

PJ-ABP-257
ISN 22711

An ARTS/FARA Library File Publication

Generating Agricultural Growth in Uganda: A Demand-Driven Approach to Research and Market Development — A Concept Paper

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GENERATING AGRICULTURAL GROWTH IN UGANDA:

**A DEMAND-DRIVEN APPROACH
TO RESEARCH AND MARKET DEVELOPMENT**

A CONCEPT PAPER

PREPARED FOR USAID/UGANDA

by

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on assignment with
USAID: AFR/ARTS/FARA**

Kampala, Uganda

April 23, 1992

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A CONCEPT PAPER¹

I. The Purpose of the Concept Paper

Currently, USAID/Uganda has several projects in the agricultural sector. The broad objectives of these projects are to:

- * improve the policy and regulatory environment for the private sector;
- * rehabilitate and develop public sector institutions which are capable of conducting agricultural research on a variety of subjects; and
- * strengthen the capacity of the private sector to engage in productive activity through the provision of technical, financial and commodity assistance.

Among the specific projects which USAID/Uganda is funding to achieve these objectives are:

- * Rehabilitation of Productive Enterprises (RPE) Project;
- * Agricultural Non-Traditional Export Promotion (ANEP) Program;
- * Manpower for Agricultural Development (MFAD) Project;
- * Cooperative Agriculture and Agribusiness Support (CAAS) Project; and
- * PL-480 Title II Project which is generating revenue to support agricultural sector activities, especially those under the CAAS project.

Some of these projects, notably the MFAD project and CAAS projects, will soon reach their completion date (1993). Therefore, USAID/Uganda is analyzing what kinds of activities in the agricultural sector should continue to be supported under the umbrella of a new project.

¹This paper was presented in draft to the staff of the USAID/Uganda Mission by the authors. A revised, final version of the paper was to be prepared once USAID Mission comments were received. Instead, the USAID Mission incorporated many of the recommendations of this report into the existing Mission portfolio, especially the 1992 amendment to the Agricultural Non-Traditional Export Promotion (ANEP) Project.

In addition, USAID/Uganda is concerned that there may not be enough linkages and active coordination among the various project activities in its agricultural sector portfolio. USAID/Uganda wants to determine what it can do, in coordination with the Government of Uganda (GOU), to strengthen the coordination of its separate project activities so in order to increase the impact of its agricultural sector portfolio.

Specifically, USAID/Uganda is analyzing what current and new activities should be supported in order to achieve the agricultural sector strategic objective of the Country Program Strategic Plan (1992-96): INCREASE RURAL MEN AND WOMEN'S INCOME FROM AGRICULTURAL EXPORTS.

This concept paper explores some of the broad sectoral and technology and market specific issues associated with an export-led growth strategy for the agricultural sector.

Therefore, the purpose of this Concept Paper is to:

1. Examine the current situation of the agricultural sector in Uganda, including the effectiveness of the research and marketing systems and make suggestions regarding strategies to improve public and private sector linkages and performance;
2. Examine broadly the agricultural projects which USAID/Uganda is supporting and make suggestions regarding methods to strengthen the coordination among and linkages between the projects; and
3. Provide recommendations for a the design of a new agricultural sector project for USAID/Uganda.

II. Approaches to Generating Agricultural Sector Growth

A. The GOU Economic Recovery Program

Since 1987, the Government of Uganda (GOU) has been engaged in a massive program of economic rehabilitation. With generous donor support, including funding from USAID/Uganda, the GOU has:

- * made extensive repairs to the primary and secondary road network;
- * liberalized the policy environment in order to allow for more private sector investment in marketing activities;
- * liberalized the foreign exchange regime in order to allow market forces to determine the exchange rate;

- * rehabilitated many social service institutions, such as schools and hospitals; and
- * re-organized the government in order to increase efficiency while reducing costs.

As a result of five years of economic rehabilitation, there has been significant growth generated by the Ugandan economy. In particular, the agricultural sector has responded favorably to these rehabilitative efforts and growth has been at about 5.5 percent per annum for the last three years.

The government is continuing its efforts in many of these areas and is to be commended for them. For example, progress continues to be made by the Departed Asians Property Custodian Board (DAPCB) in returning expropriated property to the former owners which is a sign of the GOU's firm commitment to attract private sector investment to Uganda. In addition, the recent liberalization of cotton marketing is another indication of continual policy reform to encourage the private sector.

USAID/Uganda assistance has played a critical role in these efforts. USAID/Uganda programs and projects are helping the private sector to become more actively involved in agricultural marketing activities, especially exports, and helping to rehabilitate the Makerere University infrastructure and institutional capacity.

Working through the CAAS Project, USAID is helping to revitalize the largest organized group of private farmers and marketing entities in the nation, too. Institutional reform, human resource development, and policy reform have all contributed to the revitalization of the private sector capacity to take a leading role in the export-led growth strategy of Uganda.

The Uganda Central Cooperative Union (UCCU) is a major importer of inputs for the agricultural sector. Within the past six month period, materials valued at 876 million U Shs. have been imported. The leading imports have been cement (369 million U Shs.), bicycles (246 million U Shs.), grain processing equipment (99 million U Shs.), seeds (63 million U Shs.), motors and generators (28 million U Shs.) and agricultural tools and implements (25 million U Shs.). The UCCU recently adopted a "down payment before order" strategy to prevent losses caused by District Cooperatives and primary Societies which often procure inputs at subsidized rates from the Ministry of Agriculture or through donor-funded projects. Financial liquidity is the major constraint both at the UCCU and throughout the entire coop system.

However, there are other disturbing signs that while the rehabilitative phase has been successful in generating economic growth, it should be considered as practically over. Hence, the GOU should now be working with the donors to create the conditions for more rapid growth. Unfortunately, the conditions which are both necessary and sufficient to generate more rapid, broad-based and sustainable economic growth are not yet fully in place. Indeed, recently there have been some regressive steps taken by the GOU which threaten immediate and medium-term growth prospects. These regressive steps are in the area of export marketing and the government budget, inflation and monetary policy.

For example:

- * The Government recently announced a ban on exports of major food commodities "until further notice." This move has demoralized farmers and created doubt and suspicion among the private sector about the degree of commitment of the GOU to a market-oriented economy.
- * The Government closed the two largest private sector FOREX Bureaus (Crane and Orient) because of alleged illicit activities by the management of the respective Bureaus, rather than arrest and jail the individual suspects and allow the Bureaus to continue to operate. This has effectively closed an important source of "informal finance" which was used by traders engaged in export marketing activities. The potential impact on exports, if and when the GOU ban is lifted, remains to be seen but there are indications that it will be detrimental to export growth.
- * Inflation has surged in 1992 to about 50 percent per annum.
- * The financial system is still very weak, with insufficient incentives to mobilize deposits that can be turned into viable commercial loans and investments. Interest rates for commercial banks borrowing from the Central Bank remain high; and there is cap on interest rates commercial banks can charge borrowers which is currently 10 percentage points below the inflation rate. In these circumstances, the commercial banks are unwilling to loan for any period longer than 90 days. Hence, there is virtually no medium-term financing available from the formal financial sector.
- * The Bank of Uganda disbursed only a small portion of the \$2 million allotted to the Export Re-financing Facility and Scheme for the 1991/92 marketing and export season because of: lack of publicity about the Facility; disagreements with the commercial banks over operation of the Facility; and

over-involvement of the Bank in the application and approval process for the Facility.

- * The government's efforts to streamline its staff and increase budgetary support have fallen short of their goal. For example, the agricultural sector is woefully underfunded. The research and extension system has insufficient funds to deliver the innovations in technology, which are being developed with donor assistance, to farmers which could increase agricultural productivity. And, Makerere University has insufficient funds to maintain its research programs and teaching faculty.

These situations need to be addressed immediately by the GOU and the donors in order to keep Uganda on the path of recovery and growth.

There are other problems in the agricultural sector that are preventing more rapid growth in productivity and exports from taking place.

Based on all available evidence as well as our own research and analysis of the agricultural research and marketing systems, Uganda's agricultural sector is characterized by a general ABSENCE OF LINKAGES between the public and private institutions and participants in the research (technology development and transfer) system and the public and private sector participants in the marketing system.

There is a general LACK OF COORDINATION and INFORMATION FLOWS within the public sector and between the public and the private sectors. For example, staff of the Marketing Department of the Ministry of Commerce, Industry and Cooperatives (MCIC) are not well informed about the efforts of the Export Policy Analysis and Development Unit (EPADU) in the Ministry of Finance and Economic Planning (MFEP) to change government policy and promote export marketing. Staff in the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF), Department of Agriculture (Research Division) are not well informed about the market demand for Ugandan commodities as reflected in their respective market prices, nor about the status of the market news information services of the Ministry of Commerce. Hence, the research agenda for the research system and the creation of a new National Agricultural Research Organization are being established in an environment that is virtually totally divorced from the reality of the market place.

In addition, the EPADU is collecting applications from private Ugandan agribusiness owners and local investors seeking financial and technical assistance to initiate or expand export-oriented activities. Simultaneously, the Uganda Investment Authority (UIA) is processing applications from foreign and local investors to get an Investment

Certificate and the exemptions under the Investment Act to initiate new projects. Yet there has not yet been one meeting between the EPADU and the UIA to attempt to link these investment applications. Information is not being shared and coordinated between these two key government entities.

While the MFAD project has successfully developed and adapted new seed varieties and planting materials for cassava, sunflower, maize and soybean. However, because the marketing system does not provide incentive prices for higher quality grades, standards and varieties of these crops, farmers are reluctant to pay a premium price for the seed and the new technology. Hence, much of the new technology is given away by MFAD staff and other USAID Project staff, in order to generate increases in productivity.

Sunflower seed has a market, so farmers have been quick to adopt it and the new variety as a crop. However, a recent impact evaluation of the research done by the MFAD Project indicates that because there is still a very limited market DEMAND for soybeans, farmers are not growing it and most will not even accept the seed as a gift. Moreover, when the impact team asked farmers which variety of seed they used, what type of fertilizer was used, and why they achieved higher yields, the vast majority did not know the answers to these questions. There was no follow-up work done by the extension system to explain to the farmers why productivity was increasing and after one season, farmers are unable to replicate their success.

While government attention to rehabilitating individual Ministries and individual institutions have achieved some significant results, in order to generate more impressive growth rates, more effective coordination and linkages between the public and private sector and within the public sector will be needed.

The Uganda Investment Authority (UIA) has received a total of 114 complete investment applications worth \$291.5 million; approved 57 applications worth \$164.5 million and is uncertain precisely how many of the approved investment projects have been implemented. Implementation monitoring is scheduled to begin soon. Forty-seven of the approved investments are joint ventures. Most investment applications are being made in manufacturing (42 worth \$144 million) and processing (29 worth \$41.3 million). There have been only five applications for farming investment projects, with a value of \$9.7 million. The investment certificate does not allow foreign ownership or lease of land for crop or animal production (Section 11 of the 1991 Investment Code).

Indeed, the GOU, with donor support, should be shifting its strategy from one geared towards rehabilitation and recovery to one geared more towards generating significant growth in investments and incomes.

Such a shift in strategy will require a shift in the GOU strategy and USAID/Uganda and other donor support for the agricultural sector:

For example, the GOU Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) emphasis on research and extension strategies to increase the supply of commodities in the market, without attention to the effective DEMAND for those commodities, needs to be fundamentally re-oriented.

For example, USAID/Uganda efforts under the MFAD project to develop new varieties of crops and planting materials have to be supported by more market-oriented efforts to get these inputs into the hands of farmers.

For example, GOU attitudes towards the private sector need to be fundamentally changed through more interaction with the PRIVATE SECTOR in the policy dialogue and research setting agenda process. GOU policies, programs and institutions have to be made more responsive to the needs and concerns of the private sector, especially in the agricultural sector which involves farmers and agribusiness owners. This will involve the establishment of effective LINKAGES between the public and private sectors in agriculture.

For example, USAID/Uganda efforts under the ANEP Program to support private sector exporters through the Export Policy Analysis and Development Unit (EPADU) need to be more responsive to the needs and concerns of private sector by fostering more effective dialogue with the private sector and streamlining administrative procedures for receiving assistance under the Operational Constraints Analysis aspect of the project.

Mukwano Industries U Ltd. has established a marketing arrangement with a group of farmers in northern and western Uganda. High quality white sesame seed is distributed free to the farmers for cultivation. Mukwano returns after the growing season to buy all the sesame which farmers are willing to sell and export it. Mukwano pays the farmers cash on delivery. The firm is also buying and processing 250 MT of sunflower seed per month. However, their local oil mill has been closed for two years because of the competition from inexpensive imports from Kenya and high local taxes on the Ugandan finished product.

For example, GOU policies of market liberalization and donor support for stronger institutions and private sector capacity will have to become more FOCUSSED and better coordinated, such as through the selection of key commodity systems which can only be developed to their full potential through a well coordinated effort of investment in research and marketing activities.

For example, USAID/Uganda funded efforts under the CAAS project to develop agribusiness activities, especially export markets, for the cooperatives should focus on a few key commodities, such as high-value horticultural crops, and coordinate those efforts with the Uganda Investment Authority (UIA) and the EPADU, in order to generate the investments and market information needed to capture successfully a market share of those export commodities.

B. A New Strategy for Agricultural Growth

A new approach needs to be taken by the GOU and by the donors in order to ensure that Uganda's scarce financial and human resources are applied with maximum efficiency and effectiveness to developing the full potential and wealth of agricultural and natural resources in the country.

We suggest that this new approach to generate more rapid and broad-based sustainable economic growth must:

- * BE DEMAND DRIVEN;
- * FOCUS ON INCREASED PRODUCTIVITY FOR KEY COMMODITY SYSTEMS;
and
- * PROMOTE MORE EFFECTIVE LINKAGES BETWEEN THE PUBLIC AND PRIVATE SECTORS.

1. The Demand-Driven Approach:

A demand-driven approach to agricultural growth first identifies the effective demand for the agricultural commodities which are being produced and marketed by Uganda, or which could be produced and marketed by Uganda, and then focuses investments and promotional activities to ensure that the demand for those commodities is met and that a greater market share is ultimately captured by Ugandan producers.

This involves identifying the effective demand, using elasticity of demand calculations and projections of growth in market demand, for

Ugandan commodities sold in the domestic, regional (e.g. PTA countries), Middle Eastern, European and even Asian markets.

Such an approach then focuses resources on those specific commodity systems for which there is the highest demand and greatest income earning potential for farmers and the nation and promotes investments in the entire vertically integrated commodity system in order to achieve maximum efficiency to meet the market demand.

Demand analysis will:

- a. Identify where the demand is for specific commodities;
- b. Identify the standards and quality needed to meet the market demand;
- c. Identify the production and processing technology required to meet the market demand;
- d. Identify the policy and regulatory environment which will provide maximum incentives to meet that market demand;
- e. Identify the supporting services, especially financial services, which will promote the Ugandan capacity to meet the market demand;
- f. Identify the best possible role that both the public and private sectors can play in meeting that market demand; and
- g. Suggest mechanisms and forums which will foster the creation of a public-private sector partnership, through the establishment of mutually re-enforcing linkages, especially between the research and marketing systems.

2. The Commodity Systems Approach:

To date, the approach taken by the GOU and USAID-funded projects has not been commodity specific. The approach to stimulate agricultural sector growth has tended to be horizontal rather than VERTICAL. Policy reforms that affect all commodity systems have been important in establishing an enabling environment for the private sector to become active again in marketing and for market signals to reach producers. But since the creation of an enabling environment, the GOU and donors have paid relatively less attention to the more commodity specific constraints and opportunities which exist for Ugandan produce.

For example, while policy reform has enabled the private sector to become active in domestic and export marketing, there has been

insufficient investment by the public sector in the market information systems and support services, especially financial services, required to sustain marketing arrangements. Consequently, there are not yet RELIABLE MARKETS nor sustainable marketing systems for Ugandan agricultural commodities. Without reliable markets and marketing systems, producers are left wondering from season to season: which commodities should they grow, how much of each commodity should they grow, who will come to purchase each commodity and what price will they be paid for those commodities?

By taking a specific commodity system approach, the GOU, USAID/Uganda and the other donors, will be able to focus their scarce resources on the development of an efficient and effective system which will ensure that:

- a. There will be a reliable market for commodities which have an effective demand.
- b. There will be a research system which adapts and disseminates new technologies to increase productivity.
- c. There will be attention to existing constraints in the marketing system (e.g. sorting, grading, storage, processing, transport, packaging, etc.) so that maximum efficiency is achieved and high quality produce reaches the wholesaler on time.

Combining a DEMAND-DRIVEN approach with a KEY COMMODITY specific approach can also lead to synergistic complementary effects on broader agricultural sector growth.

For example, focussing efforts to increase the productivity of commodities which are in greatest demand in domestic or regional markets may lead to increases in productivity of important staple food commodities, such as the banana (matooke), maize, cassava, millet, beans or potatoes. Once increases in productivity in high bulk but low-value marketable commodities are achieved, and the marketing system brings maximum price incentives for quality produce, preliminary research by the Makerere University staff indicates that rural household resources (land, labor and capital) can then be released to increase the productivity of higher income-generating commodities. Such a synergistic relationship seems to exist for example, between matooke and coffee in certain parts of the country and between maize or millet and cotton in other sections of the country.

Indeed, one of the primary benefits of a commodity systems approach is that the research system and marketing system will be driven to combine efforts to improve the quality of the commodity so

that the highest price is realized. This involves the establishment of clearly defined grades and standards and specifications regarding crop varieties and establishing a marketing pricing system that pays farmers accordingly. In addition, this involves the creation of an effective marketing information system to transmit all that information to producers and marketing agents alike.

Focussing efforts to increase the quality (grades, standards and varieties) of marketable commodities, especially those for high-value exports, provides an incentive structure for the dissemination and adoption of more productive technology. This is achieved by first generating higher incomes for producers, and second, by generating more DEMAND from producers for better quality seeds, more inputs, and supporting services (e.g. research and financial) so that increases in productivity and product quality will be sustained.

In Uganda, broadly speaking there are two categories of agricultural exports which are used by both the GOU and the donors supporting the GOU recovery program: traditional and non-traditional exports (NTEs). The traditional exports of Uganda have been: coffee, tea, tobacco, and cotton, although coffee still dominates foreign exchange earnings with an estimated 80 percent in 1990.

In addition, Uganda exports two broad categories of NTEs: high-bulk, relatively low value commodities, such as maize, beans, hides and skins and smoked fish; and relatively low-bulk, high-value exports such as sesame, fish (frozen), horticultural commodities and spices (e.g. vanilla, pepper, ginger).

While Uganda has successfully exported each of these commodities, there has been inadequate attention by the public sector, as well as by most private sector firms, to marketing issues of STANDARDS AND QUALITY CONTROL for many the non-traditional exports. EPADU has tried to raise consciousness and awareness among exporters of these issues, but there is no mechanism in place whereby monitoring, evaluation and feed-back can be given to exporters regarding the grades, standards and quality or even the varieties of their exportable commodities,

The Marketing Department of the Ministry of Commerce, Industry and Cooperatives collect producer price data weekly from regional trading centers and publish the information in The New Vision. There is only one local language broadcast on Radio Uganda and that is transmitted to Nyankole, Toro and Nyoro in Western Uganda, as a favor from a friendly staff person at the station. A shortage of funds at the Ministry has kept them from paying for more frequent broadcasts of market news information over Radio Uganda.

except when they are rejected upon reaching the market. This imposes a very high learning cost on the private sector.

Moreover, there has been INADEQUATE MARKET-DRIVEN RESEARCH AND TECHNOLOGY DEVELOPMENT associated with all of these commodities, especially the non-traditional exports (NTES). Indeed, one of the few successful examples of support for such research come from the ministry of Finance and Economic Planning and not from the Ministry of Agriculture or the Ministry of Commerce. The EPADU has worked somewhat successfully with a few groups and individual farmers in a few select commodities: notably with UVAN, Aga Sekalala Jr.'s firm and the farmers with whom he is working to increase vanilla exports, and with the NAVGA, the Ntangauzi (Ginger) and Vegetable Growers Association of Mpigi District (although financial problems are constraining this group's ability to export successfully).

Therefore, priority attention should be given to the forging of regular and transparent linkages between the public and the private sector, in order to continue to make the GOU policy and regulatory reform program responsive to the needs of the private sector and to ensure that the agricultural research agenda is one that is DEMAND DRIVEN.

3. Promoting Effective Linkages Between the Public and the Private Sectors:

There is some evidence that a DEMAND-DRIVEN approach is already being developed, albeit slowly, as a result of private and public sector collaboration. For example, Victoria Flowers has made a contractual arrangement with the Kawanda Research Station to conduct trials and develop growing materials for floricultural exports. In addition, another private firm, Inuula Silk Estates Limited (ISEL), has also made a contractual arrangement with Kawanda Research Station to experiment with six variety of silk worms.

However, there is not government policy to encourage the development of such ties. Indeed, many people in high positions in the Government, especially in the Ministry of Agriculture, are either uninformed or completely mis-informed about the what the private sector is already doing to increase productivity and develop the agricultural sector and what it is capable of doing with the appropriate level of support and cooperation from government.

For example, in planning to create the National Agricultural Research Organization (NARO), which will determine the agricultural research strategy and agenda for Uganda, the government plans to put only three members of the private sector on the Board: one from the cooperative societies (to be nominated by the Ministry of Cooperatives, Industry and Commerce), one from the farmers associ-

ations, and one from the private agribusiness community. The majority of the Board, ten other seats, are to be for government civil servants, primarily at the Permanent Secretary level, with one also coming from Makerere University.

Undoubtedly, one of the biggest obstacles standing in the way of improved public and private sector collaboration is the prevailing public PERCEPTION of the private sector. One government official characterized the Ugandan farmer as "ignorant and illiterate and unable to articulate their needs to Government." This is how government has justified making all the decisions about the agricultural sector, including limiting farmer representation on the NARO Board.

Similar sentiments are expressed about the private sector in general. Two government officials, on separate occasions, stated that "the private sector is very weak here." Yet, according to another government official, the private sector is not too weak, because "they use the market information they get to exploit the poor peasant, so government must protect the peasant from those traders."

While it will certainly take some time to change these public perceptions, the best and quickest way to begin changing those perceptions is to bring both the public and private sector together in regular forums so that they can begin to learn more about one another and explore ways in which they can cooperate and collaborate, rather than continuing to view each other with suspicion, antipathy and antagonism.

The private sector requires supporting services from the public sector in order to do its business effectively and efficiently. The GOU has shown a willingness to open marketing up to the private

ASSOCIATION EXPANDS (The New Vision, April 16, 1992)
The Minister of Agriculture, Animal Industry and Fisheries, Mrs. Victoria Sekitoleko, launched a recruitment drive for membership in the Uganda National Farmers Association (UNFA) at a ceremony in Kampala. This association was inaugurated by Pres. Museveni on January 14th, 1992. At the meeting, the Chairman, Dr. L.S. Nsamba, accused the government of focusing its attention to the businessman and urban dwellers and not properly opening direct links with the farmers. He said, for instance, that the recent tax deduction did not cater for farmers at all. Nsamba also accused Ministers of refusing to discuss matters with farmers. He called for quarterly consultations with the Ministries and demanded that farmers be considered for appointments on board of directors.

sector. Now, the next step to generate growth is to open up the government itself to the private sector, so that effective communication can begin which will lead to a more DEMAND-DRIVEN approach to generating rapid economic growth for Uganda.

For example, while the GOU has announced many new policy and regulatory reforms, some private marketing firms believe that the actual implementation of those reforms has not been as effective as it should be. Indeed, some firms believe that still more changes in the procedures to get export certification, for example, need to be made so that the process is more simple and quick than it currently is. In addition, exporters cite the large amount of paperwork required by the Bank of Uganda (BOU) from applicants seeking marketing capital through the Export Re-Financing Facility and Scheme, and the long wait for a decision, as another example of the poor implementation of a sound idea to encourage exports.

Yet the GOU has no mechanism and no forum through which the private sector can make its views known and make suggestions regarding the kind of services it needs to increase investments and agribusiness activities that will generate more rapid growth. For example, while the EPADU carried out a successful survey of about 250 exporters during August-September, 1990, regarding the impact of recent marketing policy and regulatory reforms on their activities, it was more than a year before the results of that survey were tabulated and analyzed. Moreover, a follow-up survey, which was planned to take place on an annual basis beginning in August, 1991, was never implemented. Hence, even the one unit in the GOU responsible for developing policies which will support export growth is not actively engaged in regular

The BOU has set aside 2 million U Shs. for the Export Re-Financing Facility. 63 applications for about 4.8 billion U Shs. have been received between August, 1991 (when the program began) and March 31, 1992. The BOU has approved and disbursed funds for only 50 percent of all applicants: 32 applications worth a total of 1.3 billion U Shs., and an additional 1.7 billion U Shs. approved for 5 other applicants has yet to be disbursed. The scheme's focus has been changed from funding only agricultural NTEs to funding the export of any NTE. Fish, maize, groundnuts, vanilla, passion fruit, pineapples, banana (matooke), sesame, beans and red chili exports have all been approved for funding through their respective commercial banks. The International Credit Bank and Nile Bank have handled the most loans through the Facility. Neither Barclays Bank nor Grindlay Bank have participated in the Facility.

monitoring and evaluation of the private sector's needs and demand for supporting services, regulatory reform, tax changes and the like which could generate more rapid export-led growth.

Recently, the GOU recently announced (March 18, 1992) a ban on exports of specific commodities (i.e. maize, maize flour, beans, cassava flour, millet, sorghum, groundnuts, field peas and rice) "until further notice." This ban on food exports was justified on the grounds that the GOU wanted to "safeguard food stocks and to avoid widespread famine given the recent drought." Yet, in reaching this critically important policy decision, there does not seem to have been any attempt to systematically survey farmers and marketing agents to determine: first, if there really is a food crisis (e.g. by analyzing both the supply of and demand for basic food commodities); and second, to calculate which specific commodities may be in short supply.

The announcement has had a dramatic effect on both farmers and the private sector. The ban on exports has adversely affected farmers in two important ways.

First, the commodities which were banned from export comprise a significant proportion of agricultural NTEs and they are grown by a large majority of the small farmers in Uganda. Hence, the ban has effectively stopped farmers from being able to realize an increase in income as food prices were rising at the time the ban went into effect. This has aborted an excellent opportunity for capital to flow into the rural areas, capital which is sorely needed by those same farmers if they are ever going to be able to afford to adapt some of the higher-yielding technology needed to increase productivity.

Second, the ban has effectively demoralized farmers. They complain that when encouraged by the Government to plant more crops, in order to feed the nation and increase exports, they did so. But that action caused a glut on the market and prices dropped so farmers did not realize significant gains in income. Now, the farmers complain bitterly, when prices are rising and they have a chance to earn some additional income, the GOU steps in and stops exports, reducing demand for those crops and creating falling prices. Farmers maintain that they continually get confusing signals from the GOU in agricultural marketing policy and they are unsure if they will increase planting of any of those banned commodities this year.

The private sector, especially marketing firms, on the other hand, were buying and storing these commodities. When the ban was enacted, these firms that had purchased the food and were already incurring storage costs, lost money almost immediately as prices fell below what they had paid for those commodities. While a few firms began selling their stocks on the local market, to guard against potential losses from a further fall in prices or additional storage

costs, some firms have maintained their stocks in the hopes that prices will recover. But, the private sector is also confused and discouraged by this recent change in GOU policy. They view the ban as a significant step backward in government policy and wonder what other policies the government may suddenly reverse without warning or consultation.

This points out the fragility of the policy environment and the significant negative effects a single adverse policy can have on the private sector's CONFIDENCE in the government's commitment to a market-based economy and private sector, export-led growth strategy.

III. RECOMMENDATIONS:

Based on our analysis of the current agricultural research and marketing environment in Uganda, we have several recommendations to make.

First, we present thirteen major recommendations for immediate consideration and implementation by the USAID Mission and the Government of Uganda. The recommendations are not all ranked by priority, although we believe that lifting the ban on exports (recommendation number one) should receive immediate attention. Most of the remaining recommendations focus on methods to improve the linkages between existing USAID/Uganda activities in the agricultural sector. In addition, there are several recommendations regarding approaches which can help to support a more demand-driven orientation to GOU agricultural sector development activities.

Second, we present seventeen recommendations regarding the development of a new agricultural sector project which is under consideration by USAID/Uganda. These recommendations focus on the design of activities which will support and promote the development of a more demand-driven, vertically integrated agricultural research system and marketing system for specific commodities of optimal income-earning potential.

A. Recommendations for Immediate Action:

- 1. GOVERNMENT OF UGANDA (GOU): Publicly announce the lifting of the ban on exports without delay and widely disseminate market price information to rural farming households and traders via regular weekly radio broadcasts in the major languages and via the newspapers.**

2. USAID/Uganda and GOU: Convene a meeting between the UIA and EPADU and establish a regular forum and procedures by which both institutions will share information and analyses, including proposals for funding, in an attempt to match potential investors with domestic agribusiness owners.
3. USAID/Uganda: Get EPADU and UIA on the mailing list of free publications available through USDA, commodity group organizations, and international marketing groups in the USA and Europe which will have price and market information relevant to Ugandan exports.
4. USAID/Uganda and GOU: Encourage EPADU to carry out immediately the annual survey of exporters which was not implemented in 1991, and establish a series of regular workshops and/or seminars (preferably at least semi-annually), in both Kampala and outlying trading centers, at which exporters can discuss difficulties faced with the implementation of policy and regulatory reforms.
5. USAID/Uganda and GOU: Encourage EPADU to conduct a brief survey of exporters before offering any commodity specific export-oriented seminars and/or workshops in order to identify precisely what kinds of information exporters want to get from such seminars. Then, initiate follow-up surveys of seminar/workshop participants, in order to monitor and evaluate the utility and application of the information gleaned from the workshops/seminars. Use this information in planning for additional seminars.
6. USAID/Uganda and GOU: Meet with the Head of the Agricultural Policy Committee (i.e. the Permanent Secretary for Finance, Planning & Economic Development) and with the World Bank and with the Ministry of Agriculture (i.e. the Minister, the Director of Agriculture, and the Secretary for Research) to discuss the role of NARO and the composition of its Board of Directors to ensure fuller and more effective participation by the private agribusiness community, such as by increasing the representation of the private sector so that it constitutes, at minimum, at least forty percent of the NARO Board.
7. GOU: Change the composition of the Board of Trustees responsible for Makerere University policies so that there is sufficient representation of the private sector, especially the private agribusiness community.

8. GOU and USAID/Uganda: Increase coordination and information exchange between the Marketing Department of the Ministry of Commerce, Industry and Cooperatives and the EPADU of the Ministry of Finance and Economic Planning. One focus of such coordination should be a mutual exchange of information on market news and price information for both domestic and export markets for Uganda commodities.
9. GOU: Increase private sector dialogue with the respective Ministries that make decisions affecting farmers and the private agribusiness community in order to ensure that GOU policies, regulations, programs and projects are demand-driven in meeting their needs for supporting services.
10. USAID/Uganda and GOU: Establish effective linkages between the CAAS project based in the UCA and UCCU, the ANEP program based in the EPADU and the UIA, and the MFAD project based at Makerere University, in order to focus immediate attention on the development of high-value horticultural exports. A working group of these various entities should also coordinate their efforts with the FAO Horticultural Research Project at Kawanda Research Station, in order to avoid duplicative efforts and to identify clearly what each group needs to do in order to increase high-value horticultural exports in the short-term. The Working Group should also draw up an Action Plan which will specify the actions needed to sustain increases in high-value horticultural exports over the long-term, and who will be responsible for which actions. An important activity of that Action Plan should be a thorough demand-analysis of the market for Ugandan high-value horticultural exports in regional (PTA countries), Middle Eastern and European markets.
11. GOU and USAID/Uganda: Change the focus of research and analysis activities from supply issues to demand issues. That is, focus on the demand for specific commodities of certain standards and quality. This will result in a clearer definition of who demands what products and which services are required to get those quality products to the client. This involves, for example, the BOU Agricultural Secretariat research activities, EPADU research activities, Ministry of Agriculture research activities, Makerere University research activities. Encouragement and support should be given, for example, by USAID/Uganda to Professor manuel vanegas to complete demand analysis of high-bulk commodities such as bananas (including matooke), cassava, maize, millet, and potatoes.

12. GOU and USAID/Uganda: Support policies and regulations and the enforcement of laws which will create a more open financial system, especially in terms of the unfettered functioning of the informal financial system upon which a significant portion of the marketing system now depends.

This would involve, for example, less stringent restrictions on the operations of the FOREX Bureaus which have provided innovative albeit informal financial services to exporters.

This would also involve support for more forward financing of exports by the ultimate buyers in foreign markets, whether through the international financial system or local financial intermediaries.

In addition, this would involve a much more active and aggressive role for the UIA in bringing foreign capital to Uganda.

13. GOU and USAID/Uganda: Promote and support the continued liberalization of the coffee marketing system and cotton marketing system. For example, continue to move the Coffee Marketing Board and the Lint Marketing Board to a completely research and regulatory (grades and standards, but not licensing) oriented function.

In particular, open the domestic and export marketing systems to more private sector firms and use a competitive marketing system to lay the foundations for the establishment of a more incentive-oriented pricing structure that will reward farmers for quality coffee beans and high quality cotton.

These activities will help to stimulate coffee and cotton production and could lead to investments in new coffee trees and the inputs which are sorely needed to raise coffee and cotton productivity levels. An incentive price structure will also promote the linkage between the marketing and research system and encourage the dissemination of new, improved planting materials for coffee and better quality seeds for cotton.

B. Recommendations for the Medium Term:

1. USAID/Uganda: Move forward with the design of a new project for the agricultural sector which will have a demand-driven focus that will support linkages among public sector institutions and between the public and the private sector involved in agricultural technology development and dissemination and marketing activities through a commodity specific vertically integrated approach.
2. USAID/Uganda: Begin project preparation and design activity by conducting a DEMAND ANALYSES for the various key commodities being produced and marketed in Uganda in order to determine the

market demand for those commodities (e.g. domestic, regional, Middle Eastern, European, or other areas) in order to determine which commodity systems (or complimentary groups of systems) hold the most promise over the medium to long term for sustainable export development and a larger share of the market. Prejudgments based on prevailing, conventional wisdom should be avoided so that no single commodity system is excluded a priori from the analysis.

Among the criteria which should be used to rank the commodities being analyzed are:

- a. Uganda's comparative advantage in that commodity (using Domestic Resource Cost analysis as a key indicator of current comparative advantage);
- b. the potential for increasing productivity through the application of available technology (such as improved seed varieties and planting materials);
- c. the demand elasticity in domestic, regional and international markets for the commodity;
- d. the potential for creating multiplier effects within the agricultural sector, such as releasing land, labor or capital to other crops;
- e. the projected effect on national food security (defined as domestic production plus imports, with an increase in foreign exchange earnings recognized as a major method to increase food security);
- f. the potential for generating broad-based, sustainable growth in the agricultural sector through higher incomes to farmers, creating a demand for more private agribusinesses, and creating additional employment and investment opportunities in the sector; and
- g. economic rates of return (and other indices) indicate that the trade-offs for investments in one group of commodities are greater than for another group of commodities.

3. USAID/Uganda: Once the specific Ugandan commodities which are in the highest demand and for which Uganda has the optimal comparative advantage have been identified, identify which aspects of the vertically integrated commodity system require support and investment in order that donor, government and private sector cooperation can be mobilized to support the development of all aspects of the commodity system. This will involve identification of the need for development of appropriate seed variety, inputs, sorting and grading facilities, packaging facilities, transport systems, market information systems, policy and regulatory issues, tax issues, and the incentives required to

stimulate sustainable growth in production and productivity for export.

4. USAID/Uganda: The focus of a new project should be to improve the performance of selected vertically integrated commodity system, including strong research and marketing system linkages. The project should foster effective and efficient linkages between research and production, research and processing, between the public and the private sectors, and between producers and markets. For example, a commodity specific focus on a high-value horticultural product would involve approaches to strengthen the ties between research, production and marketing, such as through the development of the optimal Ugandan variety to meet market demand, the adaptation of low-cost but efficient cooling shed technology for farms, support of medium to long-term financial services for investment in storage-packaging-processing-refrigerated transport, support for lower import duties and tariffs on raw materials used in production, processing and packaging, an aggressive approach to attracting foreign investment in processing facilities and export marketing activities, etc.

5. USAID/Uganda and GOU: Establish a regular forum and procedures to ensure more effective donor coordination in the agricultural sector. This will be critical to ensure the effective and sustainable development of a vertically integrated commodity system approach to growth. This would involve, for example, ensuring that each component of the commodity system, whether technology development and dissemination, production or various marketing activities, receives an appropriate level of support so that there are no weak links in the commodity system.

6. USAID/Uganda: Continue to support human resource development at Makerere University with the following caveats:
 - a. Initiate a study which analyzes the current and projected demand for personnel in the agricultural sector with specific skills, such as for agribusiness firms involved in marketing, processing and technology development, and apply that demand analysis to the academic program at the Faculty of Agriculture and Forestry to ensure that the demand for trained personnel will be adequately met by Makerere University;
 - b. Initiate a study of the institutional reforms needed to ensure that Makerere University, especially the Faculty of Agriculture and Forestry, have incentives to forge and

sustain effective links with the private agribusiness community, such as through transparent consulting arrangements;

c. Ensuring that the demand for graduates from Makerere University for both the public and the private sector is met through coordination of training by various donor-funded projects. This might involve USAID local currency funding of scholarships for students in agricultural marketing, agribusiness and agricultural technology skills, with the World Bank and the EEC funding scholarships for students in agricultural research and extension skills; and

d. Establishing a viable "twinning relationship" with an appropriate US college or university which will be able to meet the demand for short-term technical assistance for teaching and research at Makerere University's Faculty of Agriculture and Forestry.

7. GOU: Create a performance-based incentive structure for faculty and staff of Makerere University. This might involve a change in the policy regarding private sector consulting work by faculty and staff, in order to encourage the faculty and staff to work with the private sector on private sector funded research and analytical or technology development projects. This will enable the faculty and staff to apply the lessons learned from private sector work to their teaching, making the academic program at Makerere more relevant and reflective of the demand for specific skills for private agribusiness development in Uganda.

8. USAID/Uganda: Support the International Agricultural Research Centers (IARCs) which are involved in research on bulk commodities in Uganda, with the following caveats:
 - a. The IARCs do more demand analysis for the specific commodities and varieties which are being tested and improved (such as beans, potatoes, cassava, maize and banana including matooke). This demand analysis should focus especially on the domestic and the regional (PTA countries) demand for these bulk commodities;
 - b. The IARCs take a more active role, with their local counterparts, in promoting and achieving increased utilization of new agricultural technology instead of focussing only on its development or adaptation; and
 - c. The IARCs contribute to the human resource development of the National Agricultural Research organization (NARO) in terms of its technical capabilities, leadership and management abilities, and involvement as collaborators in the respective commodity research programs.

9. USAID/Uganda: Support the re-location and development of the NARO at Kawanda Research Station with the following caveats:
- a. The NARO status are modified to include a much greater proportional representation for the private agribusiness community, including farmers, in the Board;
 - b. The NARO patent regulations are modified so as to provide ownership to researchers or the private firms that fund the research activity;
 - c. The socio-economic unit for NARO has a broader mandate to conduct policy, market and economic research and analysis as well as research on methods to increase value-added to commodities through better utilization, processing or packaging; and
 - d. The socio-economic unit for NARO be comprised of the socio-economic staff or components of the Bank of Uganda (BOU) Agricultural Secretariat.
10. GOU and USAID/Uganda: The BOU Agricultural Secretariat, which conducts analysis of agricultural sector issues for the GOU Agricultural Policy Committee, should be transferred from the Bank of Uganda into those Ministries which are more directly involved in the actual implementation and monitoring of the impact of agricultural policies.
This would involve the following:
- a. Transfer the functions of broad agricultural sector policy analysis from the BOU to the Ministry of Finance and Economic Planning in order to increase coordination and linkages with the EPADU;
 - b. Transfer the socio-economic analysis functions and staff to the NARO and Kawanda research Station;
 - c. Transfer the functions of the National Inputs Coordinating Unit (NICU) to the marketing department of the ministry of Commerce, Industry and Cooperatives; and
 - d. Transfer the staff and functions of project monitoring and coordination of donor projects to the Ministry of Agriculture, Animal Industries and Fisheries.
11. GOU and USAID/Uganda: Encourage more active linkages with the private sector, especially by increasing the amount of agricultural research done through research contracts between the public and private sector.
This might involve, for example, setting aside funds for private sector contract research to be conducted at government research stations.
This would involve more active solicitation of technology development and adaptive research work from the private sector by government research units, including EPADU. Private sector

funded research contracts would ensure that the research being done on the Research Stations and in other public sector units is meeting a specific demand in Uganda and that the research results will be applied and disseminated.

An incentive system which would reward researchers who are able to bring in privately funded research projects should also be established for government staff.

In addition, public sector funding of research to meet private sector demand, such as adaptive field trials, market niche analysis for specific commodities, or research on the storage needs for specific commodities produced by small-scale farmers in Uganda, could be done. Conducting such research in collaboration with the private sector would build private sector interest in and capacity for such research.

12. GOU and USAID/Uganda: Improve the operation of the BOU Export Re-Financing Facility and Scheme by stream-lining the application procedures and approval process so that it is less time-consuming for private sector exporters and so that more autonomy is given to the commercial banks in making decisions regarding funding for exports.

The BOU should be less involved in the process of deciding which individual applications to fund for export. The BOU's role should be to ensure that the commercial banks are making timely and sufficient disbursements to an adequate number of private sector exporters to increase Uganda's non-traditional exports. One possible incentive scheme would be to make allocation of funds from the BOU facility dependent upon the deposit base of the commercial bank and the number of customers served. Other incentives should also be explored.

USAID/Uganda should give serious consideration to making local currency available to help supplement the funds available through the facility so that more exporters will be able to get more financing for export marketing activities.

13. GOU and USAID/Uganda: Support the establishment of an effective private sector seed company. This will require active donor and governmental coordination, since the African Development Bank is proposing to support a new seed project in Ugandan that will establish a new parastatal seed company (possibly by resuscitating the practically moribund parastatal Uganda Seed Project of the Ministry of Agriculture). Instead, the company should be established as a private, commercially-oriented firm.

14. GOU and USAID/Uganda: To ensure the viability of a private seed company, the pricing structure for produce will have to become more widely disseminated, through a more effective market information system, and the pricing structure will have to offer more incentives to farmers for high quality produce and seed. Such a market pricing structure and system would involve the implementation of effective grades and standards for all commodities, especially cereals, beans, other bulk commodities and especially horticultural produce. By implementing an incentive-based and discriminatory price structure, and paying farmers higher prices for quality produce, farmers will have the means (financial ability) to improve their productivity by continually improving and up-grading their seeds and planting materials and securing access to other essential inputs, including labor.

15. GOU and USAID/Uganda: Improve the collaboration between complementary public sector institutions, such as the EPADU of the Ministry of Finance and Economic Planning and the Marketing Department of the Ministry of Commerce Industry and Cooperatives. In addition, clearly delineate the separate and distinct functions of the EPADU and the Export Promotion Council of the Ministry of Finance and Economic Planning to ensure that there is no duplication of efforts or, failing that, merge both entities into one unit within the Ministry of Finance and Economic Planning.

16. GOU and USAID/Uganda: Conduct a feasibility study to determine the supply of phosphate in the Uganda mines. This would be an important first step in the preparation of a strategy to seek investors for Uganda's phosphate mining industry, in order to develop the local capacity for a fertilizer industry to support the development of high-input agriculture.

17. USAID/Uganda: Initiate a study to identify means to improve the productivity and quality of the banana (including matooke). This would involve initiating discussions with Dr. Clifford S. Gold, Entomologist from the Biological Control Program of the International Institute of Tropical Agriculture (IITA) based at Kawanda Research Station, and Dr. Patrick R. Rubaihayo, who is involved in a banana research program at the Makerere University Faculty of Agriculture and Forestry research station at Kabanyola. Preliminary research results indicate that at the farm level there is a complementary relationship between some bulk commodities and the higher income-earning commodities which can be built upon to create a synergism that can generate broad-based, sustainable agricultural growth.

For example, increases in the productivity of the banana (especially matooke) would save both land and labor resources which could then be applied to the production of other, higher-earning crops, such as coffee.

The net income realized from the incremental shift in labor and land from banana (matooke) to coffee, for example, would enable farming households to begin to accumulate the capital they need to make additional investments to increase productivity in other commodities.

18. USAID/Uganda: Continue to support human resource development in the private sector, especially in commercially-oriented skills for management (personnel, financial, operational, etc.), accounting, and technical skills associated with marketing activities (such as sorting, grading, packaging, storage, processing, etc.).

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