PD-AAZ-815

ISN 62526

UGANDA CONCEPTS PAPER

FY 88-90

USAID/Kampala

March 1987

TABLE OF CONTENTS

Annexes

I. INTRODUCTION

As we submit this concepts paper the economic and political situation in Uganda is fluid. The GOU is concluding a set of macro policy reforms with the IBRD and IMF as a prequisite to a May CG meeting to discuss problems, priorities, programs and assistance levels.

Peaceful conditions have returned to the economic heartland, but remnants of the former military regime continue to fight the GOU in the North Central/East part of the country which is, therefore, cut off from the mainstream of the economy. The fighting is a drain on resources and manpower and impedes effective implementation of an economic program.

The shape of government institutions and administrative mechanisms is still in the early stages of formation. In the short run, with 100-150,000 recently returned refugees in the northwest and 500,000 displaced persons back into the Luwero Triangle, resettlement/rehabilitation will continue to be the top priority for the GOU and donors. There are also key institutions, both governmental and NGO, in critical longer term development fields that can effectively utilize donor assistance despite the unsettled political-economic situation.

Key policy makers are prepared to listen and absorb; policy dialogue is both a possibility and a priority. Within a resettlement/rehabilitation framework, for the next generation and beyond, development must be based upon agriculture, livestock and fisheries for internal consumption and export. Initiatives in transport and industry must be built into this thrust, and programs in health and education should be designed with the needs of agriculture and the farm family in mind.

The problem of population pressure is real. Already in parts of the country soil exhaustion and erosion are apparent, and farming has reached "the top of the hills." Uganda could well solve its immediate political and economic problems, and in a generation face the disastrous situation looming in neighboring countries. The population problem is intertwined with agriculture, agro-industry and health and must be addressed. AID resources will focus upon key problems in the critical areas of food crops, production/marketing, related small scale agro-business/industry and child survival (population). The Mission has activities underway in these fields which are largely neglected by other donors. Thus, our proposed program concentration is to phase out the resettlement/refugee portfolio over the next 2-4 years and increase longer term development projects/programs during the same time. It should be noted that resettlement/refugee activities lead to, and blend in with, longer term development.

II. ECONOMIC OVERVIEW

A. Current Economic Situation

The Ugandan economy is in severe crisis. Foreign exchange reserves are critically low, inflation is increasing at an alarming rate, and the parallel exchange rate is 12 times the official rate.

The government budget deficit is expected to reach 8% of GDP, without precedent in recent years. The sources include large expenditures to rehabilitate a war-torn economy and a low level of tax revenues. Military operations in the north are an immediate and major drain. The balance of payments deficit is expected to reach $171 million, but could be greater if coffee prices continue to decline, or if the overvalued exchange rate persists.

GOU policy makers face difficult choices: foreign exchange availability is not sufficient to achieve investment targets, maintain adequate consumption levels via imports, and finance Uganda's external debt.

The internal requirements for foreign exchange are enormous. The resettlement of hundreds of thousands of people, rehabilitation of economic infrastructure (e.g., roads, educational and health facilities, water supplies, etc.), maintenance of petrol imports and other essential commodities, let alone the rehabilitation of previously productive enterprises, will require more foreign exchange than Uganda can earn through exports. A return to the productive capacity of the early 1970s will require substantial increases in foreign exchange earnings, and major increases in external assistance. (For an overview of Uganda's economy, see Annex B.)

B. Economic Potential and Investment Priorities

Potential for growth and recovery prospects. Agriculturally Uganda is endowed with some of the best "real estate" in Africa -- the basis for economic growth. But the economic environment must be radically improved if the economy is to rebound from the physical destruction and mismanagement of the past. The GOU is aggressively attempting to muster domestic and international resources for recovery. The President has established a National Economic Council consisting of his key economic ministers. The Council, with the assistance of the World Bank and IMF, is in the final phase of formulating a comprehensive macroeconomic policy reform program which is expected to be implemented with currency reform before mid-year.

If necessary financial incentives are provided, many trained Ugandans should return home, agricultural production could return to the high levels of 1970, and domestic marketing and foreign trade could increase substantially. But macroeconomic policy can only establish an environment for change, not necessarily the conditions required for sustained economic growth. Marketing, transport, agro-industrial and other constraints on agricultural production must be tackled. Research requirements could go begging; farmers will not necessarily have access to appropriate inputs, commodity markets, higher yielding varieties, etc. These concerns must be addressed together with macroeconomic adjustments.

Uganda enjoys substantial natural and human resources; the country is not one of Africa's "basket cases." Market oriented economic reform and increased donor assistance can lead to rehabilitation, dramatic increases in production and improved human welfare.

Resource Requirements. These are determined by national goals, a development strategy and an economic plan. Government planning stresses Uganda's historical advantages and experience and the goal is a return to the period when Uganda was a highly productive agricultural economy. The shortrun aim is to rehabilitate the economic and social infrastructure, which was "the pride of Africa," and previously productive enterprises in both agriculture and agro-industry. The plan emphasizes agriculture as the underpinning of the economy and envisions an important role for the private sector. (See Annex E: The Public Investment Plan).

Export Possibilities. In the mid-term Uganda's export revenues will be based upon traditional exports, dominated by coffee. The strong coffee prices of 1986 declined significantly during the first quarter of 1987, reinforcing the need to diversify exports.

To maintain or increase export volumes, domestic price increases will be necessary. With annual inflation around 200% p.a., and the exchange rate increasingly overvalued, real producer incomes deteriorated significantly during 1986. Consequently the need for a radical reduction in inflation and a major adjustment in the exchange rate.

A devaluation can create the necessary financial incentives to achieve major agricultural supply responses which can increase export volumes in 1988 and beyond. But this also requires improved marketing efficiency, rehabilitation of the transportation network and more trucks.

Export diversification will be required to mitigate the impact of fluctuations in international coffee prices and to expand total export volume. The GOU must also aggressively pursue increased trade with neighboring countries through the Preferential Trade Area. Uganda's relative comparative advantage in food crops, and the inability of neighboring countries to be food self-sufficient, should provide scope to increase food crop exports in the near term.

III. STRUCTURAL ADJUSTMENT AND STABILIZATION PROGRAM

A. Introduction

The seriousness with which the government is formulating its economic reform program was reported in a classified cable (Kampala 04051). Suffice it to say, President Museveni requested technical assistance from the IBRD in November in the formulation of a comprehensive currency reform program to be implemented before mid 1987.

Following an analysis of Uganda's economic circumstances, discussions with economic ministers, the IBRD and IMF, it is possible to anticipate the major components of the pending economic reform program. (See Section H, Annex B).

B. Social/Economic and Political Implications of Reform

1986 was a year of major hardship for Ugandans primarily due to inflation which increased from 125% at the beginning of 1986 to 200% a year by its end. Purchasing power declined rapidly and shortages in the market often meant less could be purchased with what little consumers had to spend. Rents and transport costs have at least doubled during the same period, thereby significantly increasing the cost of living for those dependent on the monetary economy.

Until the economy improves its productive capacity and inflation abates, consumers will continue to face shrinking real incomes. Many basic items, from vegetable oil to blankets, are imported. Ugandans will have to become more productive to make ends meet, and increase domestic output.

A comprehensive reform program is a long term effort. Political and economic reality mean that all necessary reforms cannot be implemented at once, nor will they continue to produce benefits without periodic adjustments. A one time adjustment in the exchange rate, for example, will not work, in part because the next adjustment is not likely to be sufficient to achieve fiscal balance or a liberalized foreign exchange market. Adjustments must be phased over a predetermined path to achieve the required objectives.

Since the next budget must avoid a large deficit (inflationary pressures) there will be losers as particular socio-economic groups receive budget cuts. Rigorous administrative controls on both revenue and expenditure will be required. Priority expenditures must be those that contribute most to productive activities and shortrun economic rehabilitation. Certain social expenditures such as health and education, are likely to be most severely cut. One can argue that the government cannot afford to maintain social services, but it also cannot allow the fields of health and education to decline further. These will be important areas for donor assistance.

Announcement of the reform program will be a major event and it will require popular support. The population must understand why reform is essential, what it is, and how it will benefit Uganda and the man on the street. Short-term impacts will be seen as largely negative and the program will test the strength of both the GOU and the people.

Large-scale domestic investment is not possible until savings, both public and private, are achieved. Savings require sacrifice at least in the shortrun and this must be part of the message. But savings will permit investment to take place with the subsequent harvesting of the benefits of the program. The political limitations on reform should be recognized. Without widespread support, a difficult and forward looking reform cannot pull Uganda out of its present circumstances.

Reform also has important political implications for the donor community. For AID the onus will be on us. The STATE/AID message has been clear -- governments must put their house in order and undertake reforms to reverse economic decline; economic assistance is contigent upon positive macroeconomic reform. Thus, responsibility requires a response when a government moves forward. The remaining issues are the timing, level and nature of our response.

C. Necessary Actions by GOU, Donors and the Private Sector

In February/March, the GOU held intensive discussions with the IBRD and IMF. Specifics of the reform program will have been largely agreed upon by mid March and will be reported by classified Septel.

The GOU has asked the IBRD to convene a Consultative Group meeting in May. If the meeting is to be successful the GOU must complete its reform program in time for the May presentation. The GOU is expected to (1) detail its investment plan and policy package (shortrun and medium term), (2) provide an accounting of resource requirements over the life of its program, including commitments to date, and (3) identify specific resource gaps for which it seeks additional donor assistance.

Donors will have to study the GOU's reform program in light of Uganda's economic circumstances and the level and relevance of their existing assistance programs. But the donors will have little time to reply and to pledge funds. We expect the GOU will have to rely upon the IBRD and IMF for short-term resource flows with the bilaterals beginning their support later in the year.

Private entrepreneurs require incentives and some government direction. We believe the public investment plan, economic reform and access to FX can encourage resource mobilization and targeted private investment in economic rehabilitation. The donors should not ignore direct assistance to the private sector.

D. Aid Role in Supporting Economic Reform

We want to support continued policy reform through policy dialogue and targeted additional resources.

Policy dialogue. Under the assumption the shortrun reform package will provide the necessary environment for economic growth and set the stage for achieving fiscal balance, AID should focus upon the sufficient conditions necessary to sustain a reform program. We envision our policy and resource focus will be largely on the agricultural sector -- production, marketing, agro-industry and to a lesser extent, trade. Uganda must become an increasingly important partner in the PTA, as regional trade could be a major mechanism to diversify Uganda's exports and increase foreign exchange earnings.

In the shortrun we will focus on pricing policy to create production incentives, longer term agricultural research, and policies to improve the structure, conduct and performance of both input and commodity markets. Our dialogue will be based upon analysis which we will undertake with government policy makers, so that it becomes a joint product that addresses their need for information, their policy issues and economic trade-offs as we and they see them.

Resources. Beyond our existing portfolio we hope to make the case that the opportunity cost of not allocating more AFR resources to Uganda is in fact large. The rationale will be based upon actual reform, planned reform over the intermediate term, expected high returns to our assistance dollars and the contribution of an expanding Ugandan economy to the growth of countries making up the strategically important Rift Valley region.

IV. USAID'S TWO TRACK STRATEGY

A. Overall Goals

If we could be so presumptuous as to set a development task for Uganda, it would be to restore the country's institutional capacity, manpower base, and physical infrastructure to where it was in 1970, updated by 1987 technology. These are essential to the overall goal of economic stability and restoration of production. This would mean a quantum jump in agricultural and agro-industrial production with a return to the prosperity of that period. Achievement of these goals also depends on a stable political system and economic policies which energize and channel the capabilities of the Ugandan people. However, large scale donor support is required as the cost of rehabilitating the war-damaged physical plant and infrastructure is beyond any potential near term export earnings.

To help in achieving these GOU (and AID) goals we see a two-track strategy for AID: (1) a completion of our humanitarian, but development related efforts in the resettlement of refugees/displaced persons, and (2) an expansion of activities in agriculture, agro-industry and population based on the GOU's medium term development strategy and priorities.

B. Refugee Resettlement Programs

Today, hundreds of thousands of displaced persons have returned to their villages and are attempting to reconstruct their lives with little capital or other assets. UNHCR believes another 50-100,000 refugees will return from Sudan and Zaire in 1987. All require tools, seeds, water, shelter, household goods, and access to schools, health facilities, credit, roads and markets. Rural commerce, small scale industry, transport and affordable energy sources must also be restored.

Our package of resettlement projects started in 1986 and will continue until scheduled termination when the income producing activities of the affected population should be restored. No new projects are foreseen. But total requirements are beyond the resources of any one donor and, indeed, donor cooperation has been at its best in these programs.

To minimize the management burden, USAID has provided inputs to UNICEF's Child Survival activities in rural drinking water as well as oral rehydration salts. USAID has developed two geographically based small farmer projects. Through a Cooperative Agreement with CARE and EIL, the West Nile Project has taken the lead in a multivaried agriculture rehabilitation program working with the first wave of returned refugees. The Rural Economic Recovery Project, through a Cooperative Agreement with ACDI, is about to start in the Luwero Triangle and other war damaged districts. This project will help set up a small farmer loan program through the commercial banking system, help restore the commodity distribution system, and import for commercial distribution commodities for agriculture and market town reconstruction. While these projects were presented and approved as humanitarian undertakings, their development impact will be significant. The resettlers are returning to some of Uganda's most important agricultural areas -- important production areas for coffee, tobacco, livestock, and food crops; they will be prime beneficiaries of longer term development activities and the key implementors in Uganda's development strategy. The above undertakings are fully funded, and we will extend their impact with local currency generated by sales of PL 480 commodities.

The Rehabilitation of Productive Enterprises Project, our largest, has as its immediate objective the provision of foreign exchange required by larger, commercial farm entrepreneurs to rebuild their production facilities or processing plants. We are upgrading the capacities of the commercial banks to undertake this type of lending as a continuing project output. If our evaluation scheduled for September 1988 shows a significant impact, we may continue our funding while urging other donors to contribute. This project can also be seen as a short run rehabilitation activity leading to longer term development.

C. Long Term Development

A reform program is a long-term GOU commitment, and periodic adjustments and midcourse corrections are inevitable. Uganda's resource requirements to achieve stability and growth insure that the GOU and donors are in for a long haul (for AID programs with a payoff beginning within 2-3 years).

The GOU is now in the final phase of formulating its macroeconomic and agriculture policies, but only just beginning to make the link between the two. This is an ideal time for AID to enter the on-going IBRD/IMF led policy dialogue. The economic situation will be in flux for some time, because of policy debates among various political factions. In the agricultural sector, we are the donor best equipped to carry on a continuing dialogue and we intend to do so. How much we can or should do depends upon policy reform at the macro and sectoral levels and, therefore, policy dialogue will be closely related to resource inputs.

Uganda could do well in all its political and economic undertakings and still be faced with a long term crisis -- the potential population problem. We can see the effects of rapid population growth on Uganda's neighbors. Rwanda survives only by outward migration, and parts of Kenya are not far behind. Uganda has, perhaps, a generation before facing the same crisis.

With our limited resources we should: (1) find resource and policy gaps which we can fill, including those where we can exercise leadership in mounting multidonor efforts, (2) ride "piggy-back" on other donor initiatives, and (3) start a few well-targeted new projects and/or program initiatives.

Supporting Policy Reform. We will continue to keep abreast of economic conditions by monitoring impacts and rigidities as reforms are implemented. Analysis will be on-going for those sectors where we have the greatest program interest. We will maintain policy dialogue with the IBRD/IMF, key economic ministers and their subordinates, and others of influence around the

President, and the President himself. Dialogue with key donors will be stepped up to share experiences and coordinate program assistance and support for the reform program. Our policy dialogue will be interrelated with our resource inputs. Each will reinforce the other.

Support to Key Sectors. Our support will be targeted largely to food crop production and marketing, related small-scale agro-industry, university trained agricultural manpower, food crop research, and child survival (population). We believe there is scope for increasing our direct involvement with the private sector, particularly in the field of food crop marketing and agro-industry.

It is important to note that the areas chosen for AID concentration are also AID/W priorities and receive minimal attention from other donors. Our strategy is one of continuity with a phasing out of resettlement projects and increased attention to carefully selected longer term development activities. We are not proposing to move into any new sectors or sub-sectors.

V. LONG TERM DEVELOPMENT PROGRAM ELEMENTS

Our refugee resettlement program is in place, fully funded, will not be expanded, and is well known to AID/W. We have already briefly commented on its role and value, and since this is a forward looking concepts paper, we need not include it further.

A. GOU Strategy and Priorities

The GOU's strategy and priorities for economic revival were well stated in President Museveni's January 26th "State of the Union" message. He said, ".... our economic programme hinges on reviving as well as intensifying production within the agricultural and industrial sectors with a view to creating an independent, well integrated, self-sustaining economy. In this regard our efforts will be directed at restoring traditional exports (coffee, cotton, tea, tobacco, hides and skins) and also at expanding the production of non-traditional export crops such as beans, sesame, and soy beans ...."

"Our priorities are the provision of:

- agricultural machinery and implements, seeds, herbicides, and animal drugs;
- trucks and spare parts for transport of produce and consumer goods;
- industrial raw materials and spare parts so that factories can produce light consumer goods for local consumption;
- basic utilities such as water and electricity, and
- the rehabilitation of roads to facilitate conveyance of commodities to markets and inputs and consumer goods to rural areas."

The long term development component of our strategy is based upon the President's stated objectives and priorities, and will combine project and non-project assistance with policy dialogue.

B. Non Project Assistance

Links to IBRD/IMF Programs and Beyond. Our support for comprehensive economic reform can be expressed during policy dialogue with the GOU. However, we will not blindly support "IBRD/IMF Programs" -- we must be convinced that our support is appropriate, well-timed and covers our major program concerns. In addition, we will need to stress sectoral policies that will be beyond the scope of the IBRD/IMF programs, or only lightly touched by them. In this respect, given our close working relations with the Agricultural Policy Committee -- the key GOU staff arm for research and proposing agricultural policies -- we can involve ourselves in agricultural policy formulation by sponsoring studies and providing advisory assistance. We also need to know what are likely to be opportunities for our program support, namely an AEPRP.

C. Links to Aid Project Assistance.

The substainability of our project and program goals depends upon continuing macroeconomic and agricultural policy changes. While we have the attention of key figures in the GOU because of their respect for our competence, their liking for Americans and the overall importance of the United States, additional resources can broaden and deepen their response to suggested and difficult decisions. Demonstrated USG support for the President's development goals will help overcome the resistance to policy changes within sections of the GOU and perhaps most important of all, increased resources can help ensure the acceptance of policy reforms and our project portfolio.

D. Forms of Non-Project Assistance

AEPRP. Uganda could be an ideal country for a modest ($10m) AEPRP. With heavy emphasis on project assistance by the donor community and GOU's continued need for balance of payment support, a targeted AEPRP could provide fast disbursing BOP support and achieve major short-term impacts. If given an indication of such funding, the Mission would identify areas where such assistance could support a focused policy reform effort and impact on sector growth. An AEPRP would permit the Mission to expand policy dialogue efforts and make program assistance that much more effective. Areas to be considered, with emphasis on the private sector, would include: agro-industrial development, input marketing including credit, stimulating inter-regional trade, and encouraging the diversification of agricultural exports.

Commodity Aid. With the necessary macroeconomic framework in place and sector constraints minimized, a modest CIP as a follow on to an AEPRP could have short term impact on agricultural production, private industry, and rural welfare while maintaining the policy change momentum. The Mission would identify options for a targeted CIP that could spur private sector investment in agricultural rehabilitation.

Food Aid. There is scope for an initial (2-3 years) food aid program despite a potentially productive agricultural base. Rehabilitation of agriculture and agro-industry will take at least 3-5 years. In the meantime a properly devised PL 480 program could increase the supply of critical food items to ease inflationary and nutritional pressures, without creating production disincentives or consumer dependence on imported commodities. One way to achieve this is effective monetization; another is to ensure that foreign exchange released by PL 480 imports is directed toward increasing agricultural supply responses. We see Food Aid as a resource available to the Mission to achieve its broader economic objectives, namely, to support policy reform, help reduce inflation, and support key components of the development budget which are inadequately funded with local currency as well as foreign exchange. (See Kampala 04548, dated 30 December, 1986, for a fuller description of our food aid program.)

D. Project Assistance

Agriculture (Food Production/Marketing)

Our strategy will center on critical sub-sectors not covered by other donors and which are critical to achieving the President's goals. These will be areas where we have demonstrated competency and experience in Uganda and which are within the managerial capability of our present staff. Our strategy will emphasize the role of the private sector in increasing agriculture productivity and sustaining economic growth. To carry out the President's strategy, the GOU has set as its objectives to:

- ensure an adequate supply of food throughout the country;
- ensure supply of raw materials to meet the needs of local industries and exports;
- ensure that soil, water, forestry and other agricultural resources are conserved and that land productivity is maintained and improved where possible;
- introduce improved farming systems which take advantage of available natural resources and include integration of crops, livestock and forestry;
- diversify agricultural production to reduce dependence on coffee and cotton while at the same time raising the unit value of these crops.

The GOU with the support of the IBRD has recently set up 11 Task Forces to review all aspects of agricultural development. The combined report of these teams will point out specific priority investments, obstacles to be overcome and policy issues that must be resolved. Specific investment and policy issues that the donors should address will hinge upon the late April Task Force reports and actions taken by government. USAID is funding staff for four of these Task Forces.

At the present time, the IBRD, EEC, IFAD, ADB, and FAO have a wide variety of agricultural projects underway or in planning, mostly centering on production and processing of traditional export crops or livestock. However, no donor is very active in the areas of current (and continuing) USAID concentration. The private sector and the cooperatives are actively involved with input distribution as well as produce marketing and processing. Marketing boards (e.g. Coffee) currently control key exports but this is under review.

Given USAID's current program and past involvements, AID/W priorities, and what we see as the direction in which the GOU is moving, our program focus is clear, though detailed proposals must await the reports of the Task Forces and the decisions flowing from them.

Research and Manpower Development. The bedrock of any long term agricultural program is research, and high quality manpower is the essential element. What stands out in Uganda is the need for new seed varieties - only two have been introduced in the last 17 years, and most germ plasm has been lost by war and neglect. In the shortrun, seeds must continue to be imported through donor assistance. However, new food crop varieties must be identified and tested in order to select varieties which can be quickly released for multiplication.

Uganda has a nucleus scientific staff and core research stations. Unfortunately both have been out of the mainstream of their professional fields for 15 years. The scientists are eager to refresh their skills and start research again.

The Makerere Faculty of Agriculture and Forestry, once the best in Africa, has fallen on hard times. Like the research stations, its facilities have drastically declined and personnel have been cut off from scientific advances. But with a staff of 45 Ph.D and MS personnel, a return to former eminence is possible. The Faculty has an important research role, but more important, it must educate the next generation of scientists and other high level manpower. The goal of building economic growth around agriculture requires this investment now.

USAID has modest food crop research programs with both the Ministry and the Faculty under an agreement with Ohio State University. Preparation of long term research strategies, rehabilitation of research stations and staff refresher training is underway. This assistance needs to be increased. Uganda should be placed in the top category under AFR's "supporting agricultural research and faculties in Africa" program. In time the faculty and the research stations could once again be centers of excellence for East Africa.

Credit and Cooperative Development. USAID assistance to the Cooperative Movement was instrumental in the 1960s in helping establish what was one of the best cooperative systems in Africa. USAID, through ACDI, provides assistance to the Co-op movement including agricultural inputs and more recently to the planned Uganda Agricultural Finance Agency (UAFA). Other donors are not working with co-ops.

The Minister of Cooperatives sees his role as "supervising only; the administration of cooperative organizations is to be done exclusively by the cooperatives themselves." Thus, the cooperatives are to return to the independent role of the 1960s with the GOU responsible for financial viability and upgrading of management. The Ministry has taken actions to confirm it is serious in giving up political control.

The GOU economic program calls for a mixed economy. There have been several examples recently where perceived failings of the private sector have led to state intervention. A strong cooperative movement is a safeguard against an increasing state role.

The Uganda Commercial Bank, with long experience in lending to the Co-ops, has classified district unions into three categories. The "A" group is credit worthy, the "B" group not yet, and the "C" group is not likely to become credit worthy. The Mission intends to work with the "A" group to expand their economic functions and with the "B" group to improve their management capabilities.

Small farm production credit, now available in only limited amounts, is essential to our strategy. We are already developing such a program through UDFA and with the Uganda Commercial Bank - the only commercial bank interested in small farm production credit. Rehabilitation of co-op infrastructure is also a prime necessity. The Mission will contribute local currency to the rehabilitation program drawn up by the Ministry of Cooperatives and Marketing. Management and technical training is also part of our plan. For the "A" group, agro-business expansion is a logical activity.

<u>Agro-Industry</u>. The GOU strategy for development of the industrial sector is based on the following objectives:

a) restructure the industrial sector to establish forward and backward linkages to agriculture, with agriculture supplying raw materials for agro-industry, and industry providing farm inputs and consumer goods;

b) broaden the industrial base;

c) be self-reliant in basic consumer and producer goods in which Uganda has a comparative advantage; and

d) adopt appropriate technology for the development of local industry.

The industrial sector is suffering from obsolete equipment, lack of spare parts, outmoded technology, and weak management. Industrial production is at 20% of rated capacity. The best one can say is that production has bottomed out and rehabilitation has started. Since industry is critical to urban employment, a modern technological base, efficient import substitution and export earnings, this sector deserves much donor attention.

It is GOU policy to reduce the public sector. The private sector will be allowed to take the lead and expropriated properties are to be returned to their owners. To facilitate these transfers, loans will be provided to private entities. While much still needs to be done to stimulate private sector growth, appropriate steps are now being taken.

Our Rehabilitation of Productive Enterprises (RPE) project is the primary on-lending facility for small to medium size commercial agriculture and agro-industry. But given the volume of funds expected to be available for agro-industrial rehabilitation from other donors, AID capital or TA inputs must be carefully targeted. As a first step, we are commissioning a study of current constraints and the role of the private sector. This should reveal both policy issues we would wish to pursue and financial inputs we could make.

AID is already involved in several agro-industries. Under the RPE project over 100 applications have been received for importation of dairy cattle, equipment and materials. Over the next 5-7 years Uganda could meet its internal requirements for milk and then consider exports to regional markets. RPE applications have also been submitted for production and processing of oil seeds to supply vegoil for internal consumption and oil seed cake for the livestock industry. There is today excess demand for vegoil and, therefore, prices are prohibitive. Since Uganda has an ideal climate for oil seed crops, there is tremendous potential for this industry.

Small-scale rural industry is wide open, beyond the current interest of other donors and just starting to gain the attention of the GOU. Yet it is essential to market town development, itself a key to agricultural and rural growth.

While our preliminary thinking and experience point us toward small scale agro-industry and commercial farming with a cooperative component, it is premature to pinpoint our precise sector role until our studies are completed and other donor activities known.

Transport Sector. The revitalization of the Ugandan economy, and especially agriculture, depends on the rehabilitation of the transport and road system -- 1,200 miles of paved and gravelled roads, plus 12,600 miles of access roads. The rail system is export oriented, but road-to-rail transport is lacking. This has been recognized by the President, and trucks are at the top of his "want" list.

European and multilateral donors have responded with large sums for rehabilitation of the primary road system and the railroad. UNDP has designed a Transport Strategy Project which includes the preparation of a national integrated transport plan. The Germans and UNDP are planning projects in rehabilitation and maintenance of rural access roads -- essential if small farmers are to participate in economic recovery. Since much of the cost of access roads can be covered with local currency, USAID proposes to use counterpart funds for this purpose thereby extending other donors' FX.

Child Survival (Population). Population growth rate is nearly 3.2% per annum. With unabated growth today's population of 14.3 million will reach 40 million by the year 2015. Rapid population increase makes it impossible to provide investment funds to upgrade social services. For example, with no fertility decline the number of school age children will double by the year 2000 and more than triple by 2015.

Although family planning was introduced in the early 1950s and the Family Planning Association of Uganda formed in 1957, programs were never given much government support in the early years of independence. In fact, under Amin family planning was discouraged. In 1981, after Amin's overthrow, the Obote Government adopted a new family planning and population policy, recognizing of population growth as a major factor determining long term economic and social wellbeing. The program never got off the ground.

The current government is fully supportive of population programs, but its first priority is a national immunization program. The President personally inaugurated the 1987 National Immunization Campaign, saying each locality would have a trained health worker and "strategies will be aimed at immunization, nutrition, control of diarrheal diseases and family planning."

Attitudes of individual citizens are changing. With limited urban incomes, parents are beginning to realize they can no longer support large numbers of children. In the overpopulated areas of the Southwest the inability to provide children with adequate farm land may soon have a similar effect.

Unfortunately, with the upheavals of the past 15 years neither the health nor education systems can respond to a nationwide family planning campaign. Thus a top priority in population programs (child survival) is the revamping and restoration of the health delivery system. This includes design of a sustainable system, improved planning and management, logistics, staff training, cost recovery, which will require large sums of foreign exchange and local currency to restore plant and equipment and pay in-country costs. For example, current projections indicate that there will be about 750 physicians in 1990. But just to <u>restore</u> the 1969 physician-population ratio will require 1400 doctors.

Many donors, including PVOs, are involved in the rehabilitation of the health sector, with UNICEF in the leadership role. UNICEF does not engage in family planning. The Church of Uganda, the Catholic Church and various missionary groups have major health programs, including family planning. The IBRD is designing a health sector project and has expressed interest in having AID implement the family planning component. But the Bank Project will not deal with the broader population issues. Within other donor programs, Population and Family Planning are neglected areas. With our small Family Health Initiatives (FHI) project, AID is the only donor currently in the population field in any meaningful way.

Given the looming population crisis, we propose to assist population efforts through GOU primary health care, education and women's programs, support the activities of Missionaries and local churches, and the Family Planning Association as well as help upgrade the management component of local PVOs. Of course, all agricultural and agro-industrial projects impact on population strategy. We want to go from the limited FHI project to a general population program.

USAID would also continue to assist the UNICEF rural drinking water and ORS activities with dollar inputs until phase-out, and use counterpart funds for GOU and donor child survival projects. The GOU, with WHO assistance, recently formulated the National Five Year Plan to control AIDS. In this immediate crisis, we would provide the services offered by the S&T Bureau's new education project, condoms, and counterpart funds for local costs. WHO has chosen Uganda as a priority country for its assistance.

The success of the GOU's health program depends upon the resolution of two policy issues - cost recovery and the structure of the health services. The Minister of Health has recently moved away from the past Government policy of free services for all, to charging fees for those who can afford them.

Responsibility for the health system is split between the Ministry of Health and the Ministry of Local Government in a way that fragments the system and leaves gaps and wastes resources. USAID has weighed in, and will continue to discuss these key policy issues.

The GOU has formed an interministerial task force, aided by outside consultants, to recommend policies, priorities, and organizational management structures for the health system, based on its goal of "health for all by the year 2000." This includes the two issues mentioned above. How USAID implements its activities will be influenced by the decisions flowing from this Task Force report.

VI. CONCLUSIONS

As the political situation stabilizes and macro policy changes appear certain, the major donors are coming forth with increasing sums of foreign exchange (the EEC announced in late January a $150 million input over three years). However, there is still a foreign exchange shortage given the magnitude of the rehabilitation required, and the shortage of key consumer goods, industrial spare parts and raw materials.

Perhaps even more important, as the donor programs expand, the GOU will have neither the foreign exchange nor local currency to take over operating costs, and this will continue until both exports and tax revenues increase.

There are major gaps in donor programs that impede long term growth. Given the current and medium term (2-5 years) outlook for Uganda and predicated donor inputs, an appropriate AID program becomes clear:

1) Completion of existing short term rehabilitation projects;

2) Grant Food Aid and AEPRP - to save or provide foreign exchange, generate local currency, and support policy dialogue;

3) Food production and marketing built around research and manpower development, credit and cooperative development and marketing studies;

4) Agro-business and industry - small and medium scale commercial agriculture and agro-business including market town rehabilitation; and

5) Child Survival - centered around population/family planning as areas little touched by other donors.

Our program is thus based upon the following factors:

- Priorities set by AID/W;
- Priorities set by the President of Uganda;
- Within those priorities a concentration upon sub-sectors not adequately covered by other donors; and
- Where we have demonstrated competance and experience in Uganda -- essentially in sub-sectors in which we are currently involved.

ANNEX A: Staffing

USAID can carry out the expanded program of activities outlined in this concepts paper with its current staff -- except for an expansion of the Child Survival Program.

With an Assistant Director/Program Economist and Agricultural Economist, we can undertake a policy dialogue at both the macro and sectorial levels. The PDO can handle his current project workload as well as provide support services on project management and procedures and limited engineering advice. Our Executive Officer serves as contracts officer. Our Agricultural Officer along with the Agricultural Economist can handle their division's responsibilities. The Program Officer, besides conventional functions is able to supervise the participant training program and the accounting section. He also handles our Child Survival portfolio. The Mission Director has become the PL 480 Officer as well as providing backup along with the Assistant Director when other staff positions are vacant or incumbents away from post.

It is tight, but doable with REDSO and RFMC assistance when needed. However, a major expansion in population and/or other Child Survival Programs will require one additional staff member with technical skills - a DH or PSC.

In addition, we may have to consider a TCN, or PSC controller as the work load of our accounting office increases - particularly as we monitor the use of counterpart funds. We are able to handle our present and increasing workload because of competent and motivated local staff. NOTE: We have no American secretary or C & R position.

ANNEX B: Uganda's Economic Circumstances

A. Current Economic Situation

The economy as of February 1987 is in disarray; a severe economic crisis is setting in. Foreign exchange reserves are critically low, inflation is increasing at an alarming rate, currently 200 percent p.a.; and the free market foreign exchange rate is 12 times the official rate and there are no signs it will abate.

Under present policies the government budget deficit is expected to reach eight percent of GDP during the current fiscal year, without precedent in recent years. Sources include large expenditures needed to rehabilitate a war-torn economy and a low level of tax revenues given a weak tax base. Another important aspect is the on-going military operation in the North. The balance of payments deficit is expected to reach $170 million but could be greater if coffee prices continue to decline, or if the overvalued exchange rate persists, thus encouraging smuggling and thereby reducing official purchases and export earnings.

GOU policy makers are faced with difficult policy choices. The policy trade-offs are well defined. Foreign exchange supplies are not sufficient to achieve investment targets, maintain adequate consumption levels via imports or finance Uganda's external debt.

The internal requirements for foreign exchange are enormous. Just the rehabilitation of economic infrastructure (e.g., roads, educational and health facilities, water supplies, etc.), maintaining petrol imports and other essential commodities, let along requirements for the rehabilitation of previously productive enterprises will require more foreign exchange than Uganda can earn via exports. Getting the economy back to its productive capacity of the early 1970s will require not only substantial increases in foreign exchange earnings, but also major increases in external assistance.

B. Macro Prices

Exchange Rate: With the announcement of the August 1986 budget the GOU unified its dual exchange rate system. At the time the official rate was Ush.1470/$ and the dual rate was Ush.5000/$ Unfortunately, unification was set at Ush. 1400, or in the wrong direction, establishing an exceedingly overvalued exchange rate to guide the economy. The overvalued exchange rate, in the wake of hyper inflation is eroding production and export incentives, contributing to an increasing budget deficit, causing dwindling foreign exchange reserves and reduced earnings, and forcing the private sector to rely upon higher priced foreign exchange in the parallel market. The magnitude of the overvalued exchange rate is reflected by the fact that domestic prices for coffee, tea, cotton and five food crops are less than border prices and, therefore, the government budget must now subsidize principal exports. In the final analysis the existing exchange rate favors domestic consumers at the expense of farmers, Uganda's principal source of foreign exchange earnings.

Interest Rate: Current savings and lending rates are high by international standards (25 and 38 percent respectively). However, with the present rate of inflation running at 200 percent per annum, interest rates are negative in real terms. While local private commercial banks are awash in

14

loanable funds, with the current rate of inflation there is little incentive to lend, particularly beyond very short term working capital loans. While banks cannot charge interest rates that would reflect a real rate (there would be no demand for loans), they also cannot afford to lend long-term in the present inflationary environment.

Inflation: During February 1987, inflation was raging at an annual rate of 200 percent and increasing. This is compared to 24-, 35- and 138 percent in 1983, 1984 and 1985 respectively. Simply put, there are just too many shillings chasing too few goods. Inflation has already eroded the real value of the April 1986 farm gate price increases for key agricultural commodities. For example, the 80 percent increase in coffee prices was fully wiped out in October 1986. Thus, production incentives have plummeted and the incentives for smuggling have increased substantially. Earlier projections of official foreign exchange earnings and tax revenues for the current fiscal year are likely to be down substantially.

C. Money Supply

In order to finance a growing budget deficit the Bank of Uganda has been printing money. The money supply increased 40 percent between June 1985 to December 1986, by 50 percent between January 1986 to June 1986 and by 70 percent since then. Thus, the money supply has more than doubled since January 1986 thereby fueling inflation.

D. Scarcity of Foreign Exchange

Foreign exchange reserves have declined and are approximately $21.0 million which is only sufficient to pay for 2 to 3 weeks of imports. Thus, the Bank of Uganda will find it increasingly difficult to finance more than meager levels of imports if the GOU is to remain on track with its external debt service. Given declining coffee prices and the increased incentives to smuggle exportables, prospects for achieving previously projected foreign exchange earnings of $360 million in 1987 are bleak.

Productive enterprises are finding it exceedingly difficult to obtain the necessary foreign exchange to import raw materials, spare parts and minimum inputs. For those in the private sector foreign exchange has to be acquired in the parallel market, thus not only increasing their costs of production, but also the price for their ultimate goods and services. In fact what has happened in recent months is that the market for foreign exchange at the official rate has been reduced to inflows from foreign aid, payments for petroleum imports and dollars to finance selected debt service payments. Almost everything else is being financed in the parallel market. Thus, the structure of prices in the economy, with the exception of those imports financed at the official rate, already reflect a significantly depreciated exchange rate.

E. Parallel FX Market

It is difficult to get a handle on the actual depth of the parallel market. But, it is certain the demand for dollars is greater than the supply, consequently, the increasing divergence between the official and parallel exchange rate (the latter during February was Ush. 16,500/$). The parallel market is increasingly attracting dollars that would otherwise enter the commercial banking system and ultimately the Bank of Uganda.

11

F. Debt Service Burden

Uganda's debt service burden, relative to current foreign exchange earnings is enormous. During the current fiscal year, the country's debt service is projected to be $201 million, of which $93 million is owed to the IMF. This magnitude of debt service has already limited Uganda's capacity to import and finance rehabilitation activities and consequently stimulate economic growth. Policy makers now face critical economic and political trade-offs that will influence the country's economic stability and growth and its external relationships.

G. Urgency of a Reform Program

There is an urgent need for sweeping economic reform to correct the major distortions and imbalances in the Ugandan economy. The nature of the reforms required has been briefly described below. A difficult road lies ahead, but if the GOU pursues a realistic economic strategy and a well-targetted development plan, coupled with necessary policy adjustments both in the short and intermediate term, then necessary domestic resource mobilization and external resource flows should be forthcoming in the form and amount necessary to put Uganda back on track toward sustained economic growth by the end of this decade.

H. Required Economic Reform

Immediate Policy Adjustments. The macroeconomic issues requiring immediate attention are (1) establishment of a flexible exchange rate and corresponding measures in price liberalization, import administration and taxation, (2) continued recovery of export volumes, and (3) restoration of fiscal balance.

To restore economic stability with growth the GOU should take the following immediate reforms:

1. Immediate devaluation to improve production and export incentives and rationalize import demand; liberalize the operation of the foreign exchange market with periodic devaluations.

2. Eliminate price controls on imports, and simultaneously change the structure/level of import tariffs and duties.

3. Reduce the effective rate of taxation on agricultural exports by granting producers real price increases, and improve the efficiency of agro-processing and marketing.

4. Reduce the government deficit by exercising greater control over government expenditures.

Medium Term Measures. Additional measures will be required to sustain growth and accelerate investment. A medium term program should be geared to (1) rehabilitating war-torn districts, (2) restoring economic stability, (3) establishing producer price incentives and competitive interest rates, (4) restoring accountability and discipline to the public sector, (5) achieving fiscal balance, and (6) restoring a sustainable BOP position.

To achieve these objectives, policy actions are required to:

1. Implement a rationalized public investment program aimed at recovery of agricultural and agro-industrial production. The program should lead and complement private investment to change the productive structure of the economy. This change should emphasize export diversification into non-traditional exports and agro-based processed commodities. It should be complemented by efficient import substitution to reduce dependence on imports of basic agro-industrial commodities.

2. Accelerate investment in economic infrastructure, particularly roads, water supplies and electric power.

3. Increase taxes on income from coffee production, processing and trade, and from economic activity as a whole.

4. Improve agricultural production through more efficient marketing of traditional export crops; strengthen the agricultural research program, particularly food crops, livestock and commodities which offer real potential for export diversification; improve the supply of inputs, and develop a more efficient agricultural credit system.

5. Permit uninhibited marketing of food crops by the private sector and allow competition with marketing boards in the export of agricultural commodities.

6. Promote mobilization of domestic resources through creation of a more active capital market with competitive interest rates.

7. Improve the efficiency and operation of parastatals that can operate on a commercial basis, and divest in those enterprises which require large capital transfers or subsidies; permit the private sector to compete with parastatals.

8. Aggressively pursue competitive trade with neighboring countries through the Preferential Trade Area.

24

ANNEX C: "Back to Luwero: recovery slowly takes shape in war-battered Ugandan district." by David Crary, Associated Press Writer (21 January, 1987)

Tongolo, Uganda (AP) - Scorched rubble litters one of his pastures and his murdered foreman is buried in a sack in another. But Mohammed Mayanja, who lost an eye as well as his dairy farm, is back to do business in the Luwero Triangle.

The once-prosperous farm was destroyed by Government soldiers in April 1982 during a counter insurgency campaign which devasted the populous, fertile region directly north of Kampala.

But the guerrillas of Yoweri Museveni's National Resistance Army won the five-year war in January 1986, and since then Luwero slowly, steadily has begun to recover.

No precise statistics exist to quantify Luwero's suffering. Some Government and relief agency officials believe as many as 200,000 people in the region were killed and even more displaced during the insurgency against President Milton Obote's army. "There was a very great fear then," said Mayanja as he walked across a recently re-cleared meadow. "The forests were full of soldiers. "But now we are very optimistic because things have been stable for a year."

Mayanja, who has a house in Kampala, wasn't at the farm during the attack, but his account -- based on reports from surviving employees -- is vivid. He said soldiers killed the farm's manager, two other workers and a visiting woman. They ripped metal roofs off the buildings, set fire to plastic water pipes, dumped diesel fuel out barrels, and herded off his 400 cows at gunpoint to be sold at the market, he said.

In August 1982, Mayanja said, soldiers accused him of supporting the guerrillas, took him to a Kampala barracks and beat him so severely that he lost his right eye. He said he paid his way out of jail after a week but didn't return to his farm until February 1986, after Museveni had become President. Now, having qualified for a 158,000 dollar loan from the U.S. Agency for International Development, Mayanja has built up a herd of 80 cows, cleared some of the overgrown fields and started to repair the damaged buildings.

Richard Podol, Director of the USAID Mission in Kampala, said entreprenurial farmers like Mayanja, who have experience but little cash, need help if Uganda is to rebuild an agricultural industry that has gone downhill since dictator Idi Amin took power in 1971.

"Uganda was once self-sufficient in milk production. Now there are only trickles, and people depend on imported dry milk," said Podol, whose agency is making 15 million dollars available for loans to private-sector agricultural projects. Not far from Mayanja's one-square-mile farm, a drilling crew sponsored by UNICEF was at work in the village of Kalege on one of more than 300 new wells planned for Luwero. Dozens of children watched the crew, but a few yards away another group of youths ignored the drilling and followed their teacher's lessons on a blackboard.

The pupils had no desks and no books, and their classroom and the rest of the one-story school had no roof. Villagers said the corrugated metal was stolen by Obote's troops. Repairs of the school proceeded even while the class was in progress. Carpenters positioned roof beams, and men and women in a nearby shed made bricks for new walls with a hand-powered machine donated by the International Labor Organization. Such projects, generally modest in scale, have started up throughout Luwero, but rehabilitation will take years. Many displaced residents have yet to return, in part because neither they nor Museveni's impoverished government can afford materials to replace their destroyed homes.

In many towns, virtually every shop and home is an empty shell, their doors, roofs and furniture carried off by soldiers during the war. One consequence of the extensive displacement is that many Luwero tracts are now subject to ownership disputes, sometimes pitting landlords against tenant farmers.

Dennis Pain, Director of Uganda Operations for the British-based relief agency OXFAM, said the government may authorize its newly established "resistance committees" to resolve such disputes. He said most of these village committees are controlled by peasants and collectively could implement sweeping land reforms if given arbitration powers.

But the uncertainties ahead don't dilute the widespread belief that Luwero is no longer a killing field. When John Kiberu, a young preacher and USAID driver from Luwero, who said Obote's soldiers killed his grandparents, was asked if he thought peace would endure for a while, his reply was emphatic. "Not for a while," he said, "for ever."

ANNEX D: Uganda's Bio-Physical Environment

1. Background

Uganda has a total land area of 214,000 sq.km. About 30 percent of the total area is presently arable, 20 percent pasture, and 12 percent national parks or game reserves. About 20 percent is occupied by inland waters and swamps; the rest is urban and waste land.

Of the total land area, 81 percent may be potentially arable. In the early 1970s, about 49,000 sq.km. (20 percent) of this total land was cultivated, the remainder being unimproved pastures and woodlands. Although official statistics on land use after 1973 are not available, estimates indicate that area under cultivation expanded at least in proportion to population increase. Therefore, the area under cultivation is assumed to be 56,000 sq.km. (5.6 million hectares and 23 percent of total land) today.

Uganda has a benign climate with plentiful sunshine, good rainfall (except in the northeast and part of Ankole) and low temperature variability. Most of the country has two rainy seasons, and total rainfall ranges from 500 to 2,250 mm annually.

Crops grown depend upon soil types and rainfall. In the south, centre, and west, where rainfall is significant (900 to 1,500 mm), perennial crops predominate: coffee and tea are produced as cash crops, with bananas as the main staple food. Cereals (maize, millet, sorghum), pulses, and oil seeds, however, are becoming an important part of the cropping system. In the north and east, where rainfall is lower (750 - 1,500 mm), and the dry season intensive, seasonal crops are grown: millet, sorghum, maize, groundnuts, cassava, and sweet potatoes as food crops, and cotton, tobacco and potentially sunflower as the main cash crops.

Farming in Uganda is generally mixed farming by smallholders. Farming practices are traditional and work is done by hand. Use of fertilizers and chemicals is limited to cash crops, such as tobacco. Farm size varies across the country, from 1.3 hectares to 1.5 hectares in more fertile and mountainous areas of the southwest where population pressure exists, to 8 - 9 hectares in the north.

2. Physical Geography

Uganda has a diversity of geographic conditions. The physiography is characterized by a series of plateaux, the surfaces of which are lower in the north and center and higher in the South, Soutwest and East. The borders of Uganda are characterized by an impressive mountainous topography. To the West -- the Mufumbiro volcanoes, Ruwenzori mountains and the trough of the Western Rift. To the East -- Mount Elgon, and the Tororo Range. The lowest area is in the Northwest on the Sudan border where the Albert Nile falls below 600m.

There are 5 major ecological zones in Uganda, each with its own soil characteristics, rainfall and agricultural potential. These are:

1) Afro-Alpine - covering 8% of the land area and high fertility; deep, well drained soils; rainfall over 1200 mm/yr; high agricultural potential (12,400 sq km).

2) Tropical - covering 19% of the land area; medium to fair fertility, well drained soils; rainfall over 1100 mm/yr; medium agricultural potential (32,600 sq. km).

3) Dry Sub-humid - covering 46% of the land area; fair to low fertility, medium drained soils; rainfall less than 1100 mm/yr; fair to low agricultural potential (71,600 sq. km).

4&5) Semi-Arid and Arid - covering 20% and 7% of the land area respectively.

3. Soils.

The more important soils for agricultural purposes and their salient characteristics are the following:

1) Buganda Surfaces (42,240 km^2): South of Lake Kyoga, five types of deep sandy clay loams of medium/high productivity. Around Lake Victoria they form the "fertile crescent".

2) Tanganyika Surfaces (78,190 km^2): North of Lake Kyoga, West Nile and Southwest Uganda; five types of sandy clay laoms of low/medium fertility.

3) Karamoja Surfaces (16,301 km^2): N.E. Uganda; two types of sandy loams of very low fertility.

4) Rift Valley Soils (12,480 km^2) West and North of Uganda bordering the Rift Valley are two types of mostly sandy clay loams, plus alluvials of medium to high fertility.

5) Volcanic Soils (4,980 km^2): Mount Elgon, North Karamoja and Southwest Uganda; medium/high potential soils except in Karamoja where it is low.

6) Alluvial Soils (27,400 km^2): Central Northern Uganda and West of Lake Victoria are river and lake deposits of low fertility.

7) Others (15,035 km^2): Northern Uganda soils of low fertility.

4. Climatology

Because of Uganda's equatorial location, sunshine is plentiful and temperature ranges are small. The weather is determined by the Inter-tropical Convergence Zone which brings two rainy seasons in April-May and again in October-November. The cooler winter season falls between the wet seasons, in June-August. Climatic conditions in selected towns are given below.

Town	Altitude (m)	Temperature Min/Max (°C)	Rainfall (mm/yr)
Kabale	1871	10-23	994
Gulu	1109	17-29	1470
Kampala	1310	17-27	1180
Fort Portal	1540	13-25	1530
Jinja	1142	16-28	1272
Mbale	1220	16-29	1186
Soroti	1127	18-30	1311

5. Agricultural Zones

Climatic and soil conditions have played a decisive role in defining Uganda's patterns of agriculture.

- 60% of the south has a bimodal rainfall of 1400 mm which encourages perennial crops and continuous cropping.

- Unimodal rainfall of 700-100 mm in the north followed by a protracted dry season favors only seasonal crops and distinct cropping seasons.

- Mean min/max temperatures range from 16°-31°C, favor a wider choice of crops.

- Rich aluvial soils around Lake Victoria and similar good soils further north, favor various types of crop production.

Accordingly major agro-ecological zones emerge. About 70% of the cultivated land is planted to seasonal crops, and 30% to permanent crops. In Buganda, however, over "0% of the cultivated land is under permanent crops, coffee and banana; 38% of the Central Region is pure coffee and bananas; 60% of the Eastern Region is cotton and millet; 40% of the Northern Region is pure cotton; and 70% of the Western Region is bananas and tea. Overall, pure stands are 100% for teas, wheat and rice; 40% for coffee; 74% for cotton; 50% for cassava; 45% for groundnuts; 16% for maize; 50% for sorghum or millet; and 60% for bananas.

6. Farming Systems

Farming systems and rotations vary widely in Uganda, but four main patterns can be distinguished:

Plantain-Coffee: In more fertile regions these two perennials are the main ones while maize, pulses, oilseeds and rootcrops are rotated on a 3 year cycle. Where plantain is the main crop, maize, sorghum and sweet potatoes are popular. In coffee areas, livestock are valued as a source of manure for increased yields.

Plantain - Millet - Coffee: From the south and west of Lake Kyoga this pattern forms a transitional belt across the country.

Cotton-millet: In the north, cotton, then millet/sorghum/pulses, then maize/peanuts/pulses are planted over 3 years followed with tobacco/millet/pulses, followed by sesame/pulses. Finger millet predominates, sorghum is common in the east and cassava in the drier west.

Pastoral: Occurs mainly in the drier Karamoja area.

7. Districts Important to Mission Agricultural Program.

The following districts are centers of concentrated effort for present and future USAID agricultural programs. Consequently the salient features of these districts are given below:

a) The Luwero Triangle: Luwero, Mubende and Mpigi districts.

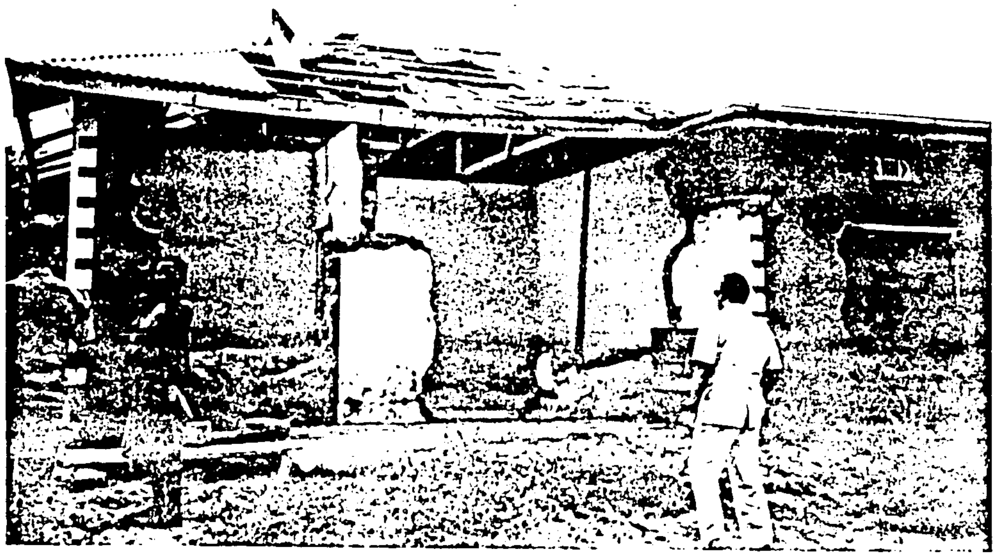
The three districts have deep sandy to clay loam soils with medium to high fertility. There are two main rainy seasons with annual total rainfall over 1,200 mm. These are among the richest agricultural zones of Uganda, producing a wide range of food crops (plantain, potato, cassava, maize, beans and others) and cash crops (coffee, cotton, tea, cocoa, tobacco, sugar cane). Moreover, the land is suitable for livestock development (dairy, beef cattle, pigs, poultry, goats). Forest reserves cover 42 sq.km. in Luwero, 75 sq.km. in Mubende, and 37 sq.km. in Mpigi.

b) <u>Arua and Moyo districts.</u>

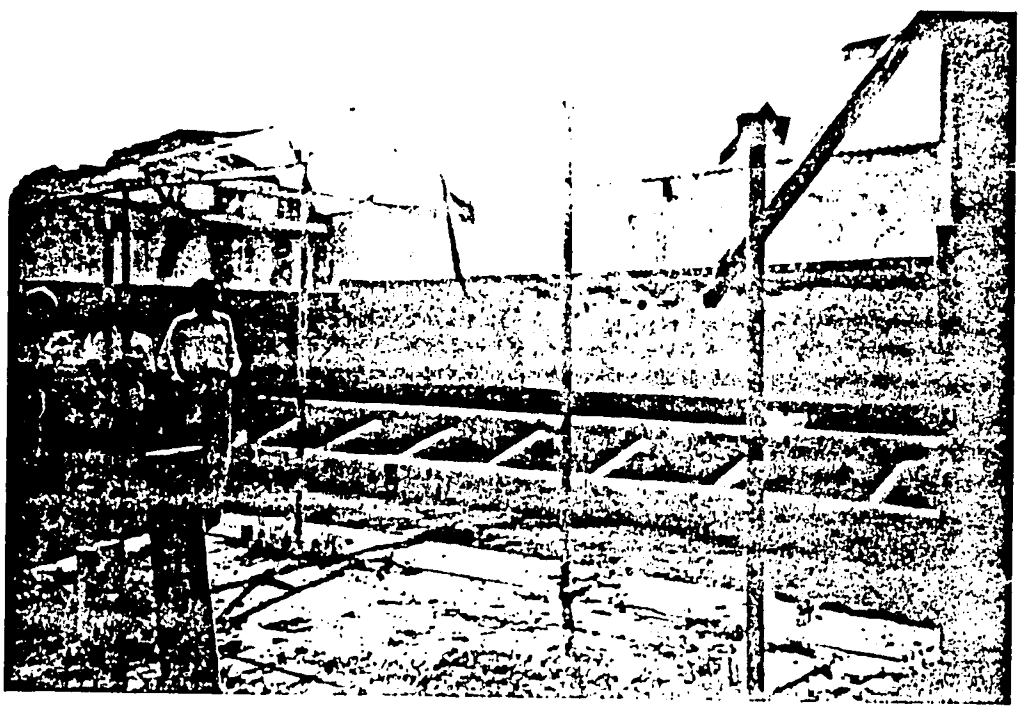
The West Nile Region is a potentially rich area with the capacity to produce food and cash crops for other parts of Uganda, northern Zaire, and southern Sudan. The region traditionally grows millet, cassava, sorghum, beans, and cash crops (cotton, coffee, and tobacco).

c) <u>Soroti, Kumi, Mbale and Lira districts.</u>

These are natural zones for production of both food crops (millet, maize, sorghum) and cash crops (arabica coffee, oil seeds and cotton). In the district of Soroti, people need to cultivate extensively with the help of oxen and ploughs to increase yields . Ox traction has been popular in Soroti district because of availability of cattle. As a result, cotton production expanded greatly before the disturbances, but has experienced a great reduction in production in recent years.

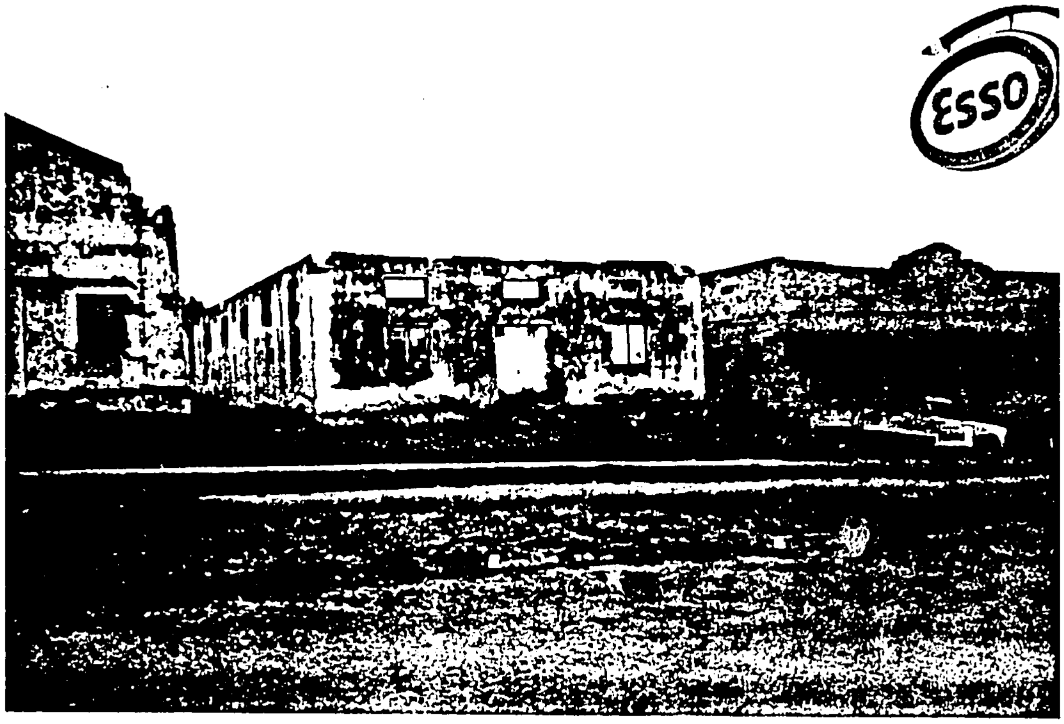


War Damaged Farm Building in Luwero Triangle

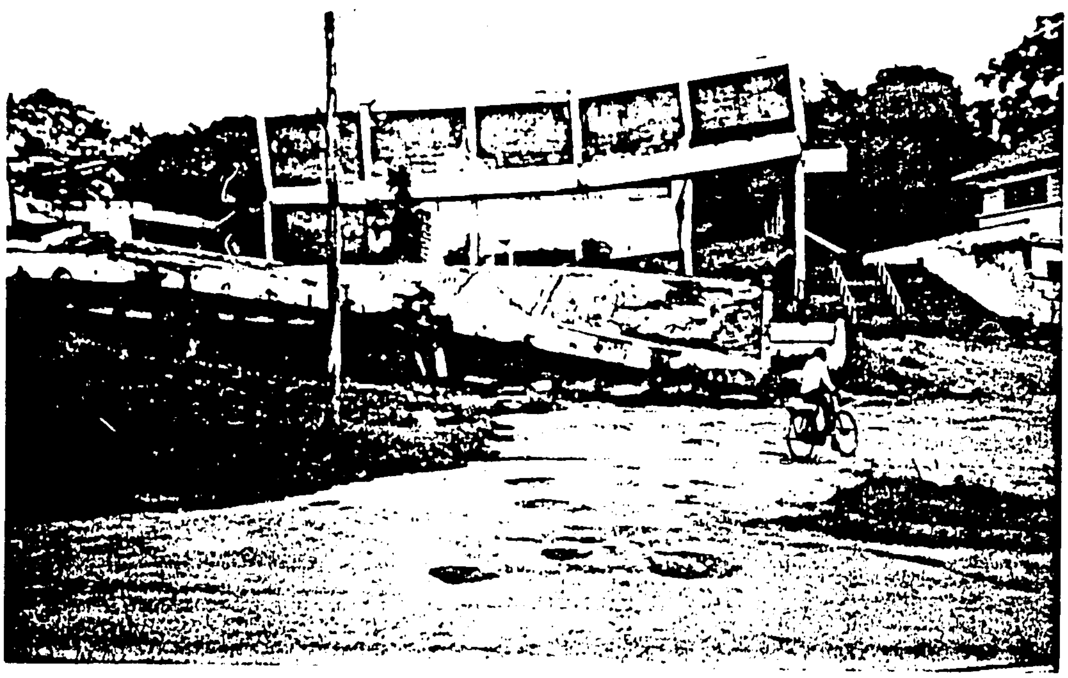


War Damaged Dairy Farm in Luwero Seeking
RPE Rehabilitation Loan

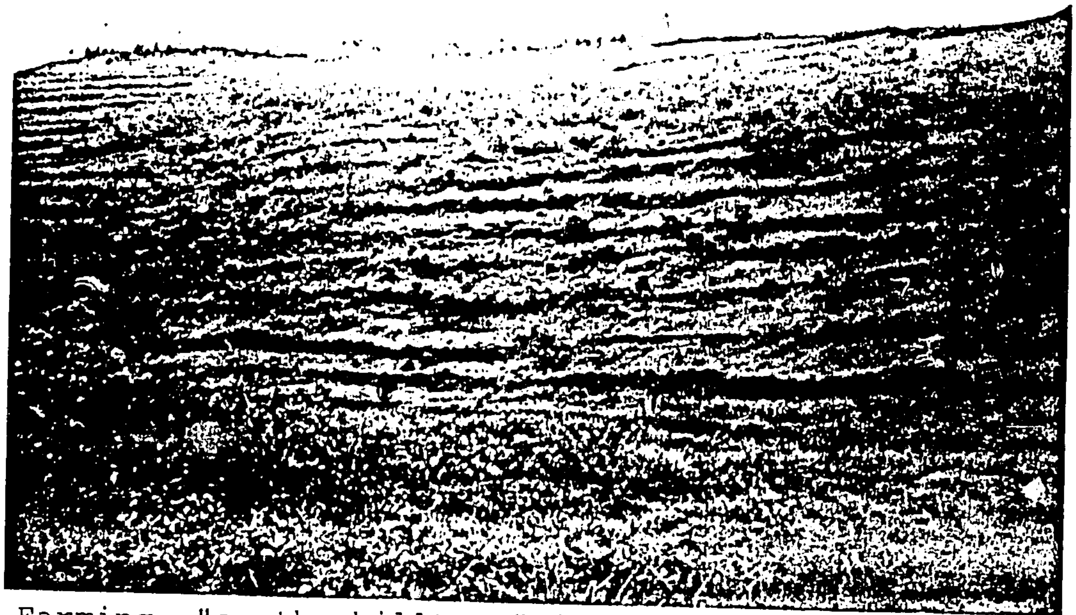
Evidence of Environmental Problems in Agricultural Areas of the Southwest.



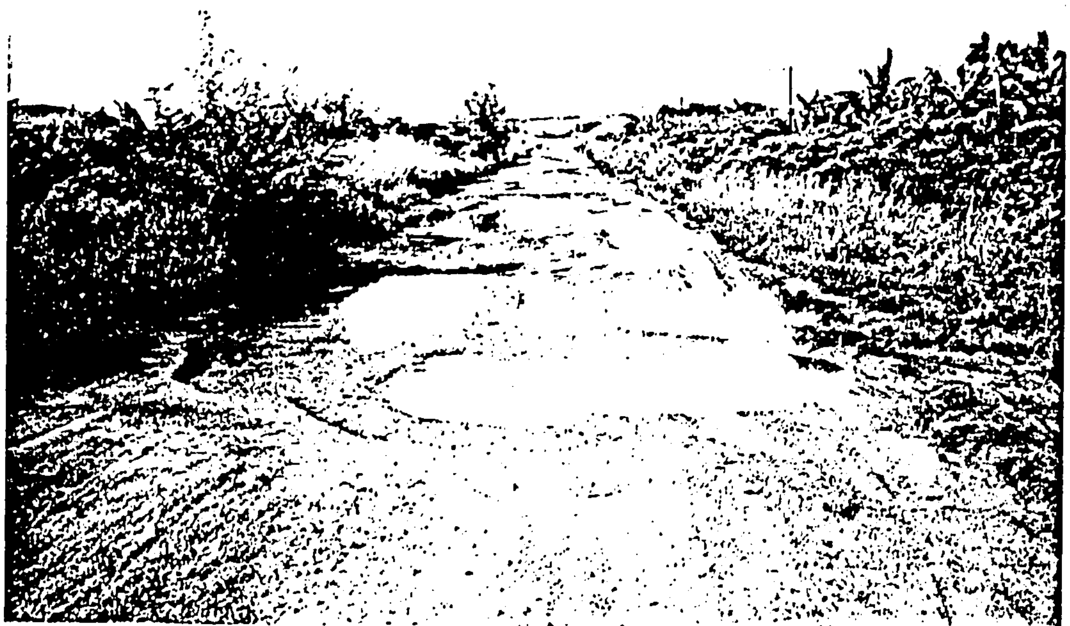
War Damaged Commercial Building in Masaka Town



City Hall Masaka



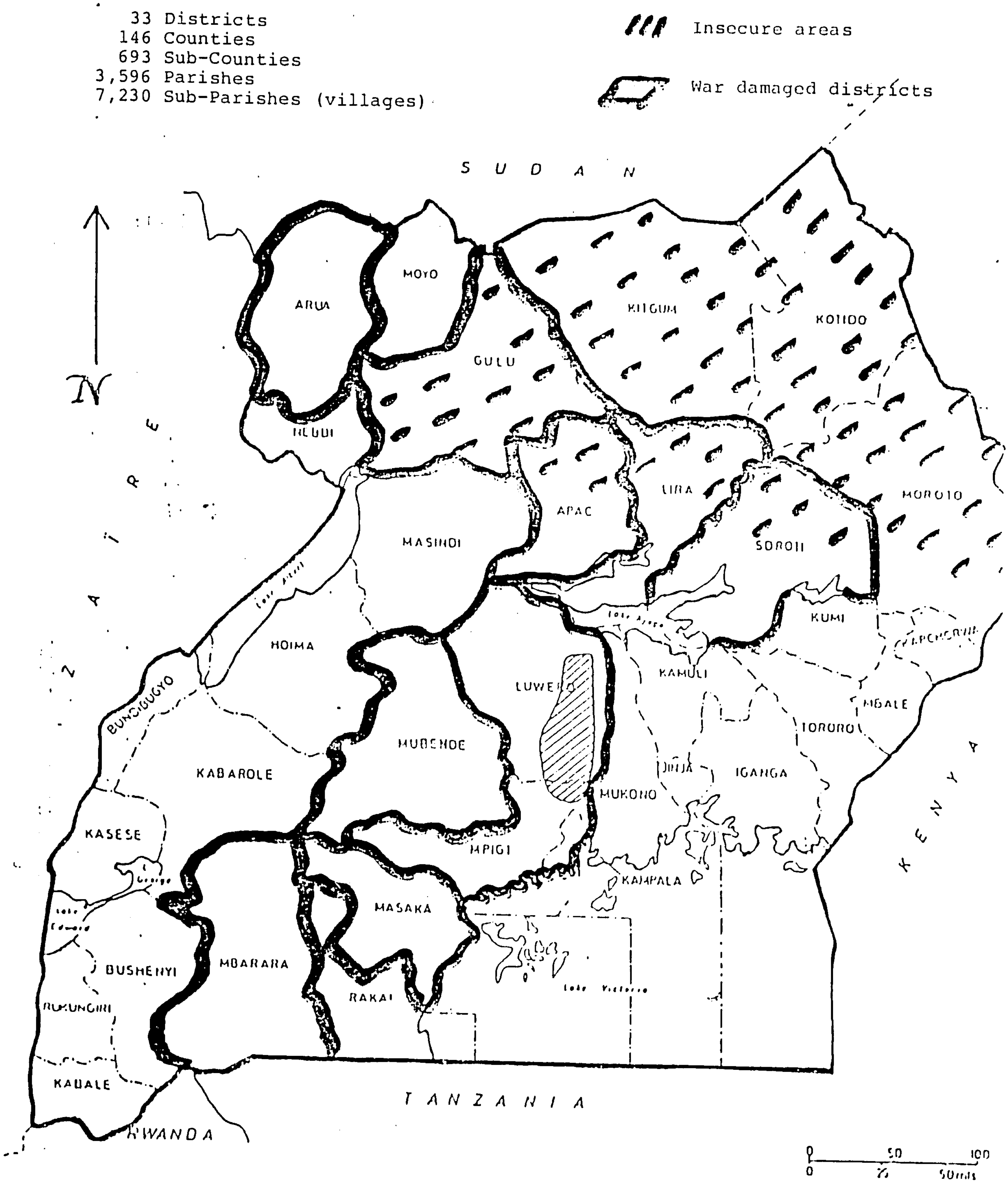
Farming "on the hilltops" in Southwest Uganda



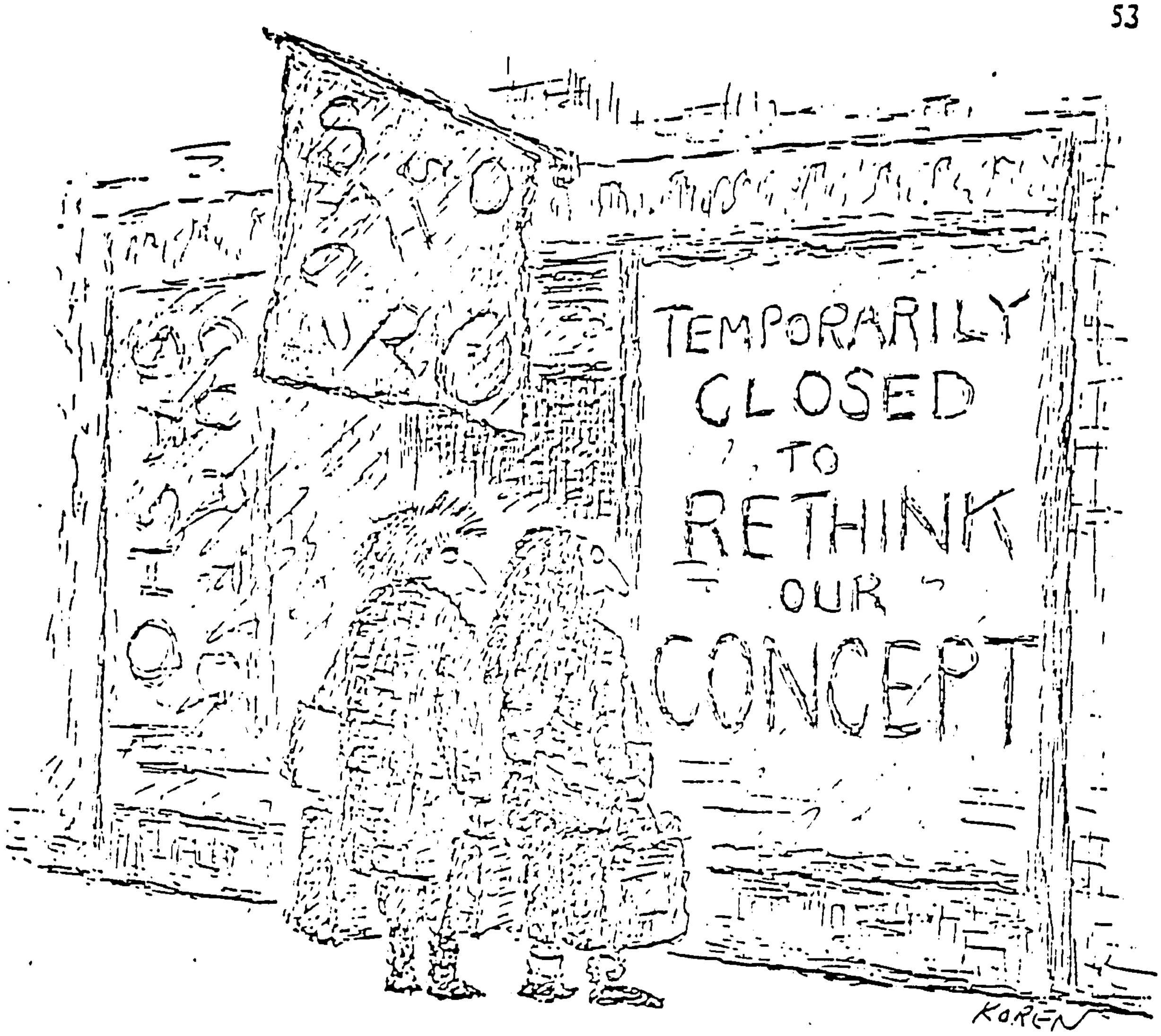
Typical Secondary Road

UGANDA

33 Districts
146 Counties
693 Sub-Counties
3,596 Parishes
7,230 Sub-Parishes (villages)



40


TEMPORARILY
CLOSED
TO
RETHINK
OUR
CONCEPT
KOREN