grain market and the fertilizer market. Grain marketing in Kenya is dominated by three commodities: maize, beans and wheat. Fertilizer is the largest input expense for farmers of crops such as maize, coffee, tea and sugar.

Mission support has focussed on the reform of grain markets with emphasis on maize and beans, while support for fertilizer market and price reform is concentrated on Diammonium Phosphate (DAP). Support of reform in these two major agricultural markets is based on the Mission's expectations that significant liberalization will lead to more efficient markets. Availability of inputs on a more timely and affordable basis and increased access to markets for producers and traders should increase agricultural productivity and incomes.

The DAP imported under the Fertilizer Pricing and Market Reform Program (FPMRP) is the most important fertilizer for maize, wheat, beans and horticultural planting. The annual consumption of DAP in the last few years averaged 80,000 tons, of which 75 percent was consumed in the long rains and 25 percent in the short rains planting periods. In FY 1991 the Mission financed the import of 43,640 tons of DAP while another 30,000 tons was imported by the quasi-parastatal, Kenya Grain Growers Cooperative Union. The Mission-supported program thus provided about 60 percent of the year's DAP supply.

One of the most important accomplishments of FPMRP has been the move by GOK to minimize its role in the fertilizer market by abandoning fertilizer price controls and import license allocation, and limiting itself to monitoring the types and quantities of fertilizers imported in the last 15 months. In the last two years, FPMRP has also accomplished the establishment of an active and influential private sector fertilizer interest group, the Kenya National Fertilizer Association (KNFA). The KNFA consists of 25 private importers and distributors of fertilizer in Kenya and has considerable influence on fertilizer allocation, and pricing and transportation issues nationwide. The group is also responsible for the allocation, handling, storage and transportation of the USAID/DAP importation. One major impact of an active KNFA was the delivery of fertilizer to the farm gate in time for the 1991 spring planting, as compared to previous years when fertilizer arrived late.

The Cereal Sector Reform Program is a GOK program with substantial donor assistance from USAID, EEC and IBRD. The USAID component, the Kenya Market Development Program (KMDP), has focussed on the relaxation and eventual elimination of movement controls for maize and beans, as well the eventual price decontrol of both. Significant

progress has been made on the issue of movement controls, despite some recent regressive moves by the GOK.

In early 1991, the GOK relaxed the controls on interdistrict maize movement by increasing the amount that could be transported without a license from 1 to 4 tons; deregulated several agricultural commodity markets including millet and sorghum; implemented a nationwide campaign to publicize these changes; and established a Ministry of Agriculture mandate to collect, compile and distribute information on market-determined prices for grains and horticultural crops. These changes provide a basis for the second phase of the total deregulation of the maize and beans markets scheduled for April 1992. The Mission is currently assessing the impact of these changes on market efficiency and integration, productivity and incomes.

**STRATEGIC OBJECTIVE 3:** Increase Private Enterprise Employment While Reversing the Decline in Real Wages

USAID/Kenya's third strategic objective is to increase private enterprise employment at constant or rising real wages. The Mission's private enterprise program aims to increase productive employment in the private sector by providing assistance both to expand non-traditional exports and to increase the profitability of small and medium-sized enterprises (SMEs).

Kenya's estimated labor force in 1990 of 9.91 million is projected to reach 14.2 million by the year 2000. This means that 4.3 million new jobs will have to be created in the next ten years if the aggregate number of unemployed is not to increase. The Government of Kenya's most optimistic scenarios project that the modern wage sector, currently employing 14 percent of the total labor force, can create only 600,000 new jobs in the next ten years, which is 14 percent of the total needed. Given fiscal constraints, the public sector's ability to absorb labor over these years will be very limited, which means that the private sector must become the primary source of employment creation.

Similarly, the small farm sector is expected to be able to generate at best 1.8 million jobs. The remaining 1.9 million jobs will have to be created in the rural non-farm and urban informal sectors. Given estimates of informal sector employment from 1988, this means that a 10 percent annual growth rate in informal sector job creation is needed over the next decade. Although informal sector employment is estimated to have been growing at an average annual rate of 11.7 percent over the past five years, this high growth rate may be difficult to sustain as the base number of enterprises gets larger. The increasing labor surplus, in conjunction with slow economic growth and growing GOK deficits, has resulted in declining real wages.

The average annual growth rate for employment in the private sector was 5.1 percent from 1984 to 1990. Private sector average real wages have fluctuated considerably since 1981, with a negative annual change in seven of the ten years. Although there has been no discernible trend over this time period, private sector real wages have been declining since 1988. USAID/Kenya is monitoring annual growth rates in employment and average real wages in order to track progress toward achievement of the strategic objective.

**TARGET 3.1:** Increase Non-Traditional Export Earnings

The target of increasing non-traditional export (NTE)[2] earnings is based on the recognition that increased production for export and the development of related backward linkages to the domestic economy have great potential to create jobs and increase real wages and incomes.

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[2] NTEs are defined as all exports except coffee, tea and petroleum products.

STRATEGIC OBJECTIVE No. 3

| | Baseline | Actual and Planned | | Data |
|---|---|---|---|---|
| | | 1990 | 1995 | Sources |
| **STRATEGIC OBJECTIVE 3** | | | | |
| INCREASE PRIVATE ENTERPRISE EMPLOYMENT WHILE REVERSING THE DECLINE IN REAL WAGES | | | | |
| Private Sector Annual Employment Growth Rate | 5.2% (1985) | 7.5 % | 7.0 % | Economic Survey |
| Private Formal Sector Annual Average Real Wage Growth Rate | -1.3 % (1985) | -3.8 % | 0.0 % | Economic Survey/ USAID/Kenya |
| **TARGET 3.1** | | | | |
| INCREASE NON-TRADITIONAL EXPORT EARNINGS | | | | |
| Non-traditional Export Earnings | $449 mil. (1990) | | $600 Mil. | Customs/USAID Survey |
| Number of Enterprises Engaged in Exporting Non-traditional Products | 1513 (1990) | | 2000 | Customs/USAID Survey |
| Total Employment in Formal Sector Non-traditional Exporters | 159,000 (1990) | | 8 % Annual Increase | NSSF |
| **SUB-TARGET 3.1a** | | | | |
| IMPROVE POLICY ENVIRONMENT FOR EXPORTS AND EXPAND SUPPORT SERVICES FOR ENTERPRISES ENGAGED IN EXPORTING NON-TRADITIONAL PRODUCTS | | | | |
| Number of Kenyan Organizations with Programs Designed to Support NTE Enterprises | 2 (1990) | | 8 | USAID |
| Number of NTE Enterprises Assisted per Annum | 107 (1990) | | 500 | USAID |
| **TARGET 3.2** | | | | |
| INCREASE PROFITABILITY OF SMALL & MEDIUM ENTERPRISES | | | | |
| Average Annual Real Revenues per SME Establishment | | | | |
| o Formal/modern sector | $1,063,000 | | 5% Ann. Incr. | CBS/USAID Survey |
| o Urban informal sector | $4,300 (1990) | | 5% Ann. Incr. | |
| Total Employment in SMEs | | | | |
| o Formal/modern sector | 295,000 | | 9% Ann. Incr. | CBS/USAID Survey |
| o Urban informal sector | 277,000 (1990) | | 11% Ann. Incr. | |
| **SUB-TARGET 3.2a** | | | | |
| IMPROVE ENABLING ENVIRONMENT & EXPAND SUPPORT SERVICES FOR SMEs | | | | |
| Number of Private Registered Kenyan Organizations Providing Support Services to SMEs | 41 (1990) | | 50 | USAID |

The declining terms of trade for Kenya's traditional agricultural exports, such as coffee and tea, underscore the need to diversify to non-traditional products. Total employment in formal sector enterprises that exported non-traditional products in 1990 is estimated at approximately 159,000, which represents 17.1 percent of formal sector employment in the country for that year. (Note: figures include parastatal employment.) Total formal sector employment in NTE enterprises is expected to increase by an average annual rate of 8 percent through 1995. An example of the employment generation potential of NTE development in Kenya is the total of approximately 7100 jobs (full-time equivalents) that were involved in the production of green beans for export in 1990. This includes employment at various stages, from on-farm production of beans to market preparation. Employment in production of green beans for export has grown by an average annual rate of 17 percent since 1988.

USAID/Kenya is supporting the development of the NTE sector through a new project intervention, Kenya Export Development Support, which will begin implementation in November 1991. Through the project, assistance will be provided to strengthen private organizations and public sector agencies to promote non-traditional exports, improve the export climate, and provide firm-level assistance.

The Mission will measure progress toward achievement of the target by tracking increases in non-traditional export earnings and in the number of enterprises engaged in exporting non-traditional products, in addition to total employment in NTE enterprises. NTE earnings are projected to increase to $600 million by 1995, from a level of $449 million in 1990. In 1990, 1513 firms exported non-traditional products. It is anticipated that this number will have increased to approximately 2000 by 1995.

**TARGET 3.2:** Increase Profitability of Small and Medium Enterprises (SMEs)

The second target of the USAID/Kenya private enterprise program is to increase the profitability of small and medium enterprises (SMEs)[3] in both the formal/modern and informal sectors. The program activities, which focus on removing constraints to the expansion of the SME sector, are based on the assumption that SMEs are more labor intensive than larger enterprises in Kenya and have greater potential to increase employment at rising real wages.

USAID/Kenya has been one of the leading bilateral donors supporting SME development over the past six years. The estimated average annual employment growth rate for the sector as a whole over this period is 8 percent. Preliminary evaluation data indicate that SMEs participating in three AID project components have experienced an average annual employment growth rate of approximately 36 percent and have increased revenues by an annual average of over 26 percent.

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[3] SMEs are defined as enterprises that have up to 100 employees.

USAID financed studies in 1990 to collect economy-wide baseline data on employment and average real revenues for both formal and informal sector SMEs. The Mission will continue to track these indicators to assess changes in the sector.

Since 1986, women have made up an average of approximately 21 percent of annual total wage employment in the formal/modern private and public sectors in Kenya. Women are much better represented in the informal sector work force, where studies show estimates of female employment ranging from 34 to 44 percent of total employment. Partial evaluation data from three USAID-sponsored programs indicate that women make up nearly 37 percent of the employment in assisted SMEs.

**SUBTARGET 3.2a:** Improve Enabling Environment & Expand Support Services for SMEs

USAID/Kenya program interventions have been focused on improving the enabling environment within which SMEs operate and increasing the capacity of enterprises to respond to the resulting, improved incentives. The majority of program activities have been encompassed under one of two interventions; the $36 million Rural Private Enterprise (RPE) Project, which was implemented from FY83 to FY91, and the $25 million Private Enterprise Development (PED) Project, which began in FY87 and is scheduled to be completed in FY94.

One of the two major components of the Rural Private Enterprise Project was designed to provide term credit to modern sector non-farm enterprises, with emphasis on assisting businesses with strong linkages to rural areas, and/or high potential for foreign exchange or efficient employment generation. The project attempted to address constraints associated with the short-term nature of existing sources of finance in Kenya. Under the project, credit and technical assistance were provided to commercial banks, which, in turn, provided loans and management advice to entrepreneurs. RPE assisted 113 businesses. Partial evaluation data indicate that small and medium enterprises assisted under RPE experienced average annual increases in employment of 30 percent, and average annual increases in sales of over 11 percent. These data also show that women made up nearly 33 percent of total employment in the SMEs after assistance was received.

USAID/Kenya's Private Enterprise Development Project includes a number of initiatives that have assisted SMEs. One activity has been the promotion of venture capital as a mechanism for expanding the availability of long-term investment capital to formal sector private enterprises in Kenya. Under the project, USAID has provided a line of long-term credit, through a trust fund managed by a commercial bank, for enterprises in which two venture capital companies, one of which was created through the project, invest equity funds. Ten businesses have received financing totaling $7.7 million under this mechanism. SMEs, which make up eight of the ten businesses, have received 76 percent of the financing. Three of the SMEs received financing too recently for it to have had impact on the businesses,

but the other five have experienced an average increase of 67.4 percent in employment. In fact, three have graduated from the SME sector because employment in each of them now exceeds 100. Women account for nearly 38 percent of the total employment in the eight assisted SMEs. It is still too early to assess the broad impact that this project activity will have on the availability of long-term investment funds for SMEs. However, the concept is gaining acceptance in the financial community, as evidenced by increasing interest on the part of institutional investors to either participate in one of the existing venture capital companies or set up new ones. The European Investment Bank has committed funds to support long-term risk investment and is seeking assistance from USAID to set up a similar facility. A measure of preliminary success is the recent profitable divestiture by one of the venture capital companies of an investment.

Another activity under PED that has assisted formal sector SMEs is USAID/Kenya institutional support for the Investment Promotion Centre (IPC). IPC is an agency under the Ministry of Finance that facilitates new direct foreign and domestic investment in Kenya. USAID has been instrumental in strengthening IPC and provides approximately 44 percent of the IPC total budget, in the form of technical assistance. Since 1988, IPC has approved 191 investments; of these, 44 are currently operating businesses. Twenty-six enterprises, or 59 percent of the total number of operating new firms, are small or medium businesses. A total of 1051 jobs were created through the formation of these SMEs.

Another major focus of PED has been the provision of credit, technical assistance and training to microenterprises[4], most of which operate in the informal sector, through institutional support for indigenous NGOs. USAID/Kenya's assistance to microenterprises began in 1984 under the RPE Project. In the course of the RPE Project, and beginning in 1987 under the PED Project, USAID's assistance to microenterprises has evolved through several programmatic changes as a result of experience gained through implementation. Assistance has been institutionalized through the creation and support of a highly successful Kenyan umbrella NGO, the Kenya Rural Enterprise Programme (known as WEREP or K-REP). K-REP in turn has provided training and technical and financial assistance to Kenyan NGOs that directly assist microentrepreneurs. K-REP has developed a unique capacity for and leadership role in sponsoring and coordinating research and policy dialogue on microenterprise assistance in Kenya.

In the early years, microenterprise assistance in the projects was provided through an "integrated" approach, which offered training and technical assistance to entrepreneurs along with credit. Illustrative studies of micro-entrepreneurs that have met repayment terms under the integrated scheme suggest that total employment in

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[4] Microenterprises are described as enterprises having ten or fewer employees.

assisted enterprises increased by an average rate of 20 percent, while sales increased by over 47 percent. However, K-REP became increasingly concerned with the issue of the sustainability of the loan programs. In an effort to help the NGOs (including K-REP itself) to recover costs and establish financially sustainable revolving loan funds, K-REP began to provide assistance to NGOs in the form of subsidized loans rather than grants, and encouraged NGOs to charge borrowers commercial rates of interest. Finally, K-REP and its assisted NGOs have recently adopted the "minimalist" lending approach. The minimalist model replaces the expensive, subsidized, and often inappropriate business management training that accompanied credit under the integrated system with a modest amount of training on the loan system rules, provided to borrowers in group settings. In addition, borrowing entrepreneurs must form groups. Group formation contributes to higher repayment rates as a result of peer pressure, group savings and group guaranties that function as collateral. Group members take over much of the administration of the system, which reduces administrative costs for the assistance organization. Lower costs and higher repayment rates mean that programs can reach many more entrepreneurs and are expected to recover direct operating costs and become financially self-sustaining within three years. Evidence from the first year of operation of the minimalist programs reinforces these expectations. The number of loans made and amount of credit disbursed in the first year of the minimalist lending are 5442 and 39.714 million Kenya shillings, compared to a total of 642 loans and 17.480 shillings disbursed under the three years of integrated activities. The repayment rate under the minimalist system has averaged 97.5 percent, compared to an overall average of 78 percent under the integrated method. Sixty-five percent of the enterprises assisted under the integrated method were owned by women, as were 53 percent of the enterprises in the minimalist program. These output data should be interpreted with caution, however. Further impact studies comparing the two credit systems are needed. Direct comparison of the lending methods may be difficult to make, as project goals shifted significantly from institutional strengthening of NGOs and provision of training and technical assistance to entrepreneurs under the integrated system to the greater focus on increasing lending volume and cost recovery under the minimalist method.

USAID/Kenya's Approach to Policy Dialogue

Policy dialogue with the GOK is an important aspect of the private enterprise program. USAID/Kenya's strategy has been to make effective use of limited USAID financial resources to promote policy reforms through Kenyan organizations. This approach supports the development of a sustainable institutional capability in Kenya to research and lobby for policy change in support of private enterprise development.

USAID/Kenya has provided assistance to two Kenyan institutions to engage the government in informed policy debate: the Kenya Association of Manufacturers (KAM), a private business membership

organization; and the Investment Promotion Centre, which, in addition to facilitating investment as described earlier, advises the GOK on policy issues relating to the investment climate. During the past four years, USAID/Kenya has supported KAM and IPC to undertake and disseminate policy studies. In turn, the World Bank has drawn upon some of the policy issues raised in these studies when establishing conditionalities for Kenya's Industrial Sector Adjustment Credit, particularly regarding price controls and the Export Processing Zones (EPZs). The result has been that the GOK has been assisted to move toward deregulation of the economy through policy reforms which USAID/Kenya has then helped the government to implement by providing technical assistance.

An example of a policy change that USAID/Kenya has supported through a KAM-sponsored study is the decontrol of prices. The GOK referred to a KAM study in its recent review of price controls and, to date, has decontrolled 31 of the 43 products previously included in the Price Control List of 1988. Following another USAID-funded study on the enabling environment for EPZs in Kenya that was undertaken by IPC, the GOK enacted legislation that provided for the establishment of private and public EPZs in Kenya and the creation of the EPZ Authority (EPZA) to act as a regulatory body for all EPZs in the country. The legislation is integral to the government's new export-led growth strategy. USAID/Kenya in turn has responded to these policy reforms by providing technical assistance to the EPZA, and the Export Promotion Programmes Office in the Ministry of Finance, which is charged with making trade policies more transparent and acting as a one-stop shop for exporters.

ANNEX A

REVISION OF INDICATORS AND EXPECTED LEVELS OF ACHIEVEMENT

The following provides a brief explanation of revisions made to indicators that were initially presented in the 1990 iteration of the API. As stated in the foreword, these changes were based on research which demonstrated the original indicators did not capture the impact of related program activities or were not operational in terms of data availability or quality. Also included are brief discussions of the rearticulations of one target and several sub-targets. Further detail concerning data presented in the API is included in the technical notes.

**Goal: Increase Sustainable, Broad-Based Economic Growth**

- Percent of Rural Population Without Access to Minimum Food Requirements; this indicator was dropped due to a lack of current, comparable and consistent data. Although the results of a national level nutrition survey were recently released by the Central Bureau of Statistics (CBS), the information included in the survey was age-specific (children under the age of five) and was relatively dated (the field work was completed in 1987).

- GOK Expenditure per Primary Pupil on School Equipment and Supplies; although the Mission has been, and continues to be, involved at the policy dialogue level with the GOK and other donors concerning education, we do not have any currently active program or project activities within the education sector. As a result, this indicator was dropped.

- Percent of Forest/Woods Depleted per Year; this indicator was dropped due to a lack of current, comparable and consistent data. A forestry survey has not been conducted in Kenya since the early 1960's. FAO estimates are recognized by donors as inaccurate. As part of the Forestry IV project being supported by the World Bank, a forestry survey covering both natural forests and commercial plantations should be completed in 1993. Current planning includes periodic later surveys to update the 1993 baseline. When and if these data become available, USAID/Kenya will consider the appropriateness of including a forestry indicator at the goal level.

- Life Expectancy at Birth; this indicator was included as a broad measure of economic and social well-being and as a gauge of the sustainability of economic growth in Kenya. Consistent and relatively high quality data are available on a regular basis for life expectancy at birth.

**Sub-goal 1: Reduce Fertility and Population Growth**

- No revisions made

**Sub-goal 2: Increase Production, Employment, Income and Foreign Exchange Earnings**

- Real GDP Growth Rate; much of the information derived from this indicator is captured in the real income per capita figure presented at the goal level. USAID/Kenya feels it is more appropriate to provide information at the sub-goal which not only reflects the relevant sub-goal, but also provides a link to the strategic objectives. Therefore, this indicator was replaced by indicators which are more efficacious, given these considerations.

- Annual Employment Growth Rate; employment is now presented as a national aggregate, as opposed to being disaggregated by sector. Relevant sector-specific employment data are provided within the table and narrative for strategic objective three. USAID/Kenya is focusing on national aggregates within the sub-goals.

- Private Sector Contribution to GDP; this indicator was added to reflect Mission program and project activities within the agricultural and non-agricultural private sectors, and to provide an explicit conceptual link between those activities and the Mission's goal and sub-goal.

- Agricultural Sector as a Percent of GDP; this indicator was added to reflect Mission program and project activities within the agricultural sector, and to provide an explicit conceptual link between those activities and the Mission's goal and sub-goal.

**Strategic Objective 1: Increase Contraceptive Use**

- No revisions made

**Strategic Objective 2: Increase Agricultural Productivity and Farm Income**

- Increase On-farm Income; this indicator was dropped due to the lack of national level data which are current, comparable and consistent. The Ministry of Agriculture does collect some district-specific farm budget data, but USAID/Kenya has not been able to gain access to that information. Although the CBS conducted an agricultural production survey in 1987, no data has yet been released. The Mission supports an analytical activity that collects private profitability data for representative farms in seven districts. These data are presented in the narrative.

- Agricultural Sector Value Added; this indicator was added to capture aggregate productivity changes in the agricultural sector. Its use permits a broader look at the sector than was possible in the 1990 API.

**Target 2.1: Accelerate Technology Development and Transfer**

- This target has been slightly rearticulated from the 1990 version, "Accelerate Development and Transfer of Improved Technologies." The organization of the sub-targets within this target have also been modified. These changes were made to clarify the Mission's agricultural objectives, to provide a greater conceptual link between sub-target, target and strategic objective, and to enhance the operationality of this section of the 1991 API.

**Sub-target 2.1a: Increase Adoption of New Technologies**

- HYV Maize Seed Sales; USAID/Kenya has attempted to specify indicators that are definable and operational, and that reflect related targets. This indicator was added because it permits the Mission to capture in a quantifiable and consistent manner the adoption of new technologies by farmers. Although it does not capture all elements of technology development (eg., fertility management, crop rotation, weeding schedules, etc.), this indicator is measurable, unlike most alternative indicators for tracking adoption rates.

- Percent Maize Production Area Under HYV Maize; this indicator was added to provide additional information regarding the use of new technologies at the farm level. Consistent and relatively high quality data are available on a regular basis for this indicator. Presently, 65 percent represents the maximum potential for this indicator as HYV seeds have only been developed for agroecological zones which cover 65 percent of the maize production area in Kenya.

**Sub-target 2.1b: Increase Development and Transfer of Technologies**

- This sub-target was modified to encompass sub-target 2.2a and subtarget 2.2b from the 1990 API. Agricultural research organizations in Kenya develop many more technologies than are released. The utility of the development of an agricultural technology is only realized if it has been transferred. These considerations led to the revision of this sub-target.

- Number of Seed Varieties Disseminated; this indicator was added to address problems evident in the framing of target 2.2 in the 1990 API (see discussion for the following indicator). By using a very specific definition for technology (seed varieties), USAID/Kenya is able to measure in a quantifiable fashion progress towards the target and sub-target.

- Increase the Number of Technological Packages Transferred to Dissemination Agencies; this indicator was dropped because of its non-specific nature and the problems inherent in its use, i.e., a technological package can consist of many elements and, thus, is very difficult to define in a useful and operational manner.

Target 2.2: Improve Agricultural Market Efficiency

Sub-target 2.2a: Improve Fertilizer Market Efficiency

**Strategic Objective 3: Increase Private Enterprise Employment While Reversing the Decline in Real Wages**

- Real Wage Bill Growth Rate; this indicator was dropped because the information provided by it is already captured in the two remaining indicators for this strategic objective.

- Private Sector Annual Employment Growth Rate; this indicator is a modification of the 1990 indicator, "Formal Private Sector Employment Growth Rate." This revision was made to include the informal sector, reflecting Mission private enterprise activities in both the informal and formal sectors. Included in the data presented are private sector formal and informal wages, self-employed and unpaid employment. The baseline, actual and planned growth rates for this indicator were changed to reflect the adjustment in the indicator. (Note: this indicator does not include data on parastatals.)

- Formal Private Sector Annual Average Real Wage Growth Rate; this indicator is a modification of the 1990 indicator, "Private Sector Real Wage Growth Rate." The word "Formal" was included in this year's iteration to clarify that the data do not capture the informal sector. USAID/Kenya attempted to gather wage data for the informal sector at the national level, but concluded that all available data were of very poor quality. The 1985 baseline growth rate was recalculated reflecting more current information and was changed slightly from that reported last year. The figure for 1990 indicates that real wages are falling more rapidly than was suggested by the number presented for 1989 in last year's API. The benchmark was adjusted based on USAID/Kenya analysis of Kenya's labor markets and potential for economic growth.

**Target 3.1: Increase Non-Traditional Export Earnings**

- Increase Investment in Non-traditional Export Enterprises; there are presently no reliable sources of data for this indicator. CBS captures investment data through several survey instruments, although only the Survey of Industrial Production (SIP) attempts to disaggregate exported and domestic production. The SIP has numerous limitations: 1) it only covers the manufacturing and mining sectors - (a large portion of Kenya's NTE enterprises come from outside these sectors), 2) coverage of the given sectors is incomplete, 3) the most current SIP data available are from 1986, 4) it is a mail-in survey and response rates are very low and of questionable accuracy. All of this means that investment data generated by CBS are often very rough estimates. In addition, CBS is reluctant to release any investment data. Even if they were made available, the structure of the data

would make them very difficult to disaggregate by non-traditional exporters. For these reasons this indicator was dropped.

- Non-Traditional Export Earnings; the benchmark for this indicator was lowered to be consistent with the 6 percent average annual growth rate projected in the Kenya Export Development Support project. Economic analysis for the project was updated in the spring of 1991 and that analysis is reflected in this revision.

- Number of Enterprises Engaged in Exporting Non-traditional Products; this indicator is a modification of the 1990 indicator, "Increase the Number of Non-traditional Exporters." This revision was made to increase the definitional clarity of the indicator. The indicator was moved to the target level because of its ability to capture impact, (indicators at the sub-target level are more oriented to program and project outputs). The baseline figure was adjusted based on the results of a USAID/Kenya-sponsored study of the sector, and the benchmark was increased accordingly. It should be noted that these data include information on parastatals.

- Total Employment in Formal Sector Non-traditional Exporters; this indicator was added as an alternative to "Increase Investment in Non-traditional Exporters." It is meant to measure progress toward the target of increasing NTE earnings and also reflects the Strategic Objective of increasing employment. These data include information on parastatals.

**Sub-target 3.1a: Improve Policy Environment for Exports and Expand Support Services for Enterprises Engaged in Exporting Non-traditional Products**

- Sub-targets 3.1a and 3.1b from the 1990 API were combined to derive sub-target 3.1a in the 1991 API. USAID/Kenya feels this is a presentation more consistent with the current API format and with Mission activities. As explained above, the indicators previously associated with these sub-targets have either been dropped or moved to Target 3.1 in this year's API.

- Number of Kenyan Organizations with Programs Designed to Support NTE Enterprises; this indicator was added and attempts to capture, at the most direct level, Mission activities which are designed to facilitate progress toward the target of increasing NTE export earnings.

- Number of NTE Enterprises Assisted per Annum; this indicator was added and attempts to capture, at the most direct level, Mission activities which are designed to facilitate progress toward the target of increasing NTE export earnings.

Target 3.2: Increase Profitability of Small & Medium Enterprises

- Increase the Number of SME New Starts; data were not available for this indicator. Although formal sector businesses must register with the Attorney General's Office, the information is not presently on computer, and the AG's Office is not able to even attempt to provide a listing of registered businesses. CBS maintains a "Master List" of registered businesses, but admits that it is very dated and that the information it contains on employment, etc., is not accurate or reliable. The Mission also questioned the ability of the indicator to measure changes in the profitability of SMEs, given distortions present in the Kenyan economy. For these reasons, this indicator was dropped.

- Average Annual Real Revenues per Establishment; this was added as a proxy indicator for SME profitability. While it is difficult to procure national aggregate revenue data, average revenue data are accessible and of relatively good quality. The indicator is disaggregated by formal/modern and informal sectors, to parallel the separate Mission activities that support enterprises in the two sectors. It should be noted that information on parastatals is included in the formal sector SME data. The informal sector data refer to the urban informal sector, and do not include the rural informal sector.

- Total Employment in SMEs; this indicator was added both as a proxy indicator for SME profitability and to reflect progress toward the Strategic Objective of increasing employment. The indicator is disaggregated by formal/modern and informal sectors, to parallel the separate Mission activities that support enterprises in the two sectors. It should be noted that information on parastatals is included in the formal sector SME data. The informal sector data refer to the urban informal sector and do not include the rural informal sector.